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## Instability of the Eurozone? On monetary policy, house prices and labor market reforms

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IZA DP No. 2547

## Instability of the Eurozone? On Monetary Policy, House Prices and Labor Market Reforms

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January 2007

# **Instability of the Eurozone? On Monetary Policy, House Prices and Labor Market Reforms**

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## ABSTRACT

### **Instability of the Eurozone? On Monetary Policy, House Prices and Labor Market Reforms<sup>\*</sup>**

This paper deals with potential instabilities in the Eurozone stemming from an insufficient interplay between monetary policy and reform effort on the one hand and the emergence of intra-Euro area divergences on the other. As a first step, we assess the effect of EMU on structural reform and investigate this question by an examination of the relationship between fixed exchange rates and reform in two wider samples of countries. We also stress that loose monetary conditions, which prevailed until some months ago, can also manifest themselves in asset price inflation, notably in the housing market. When these bubbles burst (e.g., when housing prices stop rising) this often leads to a prolonged period of economic instability and weakness rather than consumer price inflation. As a second step, we point out that risks for EMU are not only increasing because longer-term disequilibria become evident in fiscal and monetary policy, but also because serious divergences are now appearing within the Euro area which threaten its long-term cohesiveness. The most manifest example of this threat comes from what promises to be a long-term divergence between Germany and Italy, which for the time being was offset by asynchronous developments of house prices in both countries. There are still large differences within the Euro area, with the small countries performing much better than the large ones on almost every indicator. This suggests that better policies can make a large difference even if monetary policy is the same for everybody.

JEL Classification: D78, E52, E61

Keywords: asset prices, international competitiveness, EMU, instabilities, labor markets, monetary policy regime, structural reform

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## 1. Introduction

In the first new years of EMU, neither the degree of economic flexibility nor the stability of the fiscal framework or the independence of the ECB was severely tested. However, as growth has faded, tensions have increased. Optimists hoped that economic tensions would eventually break the existing structural rigidities. Unfortunately, it seems as if the rigidities are prevailing while fiscal policy discipline is giving way. Since this will certainly not keep growth going, it would be a nearly safe bet to forecast that political pressure will increasingly be brought to bear on the ECB to support economic activity in the short run by weakening the Euro both internally and externally. Hence, we raise three questions in order to tackle the primary question of the paper: Is there a significant menace of instability of the Euro area? Part I: 1) Can monetary policy serve as a driver of structural reforms?; and 2) What kind of monetary policy is suitable for a Slow Growth Economy?; Part II: 3) How should European monetary policy look like in a large and diversified economic zone?

Of course, there are many other dimensions of instabilities which could have been discussed here. Among them are evident and pressing topics like the menace of de-synchronization of regional business cycles, the question of whether the ECB only follows the Fed, the problems of decision making in monetary policy and other related policy areas caused by EU Eastern Enlargement, EMU exit considerations by politicians like Berlusconi and their feedbacks on the Euro area economies, impact differentials of Euro EXR movements among Euro area countries, the challenges to the Euro due to the Asian countries' endeavor to increase the share of the Euro in their currency baskets and the recent treatment of the stability pact (see, e.g., Wyplosz, 2006).<sup>1</sup>

In principle, the topic of this paper is not as trivial as it looks: What is meant by instability? Generally, we could define instability in several dimensions, for example instability in terms of the risk that EMU breaks apart, instability in terms of high inflation (internal stability of the Euro), or instability in terms of high exchange rate volatility and misalignments (external stability of the Euro).

In this paper, we look at the most topical set of issues at the time the paper is written, namely structural reforms, monetary policy, real estate market developments, and business cycle divergence. While there are numerous important issues within EMU, only parts of the topics of instability could be addressed here due to the space constraint.

The remainder of the paper is structured as follows. Section 2 reflects on the question of whether EMU has fostered reform efforts in the countries of the Euro area. Here, we strictly refer to the more general relationship between monetary

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<sup>1</sup>Belke (2002) examines whether wage policies in EMU have been destabilizing factors as was feared by opponents to EMU. It is argued that labor market reforms are important prerequisites of moderate wage agreements.

policy autonomy and structural reforms in open economies as the most promising guideline. In section 3, we analyze in more detail a longer-term aspect of monetary policy that has gained in importance since the start of EMU and almost certainly should have a bearing for the question whether there is internal instability of the Eurozone, namely the consequences of allowing a liquidity overhang to build up. We only note that money and credit growth that cannot be explained as responding to the needs of an economy growing at potential and a desired rate of inflation should alert us to potential future risks to price and/or financial stability and make us question the appropriateness of the stance of monetary policy.

In section 4, we argue that the emergence of widening intra-area divergences could severely test the resolve of the Euroland authorities to support the value of the Euro, which could degenerate in a process of gradual 'lira-isation' of the Euro – again a potential source of large instability of the Eurozone. Section 5 summarizes and draws some policy conclusions with an eye on some promising ways of avoiding future instabilities in the Euro area in the future.

## **Part I: Monetary Policy for a Slow Growth Economy and Structural Reforms in Europe**

EMU might tend to lower instabilities on continental European labor markets if it leads to more reform efforts due to its character as an irrevocably fixed peg than in the case of its counterfactual – flexible exchange rates among European economies (Posen and Popov Gould, 2006). But can we really expect any impact of the degree of monetary policy autonomy on the solution of the reform deadlock especially in some larger continental European economies?

### **2. Monetary Policy as A Driver Of Structural Reforms?**

Recently, the economics of structural reforms has attracted increasing attention in the academic literature (Abiad and Mody 2005; Helbling et al. 2004; for a survey see Heinemann 2004 and 2005). This ongoing research is driven by the fact that for a number of EU countries, the speed of structural change lags behind what is necessary given high structural unemployment and imminent demographic change. Policy fields for which a striking contrast between needs and deeds of institutional change has been identified are, for instance, labor markets, product markets, social security and tax systems.

Although the existing empirical literature has started to identify important drivers and obstacles of reforms with regard to different policy fields, the interplay of structural reforms and monetary policy has been neglected thus far. While the theoretical literature has formulated some hypotheses of how monetary policy may act as a catalyst for reform processes, thorough empirical studies based on the

experience of a large number of industrial countries are only scarcely available. This is all the more valid with respect to European Monetary Union, since any effort to estimate the impact of EMU on the degree of reforms must empirically suffer from the lack of degrees of freedom.

A recent paper by Belke, Herz and Vogel (2006) which we would like to address here asks if and how monetary policy can contribute to increasing the likelihood of reform and to safeguarding the continuation and successful implementation of beginning reform processes. The empirical work uses a panel of OECD countries and sophisticated measures of reform events and the monetary stance, distinguishing between reforms of labor markets, financial markets, product markets and the tax system.

## **2.1. Structural Reforms and European Monetary Union -What can we learn from the data?**

Belke, Herz and Vogel (2006) avoid the problem with the limited degrees of freedom by examining the relationship between fixed exchange rates and reform in two wider samples of countries. Based on these results, it then tries to infer the implications for EMU as a variant of irrevocably fixed exchange rates from the perspective of an individual EMU member country.

A further important distinction of our study concerns the exchange rate regime: Necessarily, the link between national reform processes and monetary policy must be relatively loose where, for instance, fixed exchange rate regimes restrict monetary policy (Calmfors, 1998, 2001; Duval and Elmeskov, 2005). Hence, we start from the empirical puzzle laid open by Herz and Vogel (2005) that more open economies do not reform more than less open ones and focus on different exchange rate arrangements as one of the main determinants of monetary policy autonomy.

However, the first-best solution to the problem of high structural unemployment in isolation (without any look at the degree of monetary policy autonomy) is to remove labor market rigidities, the fundamental cause of high structural unemployment (Svensson, 1997, p. 104 and p. 109; Duval and Elmeskov, 2005, p. 5).<sup>2</sup> Yet, such a proposal could be regarded as rather naive from a public choice perspective which emphasizes that labor market institutions, as an outcome of rational political choice, must be implemented in the loss function of politicians. Hence, what is role for monetary policy in this context?

Cross-country event studies are one obvious approach to empirically examine the impact of monetary policy strategies on the degree of economic reform. However, there are severe limitations to this approach since evidence is

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<sup>2</sup>OECD (2005) applies a consistent procedure to derive policy priorities to foster growth across OECD countries and identifies labor market reforms as being particularly important, for example in the Euro area. However, this does not at all imply that reforms in other areas are unimportant. Hence, Belke, Herz and Vogel (2006) analyze a variety of different reform measures in the empirical part of the paper.

ambiguous. The United States, for instance, is a monetary union with labor market institutions that encourage a low natural rate of unemployment. The EMS commitment was extremely helpful in fostering the reform process in the Netherlands and Denmark. The same holds for Austria under the DM peg (Hochreiter and Tavlas, 2005). In contrast, the U.K. experienced extensive labor market reforms without adhering to an international exchange rate arrangement. Several other countries outside EMU have also experienced that monetary policy changes had no fundamental effect on labor market flexibility. In Canada, for example, changes in monetary policy strategy in the early 1990s did not increase wage flexibility or unemployment. Neither could New Zealand, despite a sharp turn-around in its monetary policy towards inflation targeting, nor Argentina, through its adoption of a currency board, achieve higher wage or labor market flexibility. This suggests that it is probably highly unrealistic to expect that the ECB can exert any significant effect on the degree of structural reforms in the Euro area.

Hence, Belke, Herz and Vogel (2006) choose an econometric analysis for a large sample of countries in order to include country variance which would not be available if one only concentrates on the EMU irrevocably fixed exchange rate case. Hence, one should clearly go beyond the EMU case studies by van Poeck and Borghijs (2001), Bertola and Boeri (2001), and IMF (2004) which are rare examples of empirical investigations in this field.

Van Poeck and Borghijs (2001) argue that the prospect of qualifying for EMU should provide as big an incentive for labor-market reform as EMU membership itself. They conclude that EMU countries did not reform more than other countries and, unlike elsewhere, their progress on reform seemed unrelated to the initial level of unemployment. For a period from the early nineties up to 1999, Bertola and Boeri (2001) only focus on cash transfers to people of working age (e.g., unemployment benefits and on-job protection). They arrive at exactly opposite conclusions, namely reforms accelerated more in the Euro area than outside.

The IMF (2004) looks at the impact of a range of factors including macroeconomic conditions, political institutions, reform design and variables aimed at capturing attitudes towards structural reform on different policy areas across OECD countries from the mid-1970s up to the late 1990s. It finds that EU membership leads to faster moves towards liberalization of product markets. However, it does not clarify whether this represents an effect of EMU and/or policies to prepare for EMU (See also Duval and Elmeskov, 2005, p. 10).

