

# **Lucas Papademos: Inflation and competitiveness divergences in the euro area countries: causes, consequences and policy responses**

Speech by Mr Lucas Papademos, Vice-President of the European Central Bank, at the conference "The ECB and its Watchers IX", Frankfurt am Main, 7 September 2007.

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## **I. Introduction**

Thank you for inviting me to participate in this conference and this panel with the challenging task of addressing issues relating to the inflation and competitiveness performances of the euro area countries. The relative economic performances of euro area countries and the role of national economic policies in a monetary union have been discussed extensively both before and after the launch of the euro for various reasons. A central question is whether and to what extent inflation rates in Member States can diverge significantly and persistently from the euro area norms of price stability with undesirable consequences for competitiveness positions and economic growth. A second, related question is how euro area countries can help prevent and/or correct diverging adverse developments in their domestic inflation and international competitiveness when they can no longer deploy monetary policy at a national level or rely on nominal intra-euro area exchange rate adjustments in order to, respectively, control domestic inflation and restore price competitiveness.

I will address these two questions by examining the role of unit labour cost (ULC) developments in shaping inflation dynamics and competitiveness patterns across the euro area countries (see slide 2). The evolution of unit labour cost is a key determinant of inflation and of changes in competitiveness, as I will show, and this justifies the emphasis placed in the analysis that follows – and which is highlighted in the title of this session. At the same time, I would like to stress from the outset that relative unit labour cost is not the only determinant of competitiveness and due attention must also be given to other determining factors. International competitiveness is a broader concept that reflects both price and non-price or quality elements that will not be considered here; moreover, price competitiveness can be measured by several indicators based on HICP, producer prices or relative export prices. Nevertheless, the trend growth in relative unit labour costs provides a useful indicator of the change in competitiveness of a country in a monetary union that has the merit that it is unaffected by changes in indirect taxes or asymmetric external shocks to consumer prices.

In my presentation, I will examine and assess the facts, the causes and the economic consequences of the observed dispersion in ULC growth across the euro area countries since the launch of the euro, and then I will draw some conclusions about the appropriate policy response.

## **II. Some facts about divergences in economic performance in the euro area**

Let me start by recalling some facts and presenting some additional evidence about the observed divergences in the economic performance of the euro area countries. A first important observation is that, although inflation and growth differentials between the euro area countries are not insignificant, since the launch of the euro, they have not been unusually large when compared with the corresponding differentials in other large monetary unions, notably the United States (see slide 3). Moreover, the dispersion of inflation rates in the euro area since the introduction of the single currency is substantially smaller than that experienced in the previous decade, while the dispersion of the growth rates across the euro area countries has declined somewhat over the past twenty years (see slide 4). There is, however, a third fact which differentiates the observed economic divergences in the euro area from those in the United States: the persistence of the inflation and growth performance

across euro area countries. This feature, which is not characteristic of the United States, may suggest that the underlying adjustment mechanisms in the euro area economies are not functioning as smoothly and in a timely manner, with potentially undesirable implications for the dynamics of economic activity and employment.

To better understand the causes and consequences of the observed persistence of inflation rates across the euro area, we must look more closely at the inter-temporal and cross-border developments in the underlying determinants of inflation and growth, and in particular ULC and the factors that shape their level and evolution over time. What are the pertinent facts about the evolution and dispersion of ULC in the euro area?

On average, unit labour cost in the euro area has increased at a moderate pace in recent years, largely thanks to subdued wage developments in Germany. However, unit labour costs have grown at significantly different rates across the euro area countries (see slide 5). The cumulative growth of unit labour cost (for the total economy) in euro area countries relative to the euro area average ranged between +15% in Portugal and -10% in Germany over the period 1999-2006.

Nevertheless, the dispersion in ULC growth rates across the euro area countries has declined substantially over the last fifteen years (see slide 6). Moreover, the size of dispersion, measured in terms of the non-weighted standard deviation, is in line with that observed in other benchmark currency unions, notably the United States, and across regions in Italy and Spain, but it is higher than the recorded dispersion across the West German Länder.

