

## Nicholas C Garganas: Does one size fit all? Monetary policy and integration in the euro area

Address by Mr Nicholas C Garganas, Governor of the Bank of Greece, at a visit to the Central Bank of Chile, Santiago, 12 October 2007.

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The euro has created a new reality for 318 million Europeans and has probably become the most visible symbol of European integration. Its introduction was in itself a remarkable achievement, representing the culmination of a process of convergence and integration that began many years ago. However, the introduction of the euro did not mark the end of European economic integration. Instead, the euro created new challenges for monetary policy. I want to focus on two of those challenges in my presentation:

- First, how would the newly-created European Central bank build credibility? Here, I will argue that the adoption of a credible monetary policy strategy and its systematic implementation would be crucial.
- Second, does the single monetary policy fit the particular circumstances in each of the countries of the euro area? In addressing this question, I will argue that the traditional way of thinking about what constitutes an optimum currency area overlooks the fact that the criteria used to judge optimality are, to some extent, endogenous. In particular, I will argue that the creation of a monetary union can itself create conditions that are favourable to the well-functioning of the union.

### I. The ECB's monetary policy strategy and its implementation

The monetary policy strategy – which was initially adopted in 1998 and confirmed with a few clarifications in 2003 – drew on decades of central bank policy experience and the strategies of the most successful (in terms of inflation performance) central banks in the euro area. The strategy includes three key elements.

First, there is the objective of price stability. The view that monetary policy can contribute most to economic welfare by maintaining price stability is supported by a large body of empirical evidence. Ultimately, monetary policy can influence only the price level and can have no lasting influence on real variables. Price stability is defined as a year-on-year increase in consumer prices for the euro area of “below, but close to, 2 per cent”. The “close to” was added in 2003 to establish a safety margin above zero inflation to guard against deflationary risks. In the light of the long lags involved in the transmission of monetary policy, price stability is to be maintained in the medium term.

Second, there are the “two pillars” of economic and monetary analyses.

- The economic analysis focuses mainly on the assessment of current economic and financial developments from the perspective of the interplay between supply and demand in the product and factor markets, and provides short- to medium-term indications of inflation.
- The monetary analysis, which acts as a cross-check to the economic analysis, focuses on money and credit developments in recognition of empirical evidence suggesting that monetary growth and inflation tend to be closely related in the medium to long run.

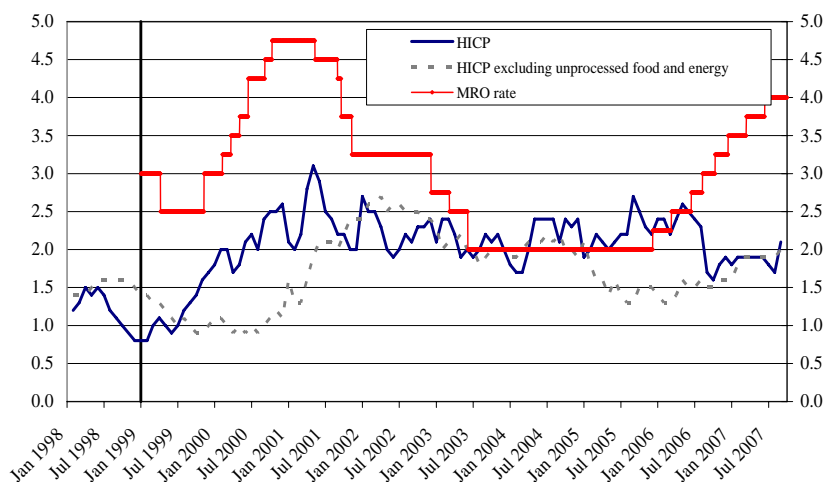
The third element in the strategy is central bank independence, counterbalanced by accountability and transparency. The Maastricht Treaty granted full political independence to the ECB in its pursuit of price stability. When exercising their duties, neither the ECB nor the

National Central Banks, nor any member of their decision-making bodies, is allowed to seek or receive instructions from EU or member-state institutions. Long terms of office for members of the Governing Council, who serve on the Council in a personal capacity, and a rule that members of the Executive Board cannot be reappointed, also contribute to minimizing potential political influences on members of the ECB's decision-making bodies.

In a democratic society, however, central bank independence needs to be counterbalanced by accountability, that is, an obligation on the part of the central bank to explain its decisions to the public and its elected representatives. In turn, accountability requires transparency with respect both to objectives and decision-making. To this end, monetary policy decisions taken by the ECB are explained "in real time" at a press conference immediately after each rate-setting Governing Council meeting.