## **2.2. Monetary Policy Autonomy and Structural Reforms: The Case of European Monetary Union**

The discussion about whether EMU has fostered reform efforts in the countries of the Euro area, i.e. the relation between the degree of monetary policy autonomy and structural reforms, is characterized by a wide spectrum of conflicting views.



However, note that it is always demanding though not impossible to identify and specify the counterfactual, i.e. the impacts of non-EMU on reform effort.<sup>3</sup>

We start with a sketch of the literature on monetary policy autonomy and reforms and throughout refer to a prominent example of the loss of monetary autonomy, i.e. the irrevocable fixing of exchange rates under European Monetary Union (EMU).

In the run-up to EMU, a number of studies tried to assess the incentive effects of alternative monetary policy strategies on labor market reforms. According to the proponents of a liberal view, EMU, as a classical variant of a rule-based monetary policy, should have a disciplinary impact on national labor markets.<sup>4</sup> In the first place, EMU enhances the credibility of monetary policy and thereby lowers inflation expectations. Negative employment effects as a result of (too) high wage claims can no longer be accommodated by discretionary monetary policy. The responsibility of wage setters for unemployment increases significantly, because they no longer negotiate about nominal wage but, instead, about real wage growth. The responsibility for existing unemployment is more transparently assigned to the parties which negotiate the relative price of labor. In contrast, autonomous discretionary monetary policy makes it more difficult to remove market rigidities, because there is still the option to solve or at least to shift the unemployment problem onto third parties (i.e., to an expansionary monetary policy).

Insofar as the single currency increases transparency, the costs of structural rigidities, as reflected in relative prices, become more evident. Lower trading costs and higher transparency jointly tend to foster competition in goods markets, which in turn reduces the available product market rents. If these rents are smaller, the incentive to resist reforms that prevent such rents to be captured are smaller as well.

Overall, the incentives for extensive reforms of goods, labor, and capital markets increase under a regime of EMU, i.e. irrevocably fixed exchange rates.<sup>5</sup> If changes in monetary policy and the nominal exchange rate are not available, and if labor is immobile as is the case in most parts of the Euro area, there is no other option than to undertake reforms in order to facilitate the market-based adjustment to shocks. Hence, credible currency pegging in general and EMU in particular has often been interpreted as a version of Mrs. Thatcher's There-Is-No-Alternative (TINA) strategy.<sup>6</sup> In their paper, Belke, Herz and Vogel (2006) generalize this striking TINA argument empirically and extend it also to countries beyond the narrow focus of the Euro area, which is what for instance Duval and Elmeskov

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<sup>3</sup>We owe this comment to David Mayes, Western Economic Association Annual Meeting, San Diego/CA, June 29<sup>th</sup> to July 4<sup>th</sup> 2006.

<sup>4</sup>For a recent survey of the arguments see Duval and Elmeskov (2005) and Hochreiter and Tavlas (2005).

<sup>5</sup>See Alogoskoufis (1994), Calmfors (1998), Duval and Elmeskov (2005, p. 6), Mélitz (1997) and Sibert and Sutherland (1997).

<sup>6</sup>See, Bean (1998), Calmfors (1998, p. 28); Duval and Elmeskov (2005, p. 5) and Saint-Paul and Bentolila (2000).

(2005) concentrate on. However, there are also important arguments against a positive impact of monetary rules on economic reform which can be applied to EMU as a specific monetary rule as well. It is thus ultimately an empirical question.

### **2.3. Main Pattern of Empirical Results and Stylized Facts**

Belke, Herz and Vogel (2006) are interested in examining the effect of EMU on structural reform and investigate this with an examination of the relationship between fixed exchange rates and reform in two wider samples of countries. Their results indicate that - in the context of OECD countries and with respect to reform beyond money and banking - EMU should not have been clearly expected to encourage structural reform.

They estimated and tested the relationship between exchange rate regimes and the degree of economic reforms by estimating panel regressions partly also via GMM. As dependent variable they use the degree of market-oriented reforms. As independent variables they include indicators of the flexibility of the exchange rate system, the stability of monetary policy and further control variables like economic performance as a proxy of reform pressure and institutional impediments to further reform. The results of their empirical analysis suggest that the adoption of an exchange rate rule like EMU is positively correlated with market-oriented reforms only in a broad world sample and with reforms in the money and banking sector in particular.

For the government sector and for market regulation, they do not find a robust significant effect, however. The impact of exchange rate policy on economic reforms is not significant in the sample of OECD countries. The use of an alternative indicator of monetary policy commitment supports these findings.

Seen on the whole, these results do not confirm the implications of Calmfors-type models, namely that one should observe a higher degree of reforms under monetary policy autonomy, i.e. outside EMU. However, the empirical results at least partly confirm the TINA argument that limiting monetary policy autonomy (like a common monetary policy under EMU from the perspective of a single EMU-in country) tends to raise the probability of the implementation of structural reforms / liberalization steps. The seemingly irrevocable elimination of the exchange rate option seems to extend the incentives for painful but long-term beneficial institutional adjustments on labor and product markets for developing countries and emerging markets, but not for OECD countries. If one subsumes Euro area countries among the latter, it becomes immediate clear that the disappointing reform experience in some larger EMU member countries is totally consistent with our estimations.

Finally, the exchange rate regime often turned out to be insignificant when the authors apply it to reforms in areas other than the money and banking system. Instead, the usual suspects like the so-called problem pressure variable as measured by the initial degree of freedom dominate the regressions. These results imply that a higher initial level of economic freedom leads to a lower scope for

further liberalization and a higher conditional policy convergence. If the exchange rate regime is significant, these coefficients are around three times as high as the coefficients measuring exchange rate flexibility. In a sense, one could even argue that a change in a nominal variable such as the exchange rate regime appears to have mainly effects on other nominal variables like the monetary and banking system, a view often condemned as too pessimistic in the discussions during the run-up to the Euro.

Hence, the upshot of the study is that one should not exaggerate the impact of monetary policy autonomy and the exchange rate regime on economic freedom in view of a large status-quo bias and path-dependence of reform intensity. There seems to be no empirical base for the argument that discretionary monetary policy is favorable because it gives more incentives for structural reforms. This insight probably represents the most robust result of the contribution by Belke, Herz and Vogel (2006).

From this perspective, the estimation results are strikingly similar to the huge amount of non-results which Duval and Elmeskov (2005) found for their sample of Euro area countries. Moreover, the results are compatible with the widely held prior that EMU was not at all important for incentives to reforms in Europe. They can also explain why the Euro neither proved to be a job machine nor a job killer, as claimed by politicians before the start of EMU. Instabilities of the Eurozone could arise because (a) a lack of reforms might hamper labor market flexibility which becomes necessary in a currency union in case of asymmetric shocks and, hence, global competitiveness of the Euro area (Belke and Gros, 1999), and (b) the shift in the monetary regime towards the Euro did not necessarily have the same impact on the reform intensity in all Eurozone member countries' economies (if instability is interpreted in an inter-country phenomenon). In general, it is unclear whether a monetary union itself increases the probability of asymmetric shocks. Not only labor market rigidities or flexibility matters, but also differences in labor market flexibility between European countries. However, what matters is the combination of asymmetric shocks and labor market flexibility. The net effect might, for instance, depend on the pre-existing degree of unionization, on the extent of centralization and coordination of wage-bargaining and the relative size of a country within the currency union (Belke and Gros, 1999, and Popov Gould, 2006).

We now become less specific and turn to our second question and ask what kind of monetary policy suits a slow growth economy like the Eurozone and whether actual monetary policy has behaved like that. If not, this might have contributed to the emergence of instabilities in the Eurozone.

### **3. What Kind of Monetary Policy for a Slow Growth Economy?**

It has often been argued that the ECB had been much less activist in its policy than the Federal Reserve (see, e.g., Belke and Gros, 2005). Could it have done more?

We start by showing that cutting interest rates to 1% in 2003 would have offset the tightening of conditions induced by the appreciation of the Euro, but it would not have qualitatively changed the assessment of the relative inaction with respect to the United States.

After these more short-run considerations, this section analyses in more detail a longer-term aspect of monetary policy that has gained in importance since the start of EMU, namely the consequences of allowing a liquidity overhang to build up. Some economists may perhaps argue that ‘liquidity overhang’, or ‘excessive credit growth’, is a meaningless concept. Money and credit growth simply reflect real economic and price growth without exerting any influence on these variables. We do not want to enter here into the causality of money and prices. We only note that money and credit growth, which cannot be explained as responding to the needs of an economy growing at potential, and a desired rate of inflation should alert us to potential future risks to price and/or financial stability (note again the title of this paper which is “Instability of the Eurozone?”) and make us question the appropriateness of the stance of monetary policy. Thus, we subscribe to the conventional wisdom that, in the long run, inflation is a monetary phenomenon, and that central banks should always keep an eye on the long run. The most recent meeting of the “ECB and its Watchers” Conference in Frankfurt has again shown that this view has emerged as a consensus among the different ECB watchers (Pill and Rautanen, 2006).

The temptation to look at the short-run becomes especially strong when price stability seems assured ‘as far as the eye can see’, i.e. for the next few years. This explains the strength of the pressure on the ECB to ‘get the economy moving’. However, it can be shown that a monetary policy that focuses on the output gap (because price stability seems assured) is liable to make serious errors as well, because estimates of the output gap are also subject to a wide margin of uncertainty. This is particularly the case for the Euro area, as is documented in chapter 1 of Gros et al. (2005). The persistent uncertainty about the growth potential for the Eurozone thus suggests that the ECB is justified in placing less emphasis on cyclical stabilization policy. The example of the Federal Reserve is misleading in this area as well, because the growth potential of the US seems to have been much more stable.