If we examine in greater detail ULC developments in individual European countries and states in the US, the range of cumulated ULC growth across the euro area countries in the period 1999-2005 is roughly similar to that observed across the United States, that is about  $\pm 10\%$  (see slide 7). At one end of the spectrum, Germany, Austria – and to a lesser extent Belgium and Finland – have experienced a decline in their relative ULC growth rates, pointing towards an improvement in the cost competitiveness of these countries vis-à-vis the euro area. In the US, this is true for most states, but the outcome is most pronounced for Louisiana, Oklahoma, Indiana and Iowa. At the other side of the spectrum, we see that increases in relative ULCs growth rates were particularly strong in Portugal, Ireland, Greece, Spain, Italy and Luxembourg. In the US, we find strong relative ULC increases in Arizona and Florida. A recent study confirms this finding that changes in relative unit labour costs in euro area countries (with one exception) are within the same range as in the United States over the period 1999-2004.<sup>1</sup> However, ULC growth in some countries (Italy, Spain and Portugal) is significantly above their own long-term averages.

A special feature of ULC developments across the euro area countries is their high degree of persistence (see slide 8). In some countries, ULC growth has been consistently either above (for instance, in Ireland, Greece and Portugal) or below (for instance, in Germany and Austria) the euro area average ULC growth in each single year since 1999. Indeed, another study, using a co-integration framework, has found that deviations of ULC from its long-term equilibrium value take longer to adjust in the euro area countries than in the States in the US.<sup>2</sup>

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<sup>1</sup> See Dullien and Fritsche (2006), How bad is Divergence in the Euro-Zone? Lessons from the United States of America and Germany. University of Hamburg, Department of Economics and Politics Discussion Papers, Macroeconomics and Finance Series 5/2006.

<sup>2</sup> Dullien and Fritsche (2007). Does the Dispersion of Unit Labor Cost Dynamics in the EMU Imply Long-run divergence? Results from a Comparison with the United States of America and Germany, University of Hamburg, Department of Economics and Politics Discussion Paper, Macroeconomics and Finance Series, 2/2007.

When interpreting relative ULC developments from a competitiveness perspective, we should keep in mind that they are also other key indicators of competitiveness. For example, Eurosystem staff have recently developed what we call Harmonised Competitiveness Indicators. These indicators, which are based on consumer price indices, are calculated on the basis of weighted averages of the bilateral exchange rates of each euro area country vis-à-vis the currencies of its trading partners. They show a broadly similar dispersion of competitiveness developments across euro area countries, although the extent to which countries have gained or lost competitiveness over the past eight years differs somewhat compared with that implied by relative ULC measures (see slide 9).

### **III. The causes of diverging ULC developments**

What is behind these diverging developments in relative ULC growth in some countries? To better understand their evolution over time we can look at the individual components of ULC: high ULC growth can be explained either by particularly strong wage growth, low productivity growth or both (see slide 10). In Greece, for example, despite very strong productivity growth, increases in compensation per employee have resulted in relatively high ULC growth vis-à-vis the euro area average. In Italy compensation per employee has grown in line with the euro area average, but productivity growth has been relatively weak.<sup>3</sup> In relative terms, Portugal has experienced both strong growth in compensation per employee and modest productivity gains. As regards the dispersion of ULC growth rates across all euro area countries, the contribution of differences in the growth of the compensation per employee accounts for the largest part of the differences in ULC growth rates (see slide 11).

We can gain further insights into the causes of diverging competitiveness performances across countries by analysing ULC developments in different sectors. In this context, ULC developments in the industrial sector may be of particular interest, given that this sector produces most of the tradables. It is interesting to note that, over the period 1999-2005, cumulated ULC growth in the industrial sector is considerably lower than in services in most euro area countries. [Slide 12] Developments in compensation per employee have been rather similar across the two sectors in most countries, with the exception of Germany. Thus, the key factor behind the stronger ULC growth in the services sector compared to industry appears to be weak productivity growth in services, which may reflect, among other things, the fact that this sector is relatively less exposed to international competition.

### **IV. Do we need to worry?**

Having presented the facts about diverging ULC developments across the euro area countries and some preliminary analysis of the causes behind this evolution, the key question – not least for policy-makers – is: do we need to be concerned? The answer is not necessarily straightforward, for ULC growth differentials may be the outcome of various factors and processes that are difficult to quantify and hard to disentangle. First, ULC growth differences may reflect the effects of catching-up processes, especially in countries such as Ireland, Portugal and Greece where the so-called Balassa-Samuelson effect<sup>4</sup> could have

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<sup>3</sup> It should be added that productivity figures in some countries, especially for Italy, may be subject to “measurement distortions” resulting, for example, from changes in employment following the registration of immigrant workers.