The ECB's record over the past nine years has been a positive one. It has delivered low levels of inflation, inflation expectations and long-term interest rates. Average inflation in the euro area since its inception has been 2.03 percent, a shade higher than the ECB's definition of price stability, notwithstanding significant price shocks stemming mainly from oil price increases. Inflation expectations have also been remarkably close to the ECB's definition of price stability and long-term interest rates have been at historically low levels for a significant period since the formation of the monetary union. The anchoring of expectations clearly attests to the ECB's credibility.

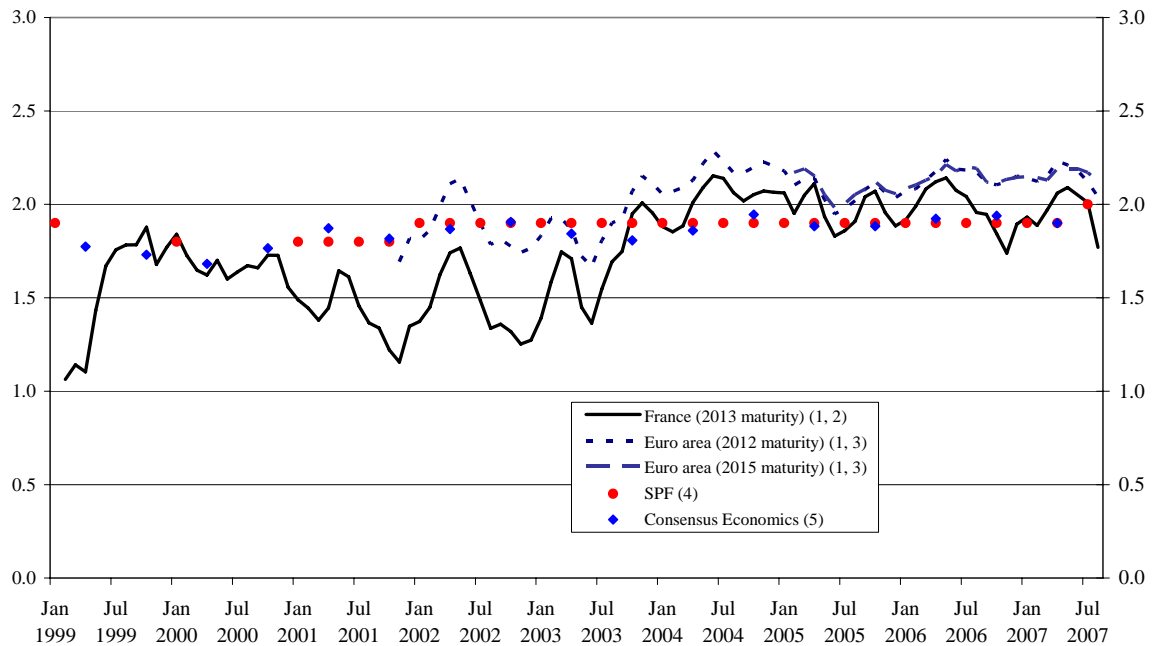
**Figure 1: Annual inflation (HICP) and Main Refinancing Operations (MRO) rate (January 1998 - August 2007) (in percent)**



Source: ECB

By maintaining low inflation and securing long-term inflation expectations at levels consistent with price stability, the ECB makes its best possible contribution to supporting sustained economic growth and employment creation. The stability-oriented policies have supported both households, by maintaining the purchasing power of their income and savings, and the business sector, by creating an environment of low and stable interest rates, conducive to investment.

**Figure 2: Indicators of long-term inflation expectations in the euro area (January 1999 - September 2007) (monthly averages)**



**Notes to Figure 2:**

- (1) The ten-year break-even inflation rate reflects the average value of inflation expectations over the maturity of the index-linked bond. It is calculated as the difference between the nominal yield on a standard bond and the real yield on an inflation index-linked bond, issued by the same issuer and with similar maturity.
- (2) Issued by the French Government linked to the French CPI excluding tobacco.
- (3) Issued by the French Government linked to the euro area HICP excluding tobacco.
- (4) Survey of Professional Forecasters conducted by the ECB on different variables at different horizons. Participants are experts affiliated with institutions based with the European Union. This measure of long-term inflation expectations refers to an annual rate of HICP expected to prevail five years ahead.
- (5) Survey of prominent financial and economic forecasters as published by Consensus Economics Inc. This measure of long-term inflation expectations refers to an annual rate of inflation expected to prevail between six and ten years ahead.

Source: ECB

**II. Does one size fit all?**

While the success of the monetary union in delivering low inflation and a credible currency is beyond dispute, the issue of whether a single monetary policy can “fit” all member states of the euro area, continues to be hotly debated.