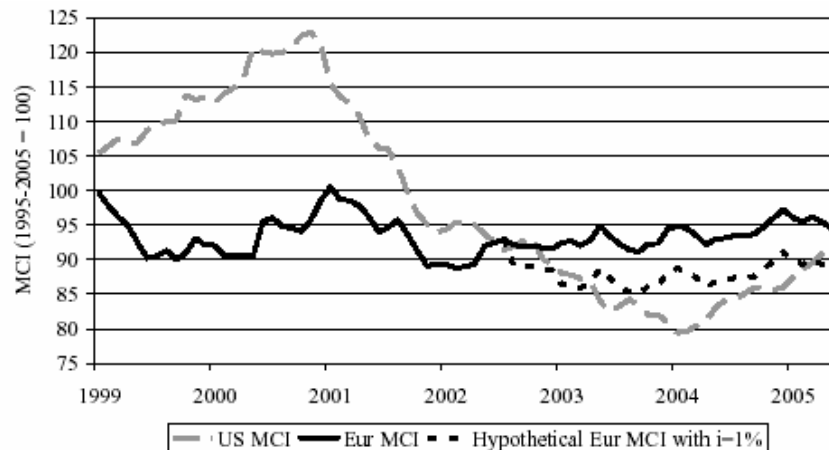
### **3.1 Not Enough Loosening?**

The ECB held rates at a historically low level for two and a half years until December 6<sup>th</sup>, 2005. However, this does not seem to have been enough to get the Euroland economy going. One explanation of this apparent failure might be that the appreciation of the Euro led to a tightening of monetary conditions despite the constant low level of interest rates. This leads to the question: Could the ECB have done more to support the Eurozone economy?

It is true that monetary policy could have been even more accommodative, as it failed to offset the impact of the strengthening currency. But how much could the ECB have achieved? Figure 3.1 below shows a counterfactual exercise, whereby

the ECB cut interest rates to 1% in 2003 and kept them stable until now. That move would have offset the appreciation of the Euro during the period and prevented monetary conditions from tightening, providing a final level of monetary conditions similar to that of the US. Nevertheless, the ECB would still have been a less activist central bank than the Federal Reserve over the period (See Gros et al., 2005).

The exercise undertaken here assumes that the exchange rate would have moved in the same fashion despite the lower level of interest rates in the EU. Although this runs against economic intuition, it might not be far from what might have happened. The strong downward trend of the dollar of the last two years is widely perceived as a corollary of the huge US current account imbalance. This imbalance would probably not have been materially affected by a loosening of policy in Euroland. It might actually have worsened it if one believes the major macroeconomic models.



Source: Deutsche Bank, Global Market Research.

**Fig. 3.1.** Comparison of the monetary conditions index: US vs the Eurozone

Thus, with the benefit of hindsight, the ECB failed to anticipate, or to react promptly to the tightening of monetary conditions that was induced by the persistent appreciation of the Euro over the two years until the midst of 2005. As we will explore below, conflicting short- and longer-term objectives probably lie at the heart of this apparent inaction.

### 3.2 Between two Pillars

Even if to a lesser extent than the Federal Reserve, the ECB maintained an expansionary monetary policy stance in the period until the second half of 2005, stimulating the real economy (and thus giving policy makers ample room to

implement economic reforms and consolidate government finances). Against the background of its long-standing opposition against a monetary policy aimed at supporting growth and against ex-ante coordination with fiscal and structural policy, the ECB's accommodating monetary policy stance (which we advocated last year) at that time is noteworthy. Unfortunately, the policy had none of the desired effects: growth remained lackluster and governments neither exerted fiscal discipline nor progressed much with structural reform (see part I of this paper).

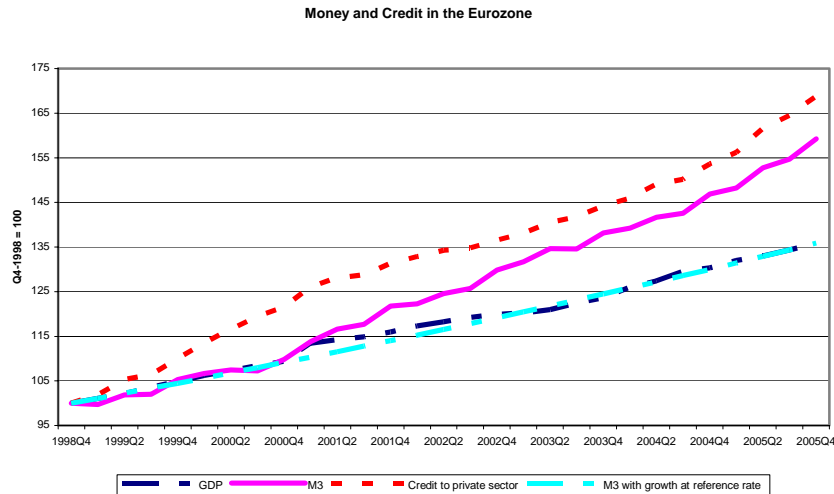
Despite this shortage of progress in reform and accelerating liquidity growth, the ECB (at the time of the 7<sup>th</sup> Annual Report of the CEPS Macroeconomic Policy Group by Gros et al., 2005, going to publication, namely June 2005) still shied away from fading out the strong monetary stimulus. The simple reason for this was that growth remained weak and inflation low.

The ECB has thus been caught between a rock and a hard place. The rock consisted of continuing sluggish real growth and subdued goods and wage inflation. The economic analysis within the ECB's monetary policy strategy thus argued for unchanged or lower interest rates. The hard place consisted of dynamic money and credit growth (which has raised housing prices). The monetary analysis was arguing for higher rates (see, e.g., the ECB Observer Report by Belke et al., 2005). With the two pillars of the strategy sending different signals, the ECB apparently has been in a dither about rate cuts or hikes for the last 15 months before June 2005. At that time, this was beginning to raise questions about the credibility of its monetary policy strategy.

With the two pillars giving conflicting signals, the communications strategy has been severely tested. The ECB has preferred not to admit openly that it is in a quandary. Instead, it has simply vacillated from one stance to another: when economic conditions seemed to pick up it has seemed to lean towards a rate increase, only to change track when current conditions deteriorated.

### **3.3 What happened to the Monetary Pillar?**

When the ECB started to be responsible for monetary policy, it emphasized that the first pillar for its decisions on monetary policy had to be an analysis of monetary policy conditions and accordingly set a 'reference' value for the rate of growth of the main monetary aggregate on which it chose to concentrate, i.e. M3. Everything else being equal, growth rates of M3 above this reference value (4.5%) were meant to signal a need for tightening policy. Since the start of EMU, however, actual growth of both money and credit has consistently been above the reference rates as shown in Figure 3.2 below.



Source: International Monetary Fund.

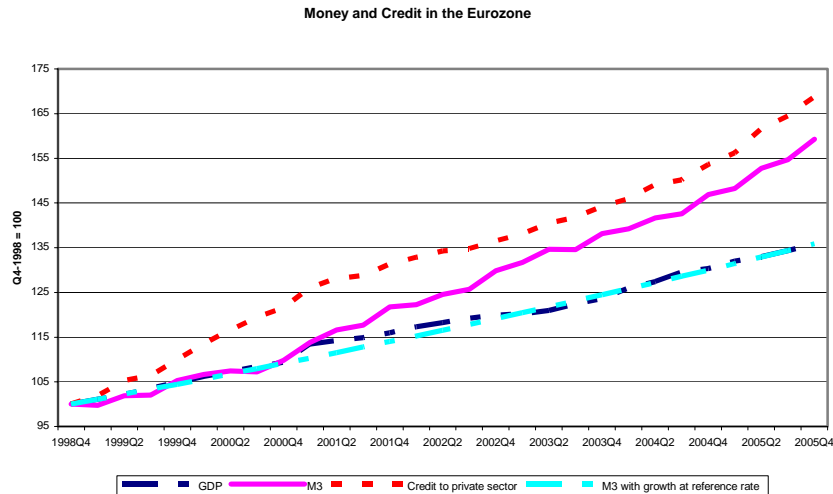
**Fig. 3.2.** Money and credit in the Eurozone

Nominal GDP grew over this seven-year period by more than 30%, which is very close to the compound growth M3 would have had if the reference rate had been observed over this period. In reality, however, the stock of money is now almost 25 percentage points above this level.

One might argue that less emphasis should be placed on monetary and credit aggregates in a time of rapid evolution of the financial markets, but upon closer inspection, this argument is much less convincing. It was widely expected that the introduction of the Euro would trigger a process of disintermediation whereby economies of scale in securitized markets would allow firms to finance themselves without recourse to bank credit. Moreover, households would then have a much wider range of investments available, which would induce them to hold a smaller share of their assets in bank accounts. Both arguments suggest that the structural changes coming with the Euro would actually reduce the ratio of credit and money relative to GDP. The expectation was that the Eurozone would move closer to the US model in which banks play a much smaller role in the financing of corporate investment and in the US the ratio of both credit and money to GDP is much lower than in the Eurozone. As Figure 3.2 shows, however, both money and credit actually increased trend-wise relative to GDP with the result that the ratio of both money and credit to GDP increased by about 20 to 25%.

A transatlantic comparison is again instructive. Figure 3.3 shows the evolution of the ratio of money and credit to GDP also for the US since 1998. It is apparent that on this metric, there is slight difference. While the change in credit per GDP is 24.2% and the change in M3 per GDP amounts to 17.2% for the Euro area, the relevant figures are 22.6% and 17.5% for the US. The popular image of the Federal Reserve flooding the US economy with liquidity compared to a much

stingier ECB that at least constantly talks about the need to keep money growth in check was thus wrong. Monetary policy on (bank) credit expansion could even be seen as having been slightly more expansionary in the Euro area than in the US.



Source: International Monetary Fund. Change 4th quarter 2005 from 4th quarter 1998.

**Fig. 3.3.** A transatlantic comparison of excess liquidity (2005, yoy)

### 3.4. The Costs of Ignoring the Monetary Pillar

At first glance, money and credit growth above earlier-desired levels does not seem to have exacted any costs on the economy. Between January 1999 and April 2005, the harmonized yearly consumer price inflation rate averaged 2%. This appears to be close enough to qualify as meeting the ECB's goal of keeping inflation below, but close to 2% over the medium term.