<sup>4</sup> The Balassa-Samuelson effect refers to inflation effects due to differences in relative productivity growth between tradable and non-tradable sectors. When productivity growth rises in the tradable sector, wages will follow without putting additional pressure on unit labour costs. However, due to labour mobility, wages in the non-tradable sector may rise as well and as productivity growth in the non-tradable sector is normally lower (and more similar across countries) than in the tradable sector, wage increases in excess of productivity growth would tend to put upward pressure on unit labour costs and ultimately inflation.

been significant in previous years. However, the size of this effect on ULC developments is difficult to identify with precision and must have been declining over time. Second, ULC growth differences may also be due to equilibrium adjustments, country-specific, possibly persistent, shocks or different cyclical positions across the euro area countries. ULC growth differentials as a result of such factors should not be a source for concern.

However, differences in ULC growth rates may also reflect the effects of structural factors, constraining productivity growth, of labour and product market features and conditions or of inappropriate national policies. As we have seen, in a number of euro area countries, compensation per employee growth substantially exceeded productivity developments. This may at least partially reflect labour market rigidities, such as the automatic indexation of nominal wages to prices, and other forms of nominal rigidities.

Because these causes of a diverging evolution of ULCs are of a structural nature, and their effects on ULC growth and competitiveness positions can persist, we need to monitor and assess their implications carefully. Should we be concerned by what we observe in certain euro area countries? Yes, because persistent ULC growth in excess of the euro area average can be expected to give rise to sustained inflationary pressures and losses in competitiveness, with adverse effects on the real economy. What does the evidence tell us? First, the cumulative change in ULC over a period of time is highly correlated with the HICP inflation over the same period across euro area countries. The close relationship between the cumulative ULC growth and inflation rates is impressive (see slide 13).

A second unfavourable impact of persistently higher ULC growth is that the resulting effects on competitiveness are likely to contribute to a worsening of trade and current account balances. Indeed, there is some evidence that countries with cumulative losses in cost competitiveness, as measured by the cumulative relative ULC growth, often exhibit large current account deficits or worsening current account balances (see slide 14). What have been the consequences of these effects on economic growth performance? Prior to EMU, diverging inflation and competitiveness developments and sizeable current account deficits would have heralded, sooner or later, external adjustment via the exchange rate. Within a monetary union, this adjustment channel does not exist any longer. The effects on GDP growth of losses in competitiveness as measured by the cumulative relative UCL growth are not visible in all countries (see slide 15).

Why have we not witnessed, so far, expected adverse effects on output growth and employment in all countries that have experienced strong ULC growth? There are several reasons. Let mention two: first, the negative effects of persistent above-average ULC growth and losses of competitiveness on economic activity and employment may take some time to materialise. Second, these adverse effects on the real economy have been counteracted, and even fully offset, over the past few years by favourable effects of other, structural or cyclical, factors. Such factors have included substantial interest rate decreases in the run-up to EMU, EU structural funds support, immigration flows and financial liberalisation. Their positive impact on economic activity may imply that the link between adverse ULC developments and economic activity was less visible and the respective adjustment processes may appear not to function. However, such a favourable constellation of factors is unlikely to persist. Eventually, the impact of some of these factors will dissipate. There is therefore a clear need, in the countries concerned, to address the fundamental causes of unfavourable ULC growth divergences.

## **V. Policy responses**

To sum up, sizeable and protracted ULC growth in a member country above the euro area average is very likely to be accompanied by a commensurate higher and persistent inflation and a loss of competitiveness that will eventually adversely affect its current account position, economic activity and employment. The available evidence supports this conclusion, although the exact timing and the dynamics of the inevitable economic

adjustment to reverse a significant cumulative loss of competitiveness cannot be predicted with precision, since other factors and processes also influence the economy's dynamic behaviour.

The observed persistent divergences in ULC growth and inflation in a number of euro area countries clearly point to increasing risks of further competitive losses and potentially costly real economic adjustment. What are the appropriate policy responses? Needless to say, but I will say it anyway to make it abundantly clear, the single monetary policy cannot address the ULC growth and inflation divergences in individual countries. And since it cannot do it, it should not attempt to do it and it will not do it. However, by ensuring the preservation of price stability in the euro area as a whole, it can help guide and anchor inflation expectations to price stability in all euro area countries and thus help consumers and firms to take appropriate economic decisions. Having said that, it is evident that structural reforms, wage-setting processes and budgetary policies must contribute to reverse competitiveness losses in individual euro area countries.