***i) EMU: an optimum – currency – area perspective***

EMU brought unique challenges for monetary policy. Critical observers took the view that a single monetary policy was doomed to failure because the euro area does not fulfill the prerequisites of an Optimum Currency Area (OCA). This implies that if national economies are affected by asymmetric exogenous shocks or if shocks are transmitted to different degrees in different economies, because of unique economic and institutional characteristics in national economies, the mechanisms which could temper their impact either do not exist or are not strong.

It is certainly true that the euro area is characterized by a lack of labour mobility, because of linguistic and cultural differences. There is also an absence of a significant centralized fiscal transfer mechanism. In these circumstances, so the argument goes, shocks are likely to lead to widening inflation differentials so that a common nominal interest rate in the monetary union results in diverging real interest rates among countries. For member countries with relatively-strong domestic demand and a higher-than-average inflation rate, the lower real interest rate fuels domestic demand and national inflation. Conversely, for countries with relatively-weak domestic demand and a lower-than-average inflation rate, the high real interest rates put further downward pressures on domestic demand and inflation. A one-size monetary policy, in other words, does not fit all.

The foregoing, traditional view of optimum currency area is static in nature. It assumes that a country's characteristics, such as its degree of trade integration, are immutable. The experience of the euro area, however, suggests that participation in a monetary union may itself induce changes in economic structure and performance. Indeed, a good deal of academic research, much of it reflecting the experience of the European monetary union, also indicates that the creation of a monetary union can itself create conditions that are favorable to the well-functioning of the union.<sup>1</sup>

The experience of the euro area has demonstrated that a common currency can affect an economy's characteristics through at least two channels. These channels operate through enhanced credibility, and trade and financial integration. In what follows, I will discuss each of these channels in turn.

How does the credibility channel work? A major benefit of participating in EMU, especially for countries such as Greece, Italy, Portugal, and Spain that have had recent histories of relatively-high inflation rates, has been the credibility gain derived from eliminating the inflationary bias of discretionary monetary policy. Since there is no devaluation risk, and no need of an interest rate premium to cover the risk of devaluation, nominal and real interest rates are lower than otherwise. Low and stable inflation and inflationary expectations lengthen economic horizons, encouraging a transformation of both the financial and real sectors.

Let me now turn to the trade-creation effects of a common currency. Recent empirical evidence has shown that a common currency (as opposed to separate currencies tied together with fixed exchange rates) can also promote trade<sup>2</sup>. The basic intuition underlying this view is that a set of national currencies is a significant barrier to trade. In addition to removing the costs of currency conversion, a single currency and a common monetary policy preclude future competitive devaluations, and facilitate foreign direct investment and the building of long-term relationships. These outcomes, in turn, can promote (over-and-above what may have been attained on the basis of the elimination of exchange-rate uncertainty among separate currencies) reciprocal trade, economic and financial integration, and the accumulation of knowledge. Greater trade integration can increase growth by increasing allocative efficiency and accelerating the transfer of knowledge.

The euro-area's experience indicates that the euro has indeed acted as a catalyst for trade integration. Intra-euro area trade in goods increased from 26% of euro area GDP in 1998 to 33% in 2006. Intra-area trade in services has also risen. Recent empirical work has shown that similar increases in trade have not taken place among European countries which did not adopt the euro<sup>3</sup>.

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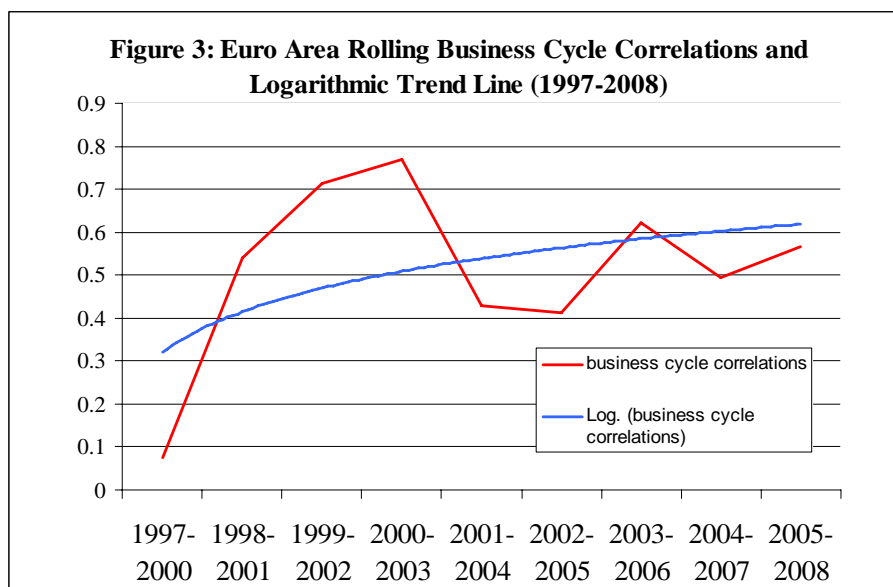
<sup>1</sup> For a survey of this literature, see DeGrauwe and Mongelli (2005).