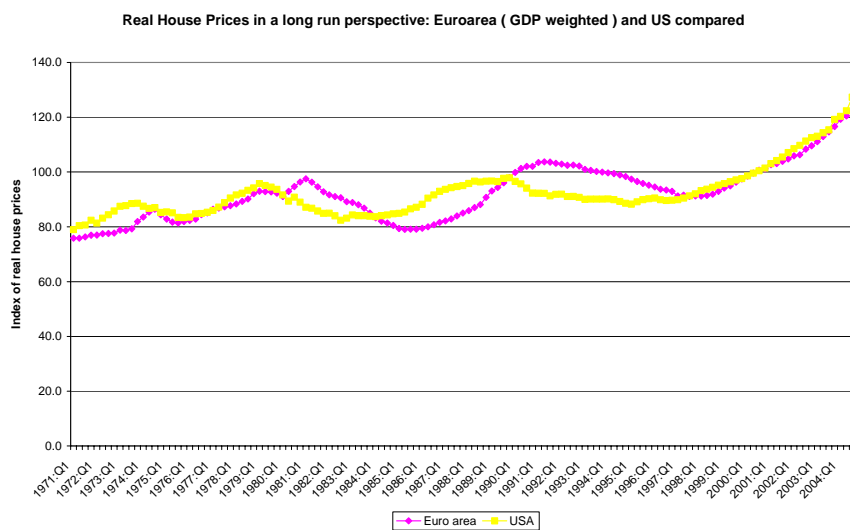
This does not mean, however, that one can ignore money and credit developments. We have learned from past experience that the lag between monetary policy and its effects on inflation can be long and variable (Pill and Rautanen, 2006). Money growth above the rate absorbed by money demand will at some point raise prices, be they for goods, services or assets. Hence, even if consumer price inflation has remained well-behaved so far and there are no signs of an imminent rise, it is too early to dismiss all risks resulting from liquidity growth.

One potential warning sign comes from housing prices. While it is true that price increases for real estate Euro area average have not been alarming in any single year (e.g., 7.2% in 2004), a longer run view reveals a trend that gives rise to concern.

Indeed, it seems that the Euro area housing index shows the same longer run development as that of the US, confirming the similarity in the expansion of



monetary and credit aggregates. This can be verified immediately from a simple plot of the data in Figure 3.4 which shows the average Euro area index constructed from OECD data together with that of the US.<sup>7</sup> The transatlantic correlation seems quite strong, not only for the most recent past, but also over a much longer period of time. House prices thus seem to be important even within the Euro zone. How large is the risk that markets turn around in the US and the Euro area at the same time? Figure 3.4 suggests on a very stylized level that the Euro area seems to follow the US with a lag of about 2 years, suggesting that, if this relationship continues to hold, the Euro area would still have two years of higher real estate prices to go.



**Fig. 3.4.** Real house prices in a long-run perspective: Euro area and the US compared

The simple fact illustrated here is that the Euro area has experienced a similar development as in the US over the last decade (Belke and Wiedmann, 2005). This is not yet widely enough appreciated. ECB President Trichet has over the last year drawn some comfort from the contained level of house price inflation in the Euro area average during 2005. However, what seems worrisome is not so much the increase during last year, but the cumulative increase over the last decade and the acceleration over the last decade, which has brought the index to beat all previous records as can easily be verified in Figure 3.4.

<sup>7</sup>Real estate market developments have always been heavily influenced by regional supply and demand conditions and price bubbles have tended to be concentrated in certain regions. This is as true for the US as for Europe. The depressed state of real estate in Germany is not too dissimilar to that of the Midwest of the US. Hence, it is as useful to look at the Euro area average as it is to look at the US average. See Belke and Wiedmann (2005).

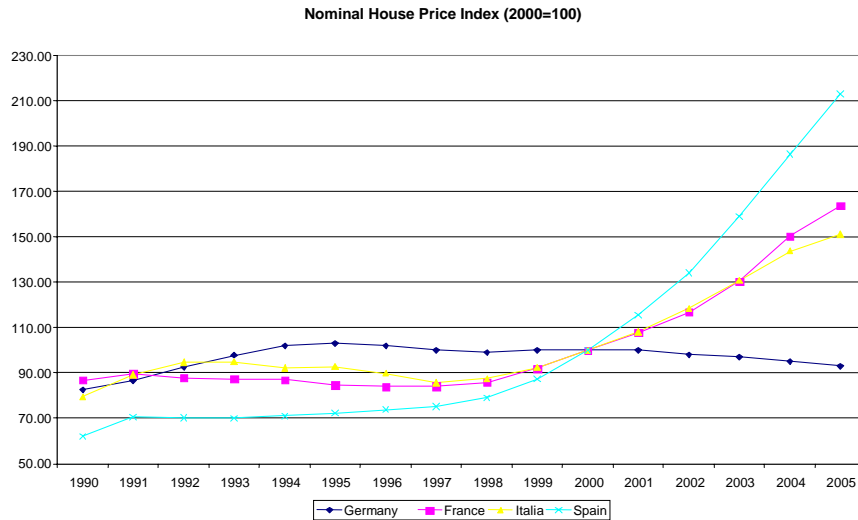
Many seem reluctant to look at the Euro area average for real estate prices, but this is not appropriate. Real estate market developments are always heavily influenced by regional supply and demand conditions, and price bubbles have tended to be concentrated in certain regions. At the same time, however, the deflation of regional price bubbles, given a critical size of the affected region, has tended to have supra-regional effects. Two examples may suffice to illustrate the point.

First, in the late 1980s, there was a property price boom in many parts of the US, particularly in states like Texas and California, fuelled by strong lending growth by savings and loan banks. While the property price booms were localized, the entire US savings and loans industry was severely shaken when the bubble burst. To help the sector recover, the Federal Reserve kept interest rates at very low levels for an extended period of time. When they eventually raised rates in 1994, they induced a severe correction in world bond markets (Belke and Wiedmann, 2005)).

Second, in the early 1990s, following the fall of the Berlin Wall and German unification, property prices rose strongly in eastern Germany. Construction investment and mortgage lending boomed, until overbuilding caused prices to collapse in the mid-1990s. The implosion of property prices weakened German consumption, investment and GDP growth. Although prices have now stabilized, the collapse of the building industry caused severe economic problems given the limited flexibility of the German labor market. Moreover, the stagnation of house prices certainly contributed to the ongoing weakness of consumption in Germany. Given the weight of the economy in the Eurozone, the housing market collapse was a major reason why the ECB had to keep interest rates at relatively low levels for a long time. These and other examples from economic history suggest that regional property-price cycles can have supra-regional effects. Recently, property prices have increased especially rapidly in France and Spain (Fernández-Kranz and Hon, 2006, and Girourard et al., 2006). These countries are certainly large enough to cause Euro area-wide problems should a housing price bubble suddenly deflate (see Figure 3.5).<sup>8</sup>

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<sup>8</sup> Even if a house price bubble exists in, say, Spain, the main research question remains whether this triggers indeed Euro area wide problems, especially with an eye on different financing structures, different potential for extracting one's equity investment in housing (which is much lower in most Euro area countries than in the US) and different degrees of "foreign" ownership. The effects could be more isolated than in the case of the different states in the US or the different Laender in Germany after the reunification. This debate is open for further research. See Fernández-Kranz and Hon (2006), Giuliadori, 2005, and Gros (2006).

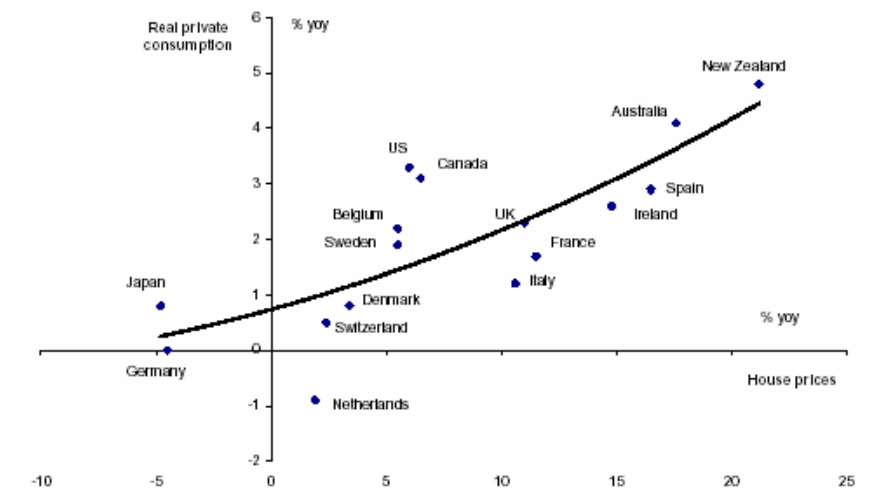


**Fig. 3.5.** Development of nominal house prices in selected OECD countries

What are the consequences of real estate booms? The key reason US house prices have attracted so much attention is that a property price crash, or just a deceleration of the rate of increase of house prices, in the US would almost certainly weaken private consumption through wealth effects and increased uncertainty about the economic outlook (Belke and Wiedmann, 2005). This is well known, but the data presented here implies that the same danger exists for the Euro area. In the Euro area the wealth effect might be less strong and consumers might be less indebted, but a fall in house prices could instead also lead to an abrupt fall of new construction investment.<sup>9</sup> Moreover, a fall in house prices may impair a part of the outstanding loans of the banking sector and force banks to raise reserves. This could reduce their willingness to extend credit to businesses and consumers. A slump in demand in the countries suffering from housing price deflation could spill over to other Euro area countries and, in the worst case, pull the entire Euro area into recession or even deflation. While the exact details of the transmission mechanism are different on the two sides of the Atlantic, it is clear that both sides face a quite similar risk.

Figure 3.6 below illustrates the close link that existed between house prices and consumption (the correlation coefficient is about 0.80) in the year 2004. Figure 3.6.a suggests a similar pattern also for the year 2005.

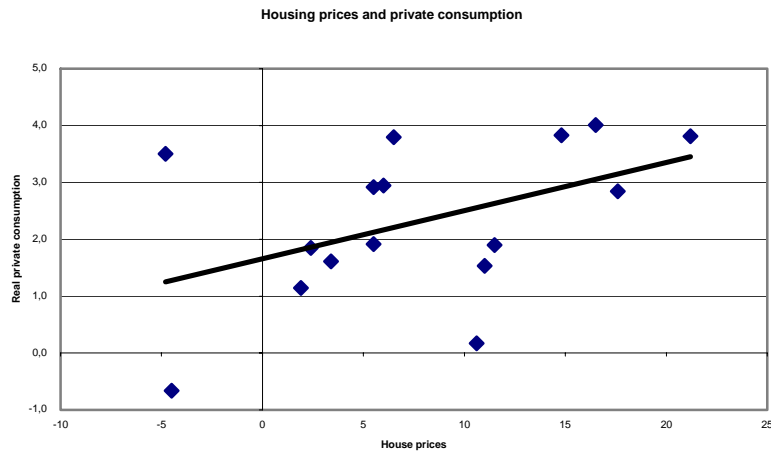
<sup>9</sup>For more details of estimated housing wealth effects in several countries and the relative importance of mortgage loans see Catte et al. (2006), Giuliadori, 2005, Peek and Wilcox, 2006, and Selosse and Schrefler (2005), p. 13.