High on the policy agenda should be structural reforms to boost productivity growth, especially in the services sector, to improve the functioning of market mechanisms – so that markets respond more promptly and smoothly to the building up of disequilibria – and to strengthen market structures and institutions that foster competition and a culture of price stability. An important advantage of this set of policy actions is that they can simultaneously contribute to higher sustained output growth, lower ULC growth and improvements in competitiveness. Moreover, they create conditions that allow wages to increase without putting pressure on prices and reduce the required adjustment of nominal wages in situations when competitiveness losses must be restored.

Wage-setting, however, has a crucial role in preserving and, if necessary, in helping reverse a cumulative loss of competitiveness. This is mainly the responsibility of the social partners who can see – and should be guided to better recognise – the long-term benefits of wage developments that are conducive to price stability, job creation and sustained income growth. To this end, nominal wage developments consistent with the objective of price stability – as quantitatively defined by the ECB – and the trend productivity growth provide an appropriate general guideline for wage-setting, which, however, must be carefully and suitably applied in a differentiated manner in order to take into account labour market conditions and productivity developments in specific sectors or regions as well as the need to improve competitiveness if this is warranted.

Labour market reforms also can help eliminate bottlenecks resulting from matching inefficiencies in the labour market that are often a source of excessive unit labour cost increases. A higher matching efficiency of euro area labour markets accompanied by greater wage flexibility would facilitate the non-inflationary adjustment of wages and support sustained employment growth. These objectives can also be fostered by reforms that aim at increasing labour mobility (across occupations, sectors and regions) in the euro area and at encouraging the increased use of more atypical forms of employment such as flexitime, part-time and self-employment. This requires continuous investment in education, training and life-long learning as well as improved efficiency of public and private employment services.

Finally, national fiscal policies can also contribute to preventing and/or reversing inflationary ULC developments and improving competitiveness through various means: by avoiding pro-cyclical budgetary policies, by enhancing efficiency in the public sector and by pursuing prudent wage policies in the public sector that can provide an appropriate orientation for non-inflationary wage-setting in the private sector.

## **VI. Conclusion**

In conclusion, I would like to emphasise three points. In the euro area the observed dispersion in ULC growth has declined substantially over the past fifteen years and, although

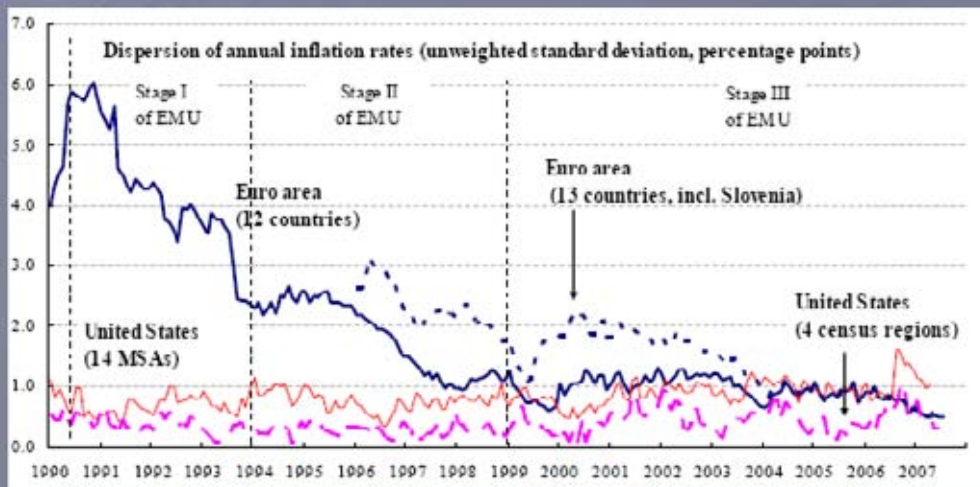
it is still appreciable, it is not unusually large and it is broadly in line with that observed in other monetary unions. However, in a number of euro area countries ULC growth divergences are significant and persistent with unfavourable consequences for their inflation and competitiveness performance. If the observed trends persist, they will adversely affect growth and employment. So these ULC growth divergences matter, especially in a monetary union. The good news is that we have insights and evidence about their causes and their consequences, and about what can be done to address them. Take the case of Germany: the adjustment to re-unification has been painful and protracted. But over the past years a combination of strong productivity growth, wage moderation, corporate restructuring and the successful implementation of structural reforms has generated an impressive export performance and renewed job creation and has led this country back on the path to sustained economic growth. It can be done. And not only in Germany. There are other examples of European countries, both within and outside the euro area, that have also succeeded in simultaneously achieving higher productivity growth and non-inflationary employment creation through the implementation of appropriate reforms, prudent wage-setting and sound fiscal policies. The euro area as a whole will emerge as a stronger and more dynamic economy if the lessons from these success stories are heeded also elsewhere.