<sup>2</sup> See Rose and Stanley (2005) for a survey of the literature on the trade-creation effects of a common currency.

<sup>3</sup> See Baldwin (2006).

The euro has also had a positive effect on intra-euro area FDI. Between 1999 and 2005 (the latest data available) the stock of intra-euro area FDI more than doubled, from around 14 per cent of euro area GDP to over 30 per cent.

Increased trade integration, along with growing intra-euro area FDI flows, lead to more highly-correlated business cycles because they increase the incidence of common demand shocks and result in more intra-industry trade. As a consequence, the need for country-specific monetary policies is reduced.



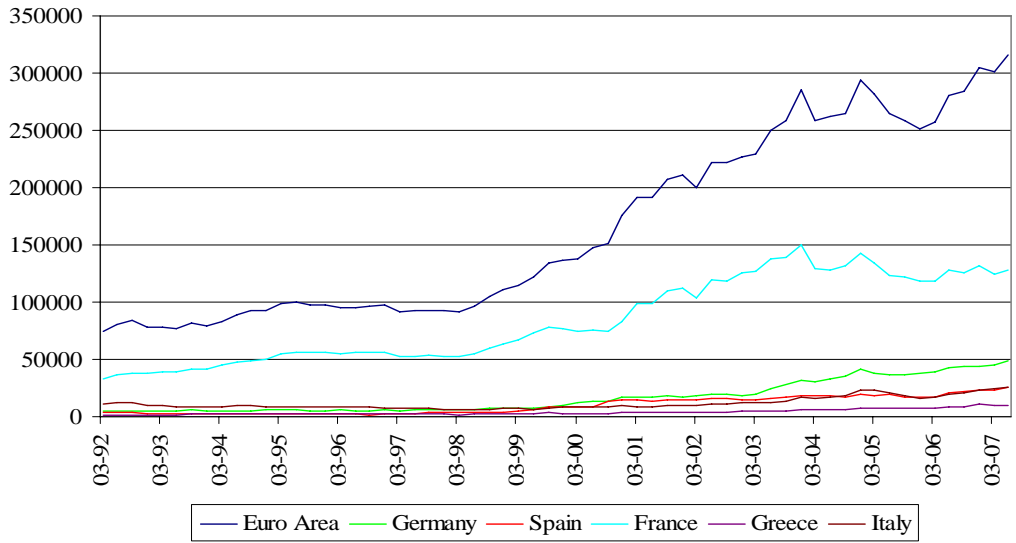
**Notes to Figure 3:**

- The rolling business cycle correlations are constructed by calculating the pairwise correlation coefficients between all euro area countries for the various 4-year periods (1997-2000, 1998-2001, etc). The average of these coefficients is calculated for each time period.
- Data source: EU AMECO database

There are additional reasons that a monetary union reduces the incidence of country-specific shocks. One of the principal causes of asymmetric shocks – divergent monetary policies – no longer exists. Furthermore, it is to be expected that deeper financial market integration will also entail a convergence in the transmission mechanism of monetary impulses.

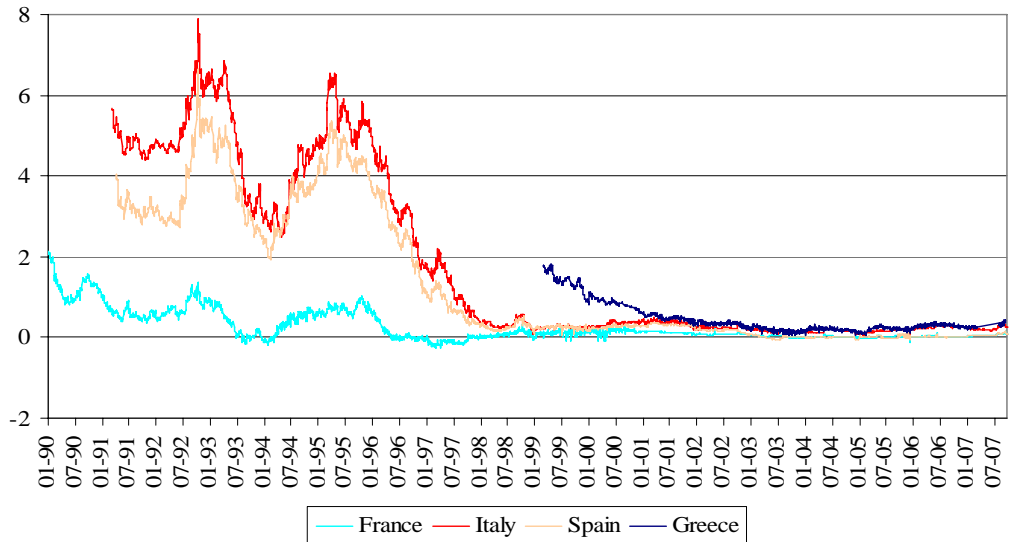
The introduction of the euro has helped make the euro area financial markets more integrated. The money market has been almost perfectly integrated since the formation of monetary union. The significant growth of the euro corporate bond market, while still smaller than its US counterpart, also provides evidence of integration and widens the range of potential investors to which firms have access. National bonds and equity market returns exhibit closer co-movements than they did prior to the introduction of the euro, offering investors the opportunity to diversify their holdings and reduce the risks for a given level of return. The main area where financial integration has lagged is that of retail banking where, in spite of an increase in cross-border M&As in recent year, cross-border activity remains relatively limited.