Source: OECD, The Economist.

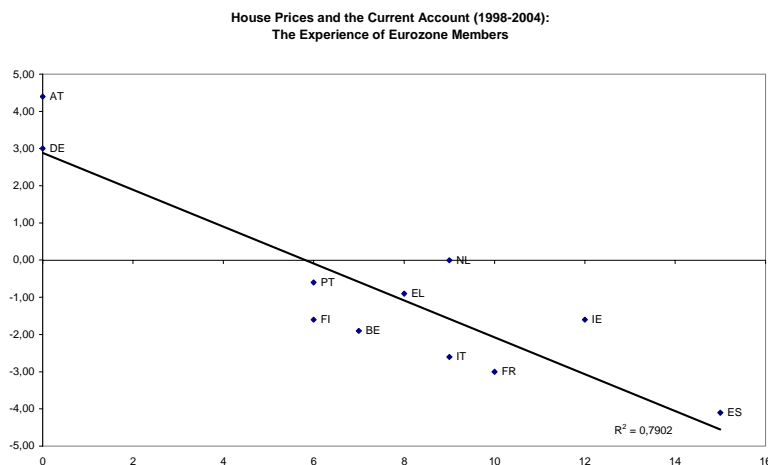
**Fig.3.6.** House prices and consumption

The development of house prices in Euroland also matters with respect to the current account position of the Euro zone member countries. The importance of housing prices in influencing domestic demand even in continental Europe where re-financing of mortgages is more costly and where house ownership is often much lower (Giuliodori, 2005) can be illustrated by simply comparing house prices and the current account across Euro area members. (Euro area members share the same exchange rate; most of any divergence in current accounts should thus be due to divergences in domestic demand.) As Figure 3.7 shows, there is a rather close correlation between the current account and real house prices, with the latter explaining 80 % of the variance of the former.



Source: Economist June 2005 and OECD, Economic Outlook November 2005.

**Fig. 3.6.a** Housing prices and consumption in the year 2005



Source: OECD. House prices average annual change and current account balance in percent of GDP 1998-2004.

**Fig. 3.7.** House prices and the current account (1998-2004): the experience of Eurozone members

Thus, excessive money and credit growth raises risks to price stability from two sides: it could stoke consumer price inflation in the longer run, or cause consumer price deflation by creating a negative asset price bubble.

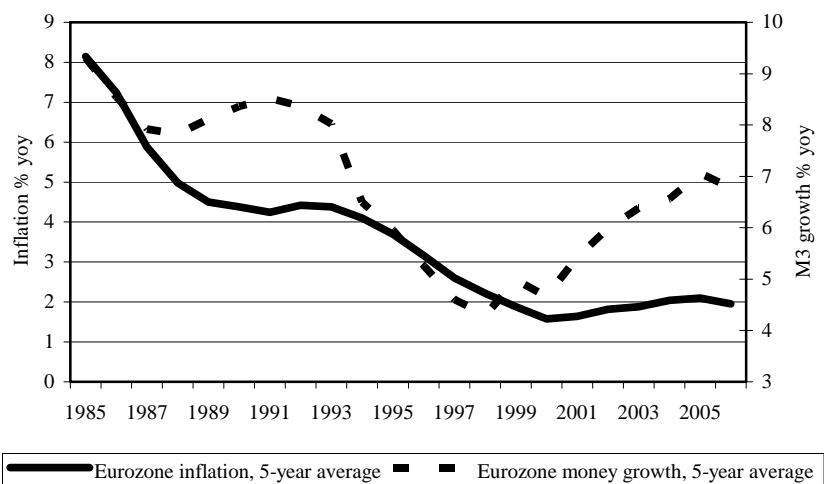
The fact that an asset price bubble does not lead to consumer price inflation while it is building up and might even lead to deflation once it bursts explains why even longer term inflation expectations might not be a good guide to policy. The cost of letting these bubbles emerge do not come in the form of higher inflation, but of a misallocation of resources (empty houses) and prolonged economic weakness. According to Figure 3.4, house prices seem to move in long-term cycles and are much smoother than stock markets. The Euro area aggregate index of real house prices has risen almost as much as that of the US and is now (together with that of the US) about 40% above its 30 year average. This is almost exactly equal to the overvaluation of Japanese real estate at the height of the Japanese bubble, which was then followed by a decade of decline (Posen, 2003). However, with an eye also on Figure 3.4, there is no doubt that (real) house prices have a clear tendency to revert to their mean (Shiller, 2005). Hence, it would be wrong to expect a sudden ‘crash’ in the real estate market. Sharp declines in stock prices have indeed corrected excesses in more than one occasion, but real estate prices tend to move much more smoothly, in part because households seem reluctant to accept lower nominal prices and prefer to hold on to their house even if real prices continue to decline for an extended period. This does not imply that the EU (or the US) will have to expect a similar economic performance than Japan over the last decade, but it does imply that a serious and long drawn out correction in house prices cannot be ruled out. It is the latter that is the most relevant danger for Euroland and could give rise to significant instabilities, given Euroland’s still quite low overall degree of flexibility (see part I of this paper).

Is the Anglo-Saxon experience a reason to relax? The UK and Australia, to name just two Anglo-Saxon countries, have also experienced massive run-ups in their housing markets. Although the markets have slowed down considerably over the last year, their economies have not collapsed. It is thus tempting to use the experience of the UK and Australia as a counter example to the thesis that housing prices have reached a worrisome level in the Euro zone (and the US). One might be tempted to infer from the relative good performance of the UK and Australian economies after the end of their respective housing booms that ‘resilience’ to housing booms and busts has increased. However, there are several reasons why it is clearly too early to conclude that housing booms can pass without any negative effects. The first reason is simply that too little time has passed since the peak was reached in these two countries. As emphasized above, the decline in house prices following a period of overvaluation tends to be stretched over a long period. Second, both the UK and Australia have strongly benefited over the last year (their first year without real estate price increases, but yet no fall) from a significant terms of trade gain due to higher raw material prices which might have prevented negative effects from materializing.

A longer-term perspective is again useful to measure the scale of the monetary overhang at present (see, extensively, Pill and Rautanen, 2006). Figure 3.8 shows that the scale of the present divergence between money growth and inflation had only one precedent, namely the early 1990s when a scissor opened between accelerating money growth and inflation which was on a downwards trend. The scissors closed in the middle of the decade, with only a slight acceleration of

inflation. The main event that led to the two series to convergence was the strong deceleration of money growth which preceded the recession of 1995 (and a subsequent period of slow growth). The deceleration in money growth was in turn due first to a tightening by the Bundesbank, which saw German inflation rising and then a considerable increase in interest rates as the central banks of those countries under speculative attack tried to maintain price stability in the face of large devaluations.

There is another parallel between the current situation and that of the early 1990s (see also part II). At the time, exchange rates were kept fixed within the ERM, although some countries were continuously losing competitiveness vis-à-vis the core of the ERM, Germany. That this situation was unsustainable became clear only in the currency crisis that started in late 1992, precipitated by the combination of a tightening by the Bundesbank and the uncertainty surrounding a French referendum. Part II of this paper will analyze the dangers inherent in the present situation in more detail. The latter might lead to instabilities of the Eurozone, again from two angles. First, the bursting of a bubble might be problematic per se, and second, all the Eurozone economies might be impacted differently.



Source: European Commission, Bundesbank.

**Fig. 7.** Inflation – A monetary phenomenon

## **Part II: The European Monetary Policy in a Large and Diversified Economic Zone**

### **4. EMU's Coming Stress Test**

From the time perspective of June 2005, Gros et al. (2005) have documented in their recent Macroeconomic Policy Group report the inability of the usual macroeconomic levers to get the Eurozone economy on a sustainable growth path, as longer-term considerations limited the extent to which both fiscal and monetary policy could perform a stabilization role. Pressured by persistently weak growth, a choice was made in favor of 'short-termism': In the fiscal field, the key disciplinary device, the Stability Pact, has already effectively been emasculated by the politicians. In the monetary field, the ECB has initially ignored but more recently taken into account medium-term warning signals stemming from the acceleration in money and credit growth. In fact, in the midst of 2005 and before the most recent interest rate hikes, it still looked to some observers as if fears of political pressures were inducing the ECB to focus on short-term growth considerations at the cost of neglecting long-term stability risks (again a close reminder of the main topic of the paper, instabilities of the Eurozone).

In the end, neither short-term demand has been boosted nor long-term discipline maintained. The result of this failed attempt to stimulate demand in the face of very sluggish supply is that Eurozone is now faced with rising public debt/GDP ratios and a large monetary overhang. The latter has not led to incipient inflationary pressures so far, and the current state of labor markets suggests that inflation is likely to remain under control in the near term. Additionally, financial markets do not seem to care, although public debt is indeed very different between EMU countries (see most recent data). Despite this, growing fiscal deficits combined with a rising monetary overhang in the face of considerable cost and price rigidities constitute a threat to future price and financial stability in the Euro area.

Seen on the whole, the European monetary policy in a large and diversified economic zone has functioned remarkably well in the first years of EMU. However, in this final section we would like to add some water to the wine and argue that this will not necessarily be the case in the future, because EMU will almost certainly come under stress in the near future due to its diversity. The emergence of widening intra-area divergences could severely test the resolve of the Eurozone authorities to support the value of the Euro, which could degenerate in a process of gradual 'lira-isation' of the Euro.



#### **4.1. EMU's Potential Breaking Points Resurface**

In the earlier debates about the requirements for economic and monetary union, many participants – including senior policy-makers – argued that monetary union would not be stable and could not survive in the long run if it were not accompanied by more economic flexibility and closer political union. The former was seen as necessary to allow for better adjustment in the absence of country-specific interest and exchange rate changes; the latter was seen as necessary to establish democratic legitimization for a stability oriented monetary policy and the conditions for a fiscal policy consistent with this type of monetary policy. Without closer political union and the emergence of a European public will, it was feared that the ECB could come under irresistible pressure from national governments to conduct a softer monetary policy and that fiscal policy would lack the necessary discipline to ensure price stability in the long run. In other words, governments could pursue their narrow interests at the expense of the public good of price stability.

As preparations for EMU progressed and prospects for closer political union faded into the background, it was argued that the statutory independence of the ECB would shield it against political influence. Moreover, to ensure some fiscal policy discipline, the Stability and Growth Pact was agreed at the Amsterdam European Council meeting in 1997.