**Figure 4: International Corporate Bonds by Country of Nationality:  
Amounts outstanding (millions USD)**



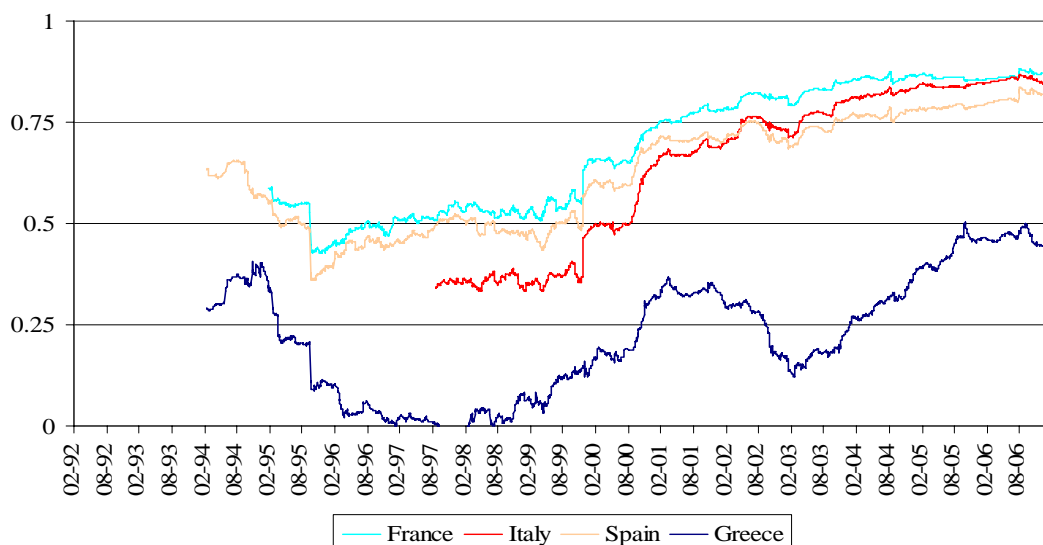
Source: BIS database

**Figure 5: Spreads between 10-year benchmark european sovereign bond yields and the German benchmark (per cent)**



Source: BIS database

**Figure 6: Correlations between German and other European returns -on composite stock indices - Rolling 24-month window**



Source: BIS database

Forces for further integration will continue, as market participants increasingly exploit the new environment of monetary union. In addition, a number of initiatives, supported by the Eurosystem and/or the Commission, will help increase integration. An example is TARGET2, the new payment platform for the financial system, which is expected to begin operating in November 2007. As integration proceeds, we can expect that the monetary transmission mechanisms across the euro area will continue to converge, helping the implementation of the single monetary policy.