In the first few years of EMU, neither the degree of economic flexibility nor the stability of the fiscal framework or the independence of the ECB was severely tested. However, as growth has faded, tensions have increased. Optimists hoped that economic tensions would eventually break the existing structural rigidities. Unfortunately, it seems that the rigidities are prevailing while fiscal policy discipline is giving way. Since this will not keep growth going, political pressure will increasingly be brought to bear on the ECB to support economic activity in the short-term by weakening the Euro internally and externally.

#### **4.2 A New Element: Intra-Area Divergences**

Growth differentials among EMU member countries have so far been rather limited and at a stable level (Benalal et al., 2006). The weighted standard deviation of the growth rates of the Euro area members has barely moved between 1999 and 2004, as the large three Euro area members tended to move broadly together. As documented below, the two main laggards in the Eurozone were Germany and Italy, with France falling somewhat in between them and the more dynamic smaller countries (“small is beautiful” also with respect to deficits, see Gros et al., 2005, chapter 2, and Felderer, 2006, for details, excluding current Portugal and Greece).

**Table 4.1.** “Small is beautiful” in macroeconomic terms (Averages 2000 to 2005)

Large vs. small (averages, 2000-2005)	Big-3*	Small-8 **	France	Germany	Italy	NMS	US	EUROZON E
Real GDP growth	1.42	2.91	1.99	1.14	1.13	4.77	2.76	1.79
Fiscal balance	-2.82	-0.45	-2.83	-2.70	-2.93	-3.43	-2.68	-2.07
Labor productivity growth	2.34	4.08	2.76	1.69	2.58	8.82	1.97	2.76
Share of industry	19.82	17.42	15.52	21.20	21.99	23.58	14.85	19.03
Unit labor cost	1.58	2.46	1.65	0.30	2.78	2.96	2.06	1.59
Change in share of exports in Eurozone	0.01	0.40	-2.26	1.15	1.15	7.43	n.a.	n.a.

\* Big 3= DE, IT, FR

\*\* Small 8= BE,AT,PT,GRE,NL,LU,FI,IE)

Source: Own calculations based on AMECO data

However, any apparent similarity between developments in Italy and Germany has been superficial. It is now becoming clear that a chasm has opened up between them under the surface.

Germany entered EMU with an overvalued exchange rate, but it has regained competitiveness through a process that used to be called ‘competitive deflation’. By contrast, Italy has continuously lost competitiveness and hence market shares. These large relative movements in competitive positions did not translate earlier into different growth rates because of the offsetting tendencies in the housing markets. As documented above, the low interest rate environment fostered by the ECB’s policy and global developments led to a housing boom in a number of countries, including Italy. This has thus far sustained consumption in Italy, while overbuilding especially in the eastern part of the country during the early 1990s lead to persistent weakness in the real estate market and consumption in Germany. However, the cumulated loss in Italian competitiveness has become so severe that its negative effects can no longer be offset by the housing boom. Hence, we foresee that Italy is likely to provide the first stress test of EMU. Below, we would like to develop some arguments underlining our hypothesis from the time perspective of the 7<sup>th</sup> Annual Report of the CEPS Macroeconomic Policy Group in June 2005. We feel legitimized in doing so, since things have not changed dramatically since then.

### 4.3 Italy Moving Towards the Brink

The Italian economy has slipped back into recession in 2004Q4-2005Q1. However, in contrast to developments in 2003, the most recent downturn has been more pronounced, and there are presently no signs of a bottoming out of this contraction in the near future. As a consequence, Italian real GDP could now drop in 2005 in a recession almost as deep as that of 1993, when real GDP contracted by 0.9%.

As mentioned above, a key reason for Italy's economic weakening has been a pronounced loss in external competitiveness. With unit labor costs in Italy rising by 1.3 percentage points faster than in the Euroland average – and by 2.5 percentage points faster than in Germany – in 1999-2004, Italy's real effective exchange rate (based on relative export prices) rose by 15.6% between 1999 and 2004, compared to a 1.7% increase in Germany and a 1.3% drop in France. This, in combination with the accompanying deterioration in business and investor confidence, has led to a sharp decline in growth since 2000 and, most likely, recession in 2005.

When Italy fell into recession in 1993, the lira depreciated substantially. It fell by altogether 34% against the ecu - the predecessor of the Euro - between 1992 and 1995. Producer price inflation accelerated from 1.9% in 1992 to 7.8% in 1995, but the total increase in prices by 16% between 1992 and 1995 was much less than the depreciation of the exchange rate. As a result, Italy regained competitiveness. This gain in competitiveness was large enough to overcome the negative impact of the increase in interest rates so that GDP growth recovered after an initial fall to 2.3% in 1994 and 3.0% in 1995.

This time, Italy cannot regain competitiveness – and stimulate economic growth – through nominal exchange rate depreciation. What is needed is real exchange rate depreciation through cost and price cuts. This is how Germany improved its external competitiveness and raised economic growth in recent years (while many economists and market participants misinterpreted these developments as deflation). Thus, German unit labor costs increased by only 0.4% in the annual average of 1999-2004, with a substantial drop by 0.7% yoy occurring in 2004. Aided by increased competitiveness, net exports rose and the German economy recovered from stagnation in 2003. However in contrast to their German counterparts, which learned to live with a hard currency and fierce competition in the past, Italian companies and trade unions have little experience in rigorous cost and price controls in a highly competitive economic environment. They operate in an environment characterized by significant restrictions on competition and a soft currency.

Moreover, while they tend to concentrate more on the production of medium-quality, price sensitive goods and services, they have made less progress than their German counterparts in outsourcing production to low-cost locations. All this suggests that it will take Italian companies much longer than their German counterparts to improve their competitive position. As a result, the medium-term outlook for the Italian economy is rather bleak.

On top of the loss of competitiveness, one has to ask how long the housing boom in Italy will last. Should housing prices stop increasing, or even decline, domestic demand would fall even further. The economic situation in Italy thus has the potential to develop into a full-blown crisis. Moreover, as both the loss of competitiveness and any post-bubble housing market weakness require considerable time to be corrected, it is likely that the Italian economy will experience a long period of economic stagnation or even contraction (Gros, 2006a).

**Table 4.2.** Italy: All competitiveness indicators point in the same direction

1999-2004	EU12	Germany	France	Italy
Labour productivity (*)	0.0	0.9	1.1	0.0
ULC (*)	1.6	0.4	1.6	2.9
Change in the share of exports over eurozone (national accounts)	--	+9.3%	-5.6	-14.4
Exports (customs) (*)	6.7	7.4	7.4	4.6
Competitiveness ranking (2004-05)	---	13	27	47
REER (ULC)	12.5	-4.8	1.7	10.9
REER (X prices)	9.2	1.7	-1.3	15.6

\*This is the year average of the % yoy rate. The changes in REERs refer to the whole period, as the change in the share of exports.

*Note:* X stands for exports. In the case of EU12, REER is computed against the rest of the world. In the case of individual countries, it is against their main 34 trade partners.

Source: Haver, European Commission, World Economic Forum and national statistical institutes.

#### 4.4 Some More Formal Considerations: Instability in a Monetary Union?

The decisive question now with respect to the title of our paper runs as follows: Is EMU in danger from internal tensions? The experience so far has shown that some countries are continuously losing competitiveness. Is this a structural problem in the sense that these countries just have problems in keeping inflation at a level that does not imply a continuing loss of competitiveness? Or is the persistence of higher inflation in some countries due to the internal dynamics of a monetary union in which any country that starts with higher inflation rates also has a lower real interest rate, which stimulates demand, and thus leads potentially to even more inflation. In other words, does a monetary union always lead to diverging cycles?

The purpose of this brief section is to discuss an extremely simplified model that can allow one to see what factors could lead to such diverging cycles at

present. This representation has just two building blocks that describe the two main channels through which output and price interact in a monetary union:

$$y_t - y_{t-1} = -\varphi(i_t - (p_t - p_{t-1})) - \gamma p_t + g_t \quad (1)$$

$$p_t - p_{t-1} = \beta^{-1}(y_t - y_{t-1}) + u_t \quad (2)$$

Where the usual notation applies:  $y$  stands for output,  $i$  the nominal interest rate,  $p$  the price level. The shocks to the demand equation and the Philips curve are denoted by  $g$  and  $u$ , respectively. The first equation says that output (growth) depends on the real interest rate and the level of the real exchange rate, which in EMU is given by the domestic prices level. The second equation is just a standard Philips curve.

The parameters have a straightforward interpretation:  $\gamma$  should increase with the degree of openness (to intra Euro area trade); it should thus be higher for small countries (and for Germany where exports amount to over 40 % of GDP) than for Italy, France or Spain (where exports are around 25 % of GDP). The parameter  $\varphi$  denotes the impact of interest rate conditions on demand and should thus be related to the financing structure of the economy, e.g. the importance of external finance for investment and the mortgage sector for household consumption (and investment in housing). Finally,  $\beta$  denotes the inverse of the slope of the Philips curve.

The dynamics of the system are determined by the difference equation which results from simply inserting the second into the first equation:

$$\beta(p_t - p_{t-1} + u_t) = -\varphi(i_t - (p_t - p_{t-1})) - \gamma p_t + g_t \quad (3)$$

$$p_t = \{-\varphi i_t + (\beta - \varphi)p_{t-1} + g_t + \beta u_t\} / (\beta + \gamma - \varphi) \quad (4)$$

Stability of the system requires that

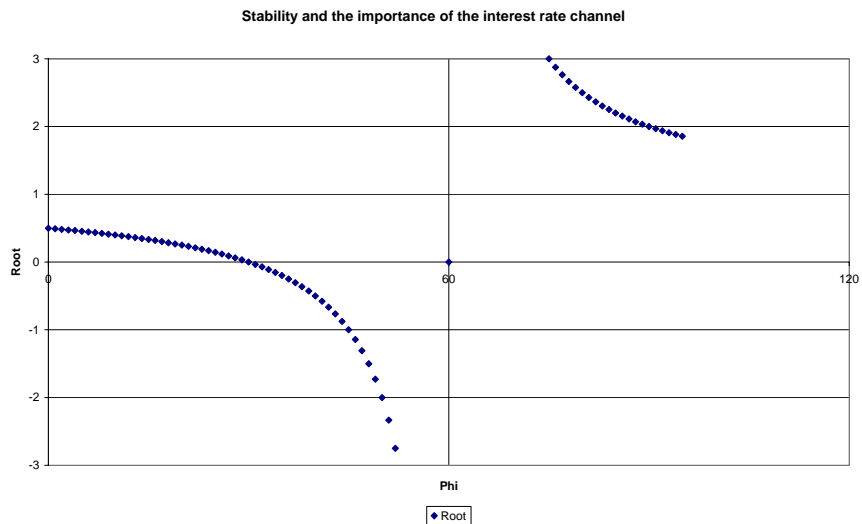
$$-1 < (\beta - \varphi) / (\beta + \gamma - \varphi) < 1 \quad \text{or} \quad \beta + \gamma > \varphi \quad (5)$$

This suggests that the bigger  $\varphi$  is relative to  $\gamma$  (for example the case of Spain which combines a relatively low degree of openness with a relatively strong financial sector), the more likely it is that the country will experience large deviations of its price level from the equilibrium value. More generally, a higher degree of openness makes it more likely that the stability condition is satisfied. More openness should thus stabilize the price level (and hence also output) in a monetary union.