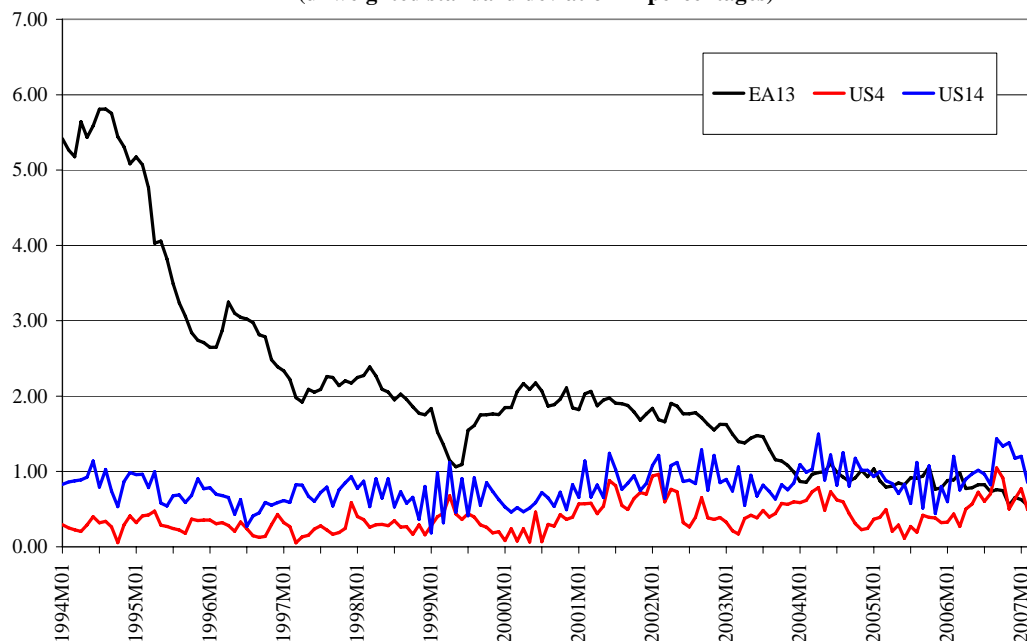
To the extent that countries nevertheless continue to experience asymmetric shocks or asymmetric responses to common shocks, financial integration can help members of a union insure against the effects of such shocks by providing opportunities for diversification of income sources and adjustments of wealth portfolios. In effect, the members can mitigate the effects of shocks by insuring one another through their holdings of financial claims on each other's output in financial markets.

## **ii) Inflation and growth differentials**

Despite the increased trade and financial integration in the euro area, the fact remains that divergences in economic performance continue to exist. How significant are these, and how concerned should we be?

Recent evidence, provided by the ECB, shows that, over the period 1990-99, the euro area experienced a downward trend in the degree of inflation dispersion – measured as the standard deviation of that dispersion – from about 6 percentage points in the early 1990s to a low of less than one percentage point in the second half of 1999. Since that time, inflation dispersion has changed very little – and for some time now it has been less than a percentage point.

**Figure 7: Dispersion of annual inflation rates within Euro Area (13 countries), US (14 Metropolitan Statistical Areas) and US (4 regions) (unweighted standard deviation in percentages)**



Source: US Bureau of Labor Statistics and ECB

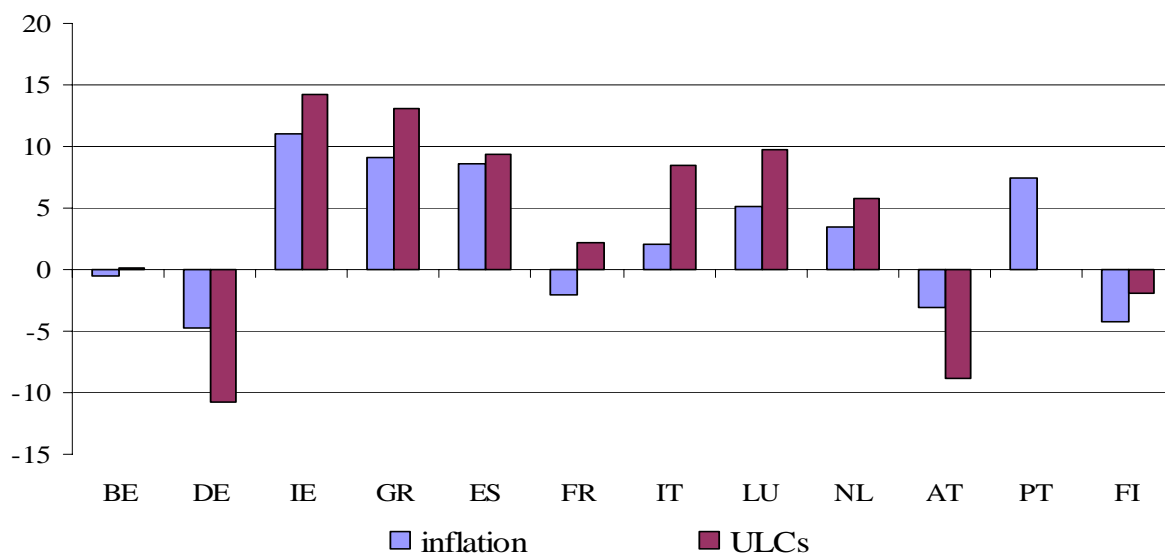
Another fact worth emphasizing is that inflation dispersion in the euro area does not differ that much from dispersion across a similarly-sized monetary union, that of the US. Where the euro area does differ from the US, however, is that the observed differentials seem to be more persistent in the euro area. In part, persistence can be explained by the so-called Balassa-Samuelson effect, according to which long-term differentials in regional inflation are attributable to differences in the rate at which productivity increases in the various regions' tradable and non-tradable goods sectors. This situation represents an equilibrium adjustment process that does not, in principle, require economic policy correction. Indeed, differentials arising from this source importantly do not lead to a permanent worsening of the competitive position of the country experiencing the higher inflation.

However, given the degree of convergence in living standards experienced by euro area countries over the last decade or so, it is difficult not to conclude that the contribution of the Balassa-Samuelson effect to inflation differentials now is likely to be relatively small. This may well give cause for concern since it suggests that the differentials originate from the fact that adjustment mechanisms in the euro area are not functioning as smoothly as they might and that policies other than monetary policy are not consistent with inflation rates close to the euro area average. Thus, other factors are contributing to the inflation differentials within the euro area, including misaligned fiscal policies, wage dynamics not linked to productivity developments (something reflected in the significantly different rates of growth in unit labour costs across the union), and structural inefficiencies such as rigidities in product and factor markets. Persistent differentials that result from these factors lead to a loss in competitiveness and cannot be considered benign.

Figure 8 indicates a strong positive relationship between average inflation rates in different euro area economies and the average growth of unit labour costs over the period since monetary union began.

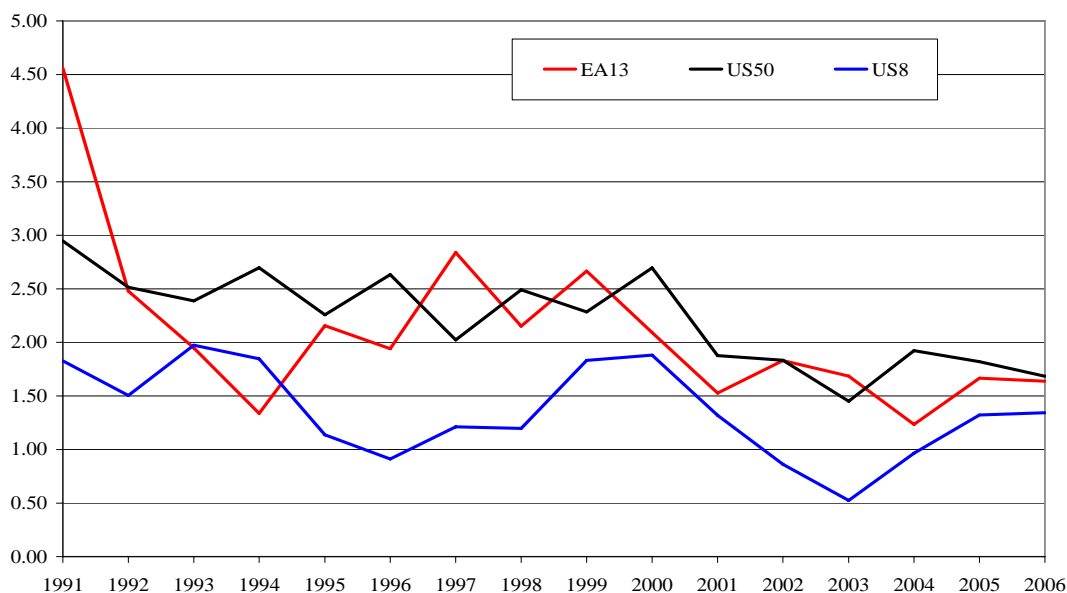


**Figure 8: Cumulative Deviation of Inflation and ULCs Relative to Euro Area Average (1999-2006, in percentage points)**



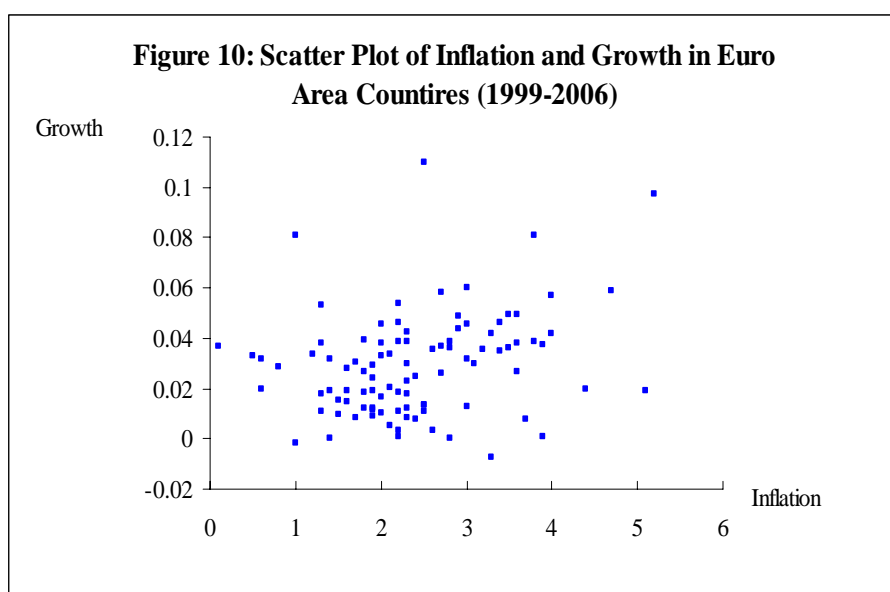
Source: BIS database

**Figure 9: Dispersion of real GDP growth rates within Euro area (13 countries), US (50 states and D. Columbia) and US (8 regions) (unweighted standard deviation in percentages)**



Source: US Bureau of Economic Analysis and EU AMECO database

It is important to note that the process of nominal convergence from the early 1990s onwards, which culminated in the adoption of the euro, was not accompanied by a greater dispersion of real GDP growth rates. Nor has dispersion increased following the adoption of the single currency. If any trend is discernable, it is a slight downward one, with dispersion remaining close to its historical average of around 2 percentage points, which is no greater than that found in the US. Moreover, inflation and growth across the euro area appear to move together. Those countries with higher than average inflation rates (Ireland, Greece, Spain, for example) appear to have higher growth rates. This suggests that, to the extent that inflation differentials do not reflect differences in growth rates of productivity, the dampening effect of loss in competitiveness has been offset by other factors, such as interest rate decreases in the period up to the adoption of the euro, inflows of EU structural funds, immigration and financial liberalization. These favourable factors are unlikely to persist indefinitely and, once they diminish, the consequences of falling competitiveness are more likely to become a dominant determinant of actual growth outcomes.



Source: ECB and EU AMECO database