Figure 4.1 below shows the root of the difference equation as a function of the parameter  $\varphi$  for two particular values of  $\beta$  and  $\gamma$  (both equal to 30). This graph illustrates a general pattern: For small values of  $\varphi$ , the system is always stable and adjustment becomes initially quicker until  $\varphi = \beta$ . At this point the root is zero and inflation is no longer influenced by its own past (and thus driven only by the shocks). If  $\varphi$  is greater than  $\beta$  the root becomes negative, implying that the system will exhibit cycles. These cycles will converge as long as  $\varphi < \beta + 0.5\gamma$ . If  $\varphi$  is

greater than  $\beta + 0.5*\gamma$ , the system becomes unstable (but remains cyclical provided that  $\phi$  is smaller than  $\beta + \gamma$ ).

For an alternative with competitiveness having a lagged instead of an immediate impact on output, see our annex.



**Fig. 4.1** Stability and the importance of the interest rate channel

#### 4.5 The Stress Test in Action

Unfortunately, Italy is not the only country to experience the combination of a strong loss of competitiveness whose effect has so far been covered by a housing boom; Portugal and Greece are in a similar situation. These two countries are also running the highest government budget deficits in the Euro area – in the case of Greece even before growth is likely to turn down under the impact of a slowing housing market and the ongoing loss of competitiveness. Even a strong performer like Spain masks a deteriorating competitive position under the strong growth that, were its housing market to slow down, would put its economic performance at risk. Thus, the list of countries at risk is increasing and could easily become a majority soon. At that point, a key political question will have to be answered: Does the majority want to undergo the painful process of regaining competitiveness through cost and wage control, or is a weaker currency preferable?

Given the aversion of especially the large member countries to painful structural reform, which was documented above in section 2, and in view of the likely persistence of the economic difficulties, the political systems in the weaker countries - at first probably Italy - are likely to abandon fiscal policy discipline. The European Commission hopes that the Council of Finance Ministers

(ECOFIN) will demonstrate that the Stability and Growth Pact still exerts a disciplinary influence on EMU members after its recent revision. We doubt this. With France and Germany also experiencing severe strains in government finances, and Portugal and Greece among its 'compagni di sventura', Italy can count on powerful and numerous allies in its likely course towards higher fiscal deficits.

However, it is crucial to understand that fiscal policy cannot address Italy's long-term competitiveness problem and is hence unlikely to engineer the desired economic revival – in the same way that past devaluations of the lira only provided temporary respite. Therefore, Italian policy-makers are very likely to step up pressure on the ECB to pursue an even more expansionary monetary policy, especially as they would have to bear the largest fiscal burden should interest rates increase substantially. French and German politicians may not stand in the way of efforts to coax the ECB into an easier monetary policy as they have been unable to engineer a reduction of unemployment through labor market reform.

Without European political union, the ECB lacks a public constituency supporting its monetary policy stance in the face of political pressure. Public support was a cornerstone for the German Bundesbank's ability to pursue a low-inflation, hard currency policy. It remains to be seen whether the ECB can do the same without strong backing from the general public. Should the ECB yield to inevitable political pressures, the switches would be set for a higher-inflation, softer-currency EMU. Monetary union is thus likely to undergo a major stress test, which should not come as a surprise. Many economists had predicted severe stress before the start of EMU and warned that this could result in a softening of the common currency or even an eventual demise of EMU. What is perhaps surprising is how unprepared economic policy-makers, including those at the ECB, presently appear in dealing with the stress.

The debate preceding the referendum in France (even more than its outcome) showed the severe stress under which policy-makers have come throughout the EU. One argument used against the Constitutional Treaty was that it validated an excessively liberal economic approach, based on 'Anglo-Saxon' principles. Formally, this argument was wrong in that the draft Constitutional Treaty would not have changed the economic constitution of the EU. However, this argument does have a basis: the EU, and especially EMU, has been a catalyst for reforms in many areas (finance, central bank independence, etc.), which more often than not have been presented by national policy-makers as constraints imposed by 'Brussels'. Moreover, at the European Council of Lisbon, national leaders united to proclaim solemnly that the EU would deliver the "most competitive knowledge-based economy". However, as documented amply in previous analyses (and official documents), the so-called 'Lisbon process' has led to reform inflation with many promises and little action. This failure to deliver – combined with the constant sniping against EU rules that were perceived either as too liberal (services directive) or too constraining (limits on state aids, limits on fiscal deficits) – has undermined the legitimacy of the EU in general. It appears to be only a question of time before this general dissatisfaction also reaches the ECB.

## 5. Policy Conclusions

In this paper we have demonstrated how tensions between short-term and long-term policy objectives seemed to have delivered the worst of all possible outcomes for the Eurozone, lack of cyclical support and a weakening of long-term discipline. With growth now slowly picking up there is no longer an excuse for structural policy to shelve important reforms. It should now also become easier to tighten fiscal policy by cutting expenditures and for monetary policy to continue to refrain from turning a blind eye to accelerating money and credit growth.

While the Eurozone average seems to slowly be coming out of hibernation, important internal divergences have appeared. The key question is whether these stark divergences in performance are the result of divergent policies or of diverging economic fortunes. The answer is probably both: inside a monetary union, diverging economic fortunes will lead to diverging economic paths, especially if policy responses diverge. Our analysis suggests that countries that have learned to live with a hard currency in the past should be able to adjust within EMU. This applies primarily to some of the smaller countries, but also to the same extent to Germany which has regained competitiveness through rigorous price and cost control. According to section 2, however, this is valid only for German firms, but not to the same extent for the labor market, which still suffers from severe mismatch problems.

Which lessons can be drawn from the history of European integration in order to assess the probability of instabilities within the Eurozone? The first attempt to form a monetary union in Europe started in the early 1970s (the so-called Werner Plan to reach EMU by 1980). It ended in total failure because of intra-area differences which show, *mutatis mutandis*, very similar elements to today's situation. At the time, the main reason for divergence was a difference in the reaction to the oil shock of 1973. Germany chose the hard-currency approach, whereas most other countries tried to inflate their way out. Needless to say, the attempt to inflate away a terms-of-trade loss was not successful. The hard currency model thus led over time to much better economic performance. Monetary union became possible only once this lesson had been learnt and, at least on the surface, there was broad agreement on the hard-currency approach. The list of countries that have successfully absolved a national stress test of the hard-currency approach is not long:

- Germany after 1967, following the rise of the DM against the dollar and again in 1973;
- The Netherlands following break-up of the Bretton-Woods system in 1974, in the 'snake' with the DM;
- Austria in the early 1980s, after adoption of the hard-shilling policy;
- France in the early 1990s, following adoption of the franc fort policy in the late 1980s; and
- Germany over the last decade following the reunification boom and bust especially in its real estate market.



By contrast, none of the Southern European countries have maintained a hard currency policy over an entire business cycle. Today, the main threat no longer comes from trade-unions that demand double-digit wage increases. Rather, the main danger lies in the swelling ranks of retirees who demand 'only' their acquired rights in the face of shrinking resources. As Gros et al. (2005) have documented, the resources available for distribution have shrunk due to lower productivity growth and ongoing demographic decline. Today, as 30 years ago, policy-makers are at first trying to ignore the long-term constraint.

Acceptance of the long-term constraints on fiscal policy is made more difficult by the fact that financial markets can provide immediate signals only as long as there is - as was the case before EMU - a national currency to sell. Countries like Italy (and France at some point) learned from first-hand experience that bad fiscal policy led immediately to large pressures on the currency and interest rates. Under EMU, the long-term constraints appear now in the form of man-made rules, like the Stability Pact, which is increasingly perceived as an unwarranted intrusion of the EU into national policy-making. In the 1970s, the 'gnomes from Zurich' were the favorite bogeymen for the leftwing Italian press. Today, the 'accountants from Brussels' have a similar image.

Under EMU, it is the ECB's task to perform this job for those countries that have not had this education. This means that the ECB will have to downgrade its short-term concern about cyclical economic developments and pursue a monetary policy with the goal of hardening the Euro in the long run. It also means that the hard-currency countries will have to return to fiscal discipline, setting an example and exerting pressure on the previous soft-currency countries to do the same. The importance of this point cannot be exaggerated: only credible fiscal discipline leads to a comfortable position by the beginning of the next downturn and to the necessary moral and political authority to prevent much more serious excesses in Italy and other countries under stress.

However, the ECB will not be able to keep the Euro hard if it lacks political support. But it has no natural constituency it can appeal to over the heads of politicians for a stability-oriented monetary policy. Hence, EMU can only survive as a hard-currency union, if ECB policy makers muster the courage to pursue a monetary policy that may become very unpopular in the short-run and if the governments of previous hard-currency countries support the ECB in this endeavor. If these conditions are not fulfilled, we fear that the Euro will descend into a soft currency.

The 'lira-isation' of the Euro can no longer be excluded. The 'Euro-isation' of Italy is also possible, and by far the more desirable scenario; it will however require a strong commitment by the ECB, and all institutions in general, to force through the painful but necessary adjustments in Italy and elsewhere.

What can we learn from our analysis? While instability in terms of exchange rate volatility is not perceived as an important issue, instability exists in terms of absorption capacities of economies given structural problems including market rigidities. More specifically, there is primarily a no-result regarding the effect of the exchange rate regime or the monetary policy autonomy on the degree of structural reforms. Second, the ECB has allowed a liquidity overhang to build up,

but no negative consequences have (yet?) resulted from it. Third, house price developments in the Euro area have - on average - not been very different from the US involving risk from a possible bursting of a house price bubble. Fourth, developments particularly in Italy, but also in Greece and Portugal, are likely to cause a stress test to EMU. This will eventually lead to either a "Euro-isation" of Italy or a "lira-isation" of the Euro area. Sixth and finally, the different real interest rates are part of the convergence mechanism. Yet as our model shows, they have the potential to lead to cycles or instability.