### III. Conclusions

A single-size monetary policy has worked extremely well in the euro area. I have argued that this is partly the result of endogenous changes brought about by the very existence of the monetary union. Increased trade and financial integration, spurred on by the common currency, have contributed to making the euro area closer to an optimum currency area. In addition, the credibility of the ECB's monetary policy has delivered low interest rates and price stability.

Yet these are not sufficient alone to increase economic growth and raise living standards. Low interest rates and a stable price level provide the fabric upon which a more dynamic Europe can be woven. Whilst endogenous responses by the private sector to the creation of monetary union can contribute to the necessary increases in flexibility in product and labour markets, there is also a need for countries themselves to adopt measures in this direction. Between 2001 and 2005, euro area growth was relatively weak. Moreover, in spite of declines in the dispersion of inflation rates and growth rates, their persistence raised some concerns in terms of the competitiveness of certain countries within the euro area.

In these circumstances, some countries (the most prominent example being Germany) undertook structural reforms, the fruits of which began to be seen in the second half of 2004.

Thus euro area unemployment has fallen sharply, reaching its lowest level since the start of monetary union. Although this outcome reflects, in part, a cyclical rebound, part of the decline in the unemployment rate may well be due to the impact of structural reforms. However, structural impediments continue to exist in the euro area; they help explain still high levels of unemployment and low participation rates. Further reforms can only foster economic growth and create additional employment opportunities.

Fiscal developments in the euro area have also been favorable in recent years. However, budgetary improvement has largely been the result of strong output growth and revenue windfalls. Only a small part has been due to policy measures. Against the background of the current economic expansion, it is essential to sustain the momentum toward improving public finances and to accelerate the pace of fiscal consolidation. This would strengthen the capacity of the euro area to adjust to external shocks, increase consumer and investor confidence, and hence support growth and employment.

To conclude, the euro area has indeed come a long way. The success of the single currency has demonstrated that one size can fit all. Such has been the success of the euro area that it has given rise to considerations, still at an early stage, of regional currency arrangements in Africa, Asia and Latin America. Nevertheless, much more needs to be done to ensure that the euro area becomes a more dynamic force for growth in the global economy on a sustainable basis. It is my view that the experience of the euro area to date only serves to highlight the fact that a currency union requires more flexibility in factor and product markets, and greater competition than do independent monetary areas. Flexible markets and strict fiscal rules are not just superfluous conditions for members of a monetary union. They are necessities that make monetary union work by providing the adjustment mechanisms that the one size fits all monetary policy cannot.

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