The real risks for EMU seem to arise from the lack of shock absorption capacities of economies. In this context, possible tensions can be expected resulting from real appreciation in some countries (e.g., Italy, Portugal and Greece). Problems of global competitiveness could arise related to the political economy of structural reforms not only in connection with labor markets, but also with ageing, health reforms, the lack of innovation, and education policies.

## References

- ABIAD, A. and A. MODY (2005), Financial Reform: What Shakes It? What Shapes It?, *American Economic Review*, 95, 66-88.
- ALOGOSKOUFIS, G. S. (1994), On Inflation, Unemployment and the Optimal Exchange Rate Regime`, in F. VAN DER PLOEG (ed.), *The Handbook of International Macroeconomics*, Cambridge, Oxford, Blackwell, 192-223.
- BEAN, C. (1998), The Interaction of Aggregate-Demand Policies and Labour Market Reforms, *Swedish Economic Policy Review*, Vol. 5, 352-382.
- BELKE, A. (2002): Wage Policy in European Economic and Monetary Union – Stabilizing or Destabilizing Factor?, in: CAESAR, R. and H.-E. SCHARRER (eds.), *European Economic and Monetary Union: An Initial Assessment*, Veröffentlichungen des HWWA-Instituts für Wirtschaftsforschung, No. 68, Nomos, Baden-Baden, 207-248.
- BELKE, A. and D. GROS (1999), Estimating the Costs and Benefits of EMU: The Impact of External Shocks on Labor Markets, *Weltwirtschaftliches Archiv*, Vol. 135, 1-48.
- BELKE, A. and D. GROS (2005), Asymmetries in Trans-Atlantic Monetary Policy Making: Does the ECB Follow the Fed?, in: *Journal of Common Market Studies*, Vol. 43, 921-946.
- BELKE, A., HERZ, B. AND L. VOGEL (2006), Structural Reforms and European Monetary Union What Can a Panel Analysis for the World versus OECD Countries Tell Us?, Paper presented at the Money, Macro & Finance Research Group and University Association for Contemporary European Studies Conference on “The Travails of the Eurozone,” Edinburgh, March 24, 2006.
- BELKE, A., KÖSTERS, W., LESCHKE, M. and T. POLLEIT, ECB Observer, various issues, web: <http://www.ecb-observer.com>.
- BELKE, A., WIEDMANN, M. (2005), Boom or Bubble in the US Real Estate Market?, in: *Intereconomics - Review of International Trade and Development*, Vol. 40, 273-284.
- BENALAL, N., DIAZ DEL HOYO, J.L., PIERLUIGI, B. and N. VIDALIS (2006), Output Growth Differentials across the Euro Area Countries – Some Stylized Facts, ECB Occasional Paper Series, No. 45, European Central Bank, Frankfurt/Main, May.
- BERTOLA, G. and T. BOERI (2001), EMU Labor Markets Two Years On: Microeconomic Tensions and Institutional Evolution, paper presented at the Workshop ‘The Functioning of EMU: Challenges of the Early Years’ organized by the Directorate General for Economic and Financial Affairs, European Commission, Brussels, 21-22 March 2001, 27 April 2001 version.
- CALMFORS, L. (1998), Macroeconomic Policy, Wage Setting and Employment - What Difference Does the EMU Make?, *Oxford Economic Policy Review*, Vol. 14, 125-151.
- CALMFORS, L. (2001), Unemployment, Labor-Market Reform and Monetary Union, *Journal of Labor Economics*, Vol. 19, 265-289.
- CATTE, P., GIROUARD, N., PRICE, R. and A. CHRISTOPHE (2006), Housing Markets, Wealth and the Business Cycle, OECD Economics Department Working Papers No. 394, Paris, January.
- DUVAL, R., and J. ELMESKOV (2005), The Effects of EMU on Structural Reforms in Labour and Product Markets, OECD Economics Department Working Paper, No. 438, Paris.

- FELDERER, B. (2006), Small Is Beautiful, in: Festschrift für Professor Bodenhöfer, Institut für Höhere Studien (IHS), Vienna.
- FERNÁNDEZ-KRANZ, D. and M.T. HON (2006), A Cross-Section Analysis of the Income Elasticity of Housing Demand in Spain: Is There A Real Estate Bubble?, in: Journal of Real Estate Finance and Economics, Vol. 32, 449-470.
- GIROURARD, N. KENNEDY, M., VAN DEN NOORD, P. and C. ANDRÉ (2006), Recent House Price Developments: the Role of Fundamentals, OECD Economics Department Papers No. 475, Paris, January.
- GIULIODORI, M. (2005), The Role of House Prices in the Monetary Transmission Mechanism across European Countries, in: Scottish Journal of Political Economy, Vol. 52, 519-543.
- GROS, D. (2006), Bubbles in Real Estate? A Longer-term Comparative Analysis of Housing Prices in Europe and the US, CEPS Working Document No. 239, Centre for European Policy Studies, February, Brussels.
- GROS, D. (2006a), Italy and Germany - Convergence or Divergence for the Euro Laggards, Centre for European Policy Studies, July, Brussels, mimeo.
- GROS, D., MAYER, T. and UBIDE, A. (2005), EMU at Risk, 7<sup>th</sup> Annual Report of the CEPS Macroeconomic Policy Group, Centre for European Policy Studies (CEPS), Brussels.
- HEINEMANN, F. (2004), Explaining Reform Deadlocks, Applied Economics Quarterly Supplement, Vol. 55, 9-26.
- HEINEMANN, F. (2005), How Distant is Lisbon from Maastricht? The Short-run Link between Structural Reforms and Budgetary Performance, mimeo, prepared for the DG ECFIN Workshop 'Budgetary Implications of Structural Reforms', Brussels, 2 December.
- HELBLING, T., HAKURA, D. and X. DEBRUN (2004), Fostering Structural Reforms in Industrial Countries, in: World Economic Outlook 2004, chapter III, 103-146.
- HERZ, B. and L. VOGEL (2005), Bestimmungsgründe marktorientierter Reformen: eine empirische Analyse, in: W. SCHAEFER (ed.), Institutionelle Grundlagen effizienter Wirtschaftspolitik, Schriften des Vereins für Socialpolitik, N.F. 304, Berlin, 2005, 25-49.
- HOCHREITER, E. and G. S. TAVLAS (2005), The Two Roads to the Euro: The Monetary Experiences of Austria and Greece, in S. SCHADLER (Ed.), Euro Adoption in Central and Eastern Europe – Opportunities and Challenges, International Monetary Fund, Washington/DC.
- INTERNATIONAL MONETARY FUND (2004), Fostering Structural Reforms in Industrial Countries, chapter III, in World Economic Outlook. Advancing Structural Reforms, International Monetary Fund, Washington D.C. (2004).
- MÉLITZ, J. (1997), The Evidence about the Costs and Benefits of EMU, in: Swedish Economic Policy Review, Vol. 4, 191-234.
- ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (2005), Economic Policy Reforms - Going for Growth, OECD, Paris.
- PEEK, J. and J.A. WILCOX (2006), Housing, Credit Constraints, and Macro Stability - The Secondary Mortgage Market and Reduced Cyclicity of Residential Investment, in: American Economic Review - Papers and Proceedings, Vol. 96, 135-140.
- PILL, H. and T. RAUTANEN (2006), Monetary Analysis - The ECB Experience, Paper presented at the 8<sup>th</sup> The ECB and Its Watchers Conference, Session ECB Watch - Review of the ECB's Strategy and Alternative Approaches, May 5<sup>th</sup>, Frankfurt/Main.

- POSEN, A. (2003), It Takes More than a Bubble to Become Japan, Institute for International Economics, Working Paper No. 03.09, Washington, D.C. October.
- POSEN, A. and D. POPOV GOULD (2006), Has EMU Had any Impact on the Degree of Wage Restraint?, Paper presented at the Money, Macro & Finance Research Group and University Association for Contemporary European Studies Conference on "The Travails of the Eurozone," Edinburgh, March 24, 2006.
- SAINT-PAUL, G. and S. BENTOLILA (2000), Will EMU Increase Eurosclerosis?, International Macroeconomics and Labor Economics, CEPR Discussion Paper 2423, April, London.
- SELOSSE, C. and L. SCHREFLER (2005), Consumer Credit and Lending to Households in Europe, European Credit Research Institute (ECRI), Brussels.
- SHILLER, R. (2005), Irrational Exuberance, Princeton University Press, second edition.
- SIBERT, A.C. and A. SUTHERLAND (1997), Monetary Regimes and Labor Market Reform, CEPR Discussion Paper 1731, November 1997, London.
- SVENSSON, L. (1997), Optimal Inflation Targets, "Conservative" Central Banks, and Linear Inflation Contracts`, in: American Economic Review, Vol. 87, 98-114.
- VAN POECK, A. and A. BORGHIS (2001), EMU and Labor Market Reform: Needs, Incentives and Realisations, Oxford, Blackwell Publishers.
- WYPLOSZ, C. (2006), European Monetary Union - the Dark Sides of a Major Success, with comments from Stephen Nickell and Martin Wolf, Economic Policy, pp. 207-261.

## Annex

In the following we develop an alternative with competitiveness not having an immediate impact on output. Given the well known lagged effects in trade equations it could also be assumed that output growth responds only with a lag to changes in the price level, which here are equivalent to changes in competitiveness.

$$y_t - y_{t-1} = -\varphi(i_t - (p_t - p_{t-1})) - \gamma p_{t-1} + g_t$$

$$p_t - p_{t-1} = \beta^{-1}(y_t - y_{t-1}) + u_t$$

With the same substitution as above this yields:

$$\beta(p_t - p_{t-1} + u_t) = -\varphi(i_t - (p_t - p_{t-1})) - \gamma p_{t-1} + g_t$$

$$p_t = \{-\varphi i_t + (\beta + \varphi - \gamma)p_{t-1} + g_t + \beta u_t\} / (\beta - \varphi)$$

Stability of the system requires now that :

$$-1 < (\beta + \varphi - \gamma) / (\beta - \varphi) < 1 \quad \text{or} \quad \gamma < 2\varphi, \text{ with } \beta > \varphi \text{ or } \gamma > 2\varphi, \text{ with } \beta < \varphi$$

In this case it is not always true that a higher degree of openness is stabilizing. If it is too high it might destabilize.