Thank you very much for your attention.

## Outline

- **Introduction**
- **Some stylised facts**
- **Causes of unit labour cost (ULC) growth differentials and consequences for economic performance**
- **Policy responses**

## Inflation dispersion in the euro area and in the United States



Sources: Eurostat and US Bureau of Labor Statistics.

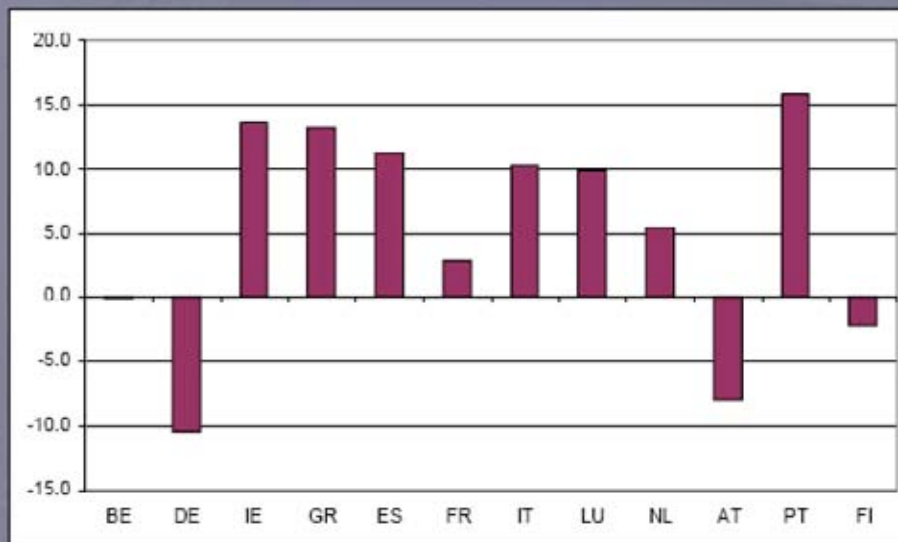
Note: Euro area data up to July 2007 US 4 census regions up to June 2007 and US 14 MSAs up to April 2007.

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## Total ULC growth between 1999-2006 in euro area countries relative to euro area average

(In percentage points)



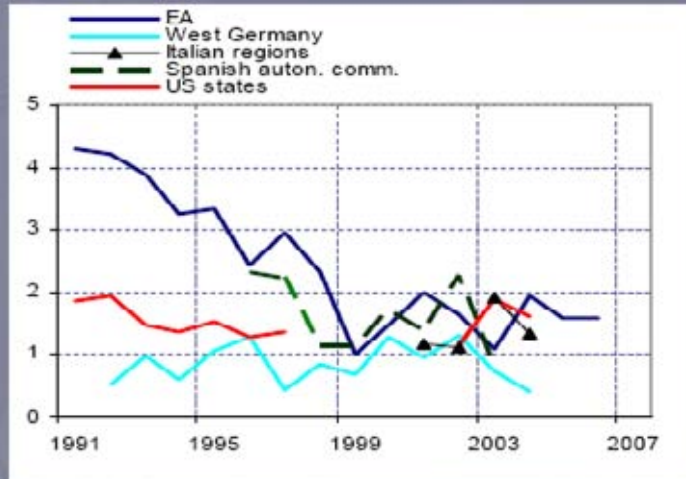
Source: European Commission

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## Euro area ULC growth dispersion in line with benchmark areas since 1999

ULC growth dispersion in the euro area compared with states in the US and with regions of large euro area countries (in percent)



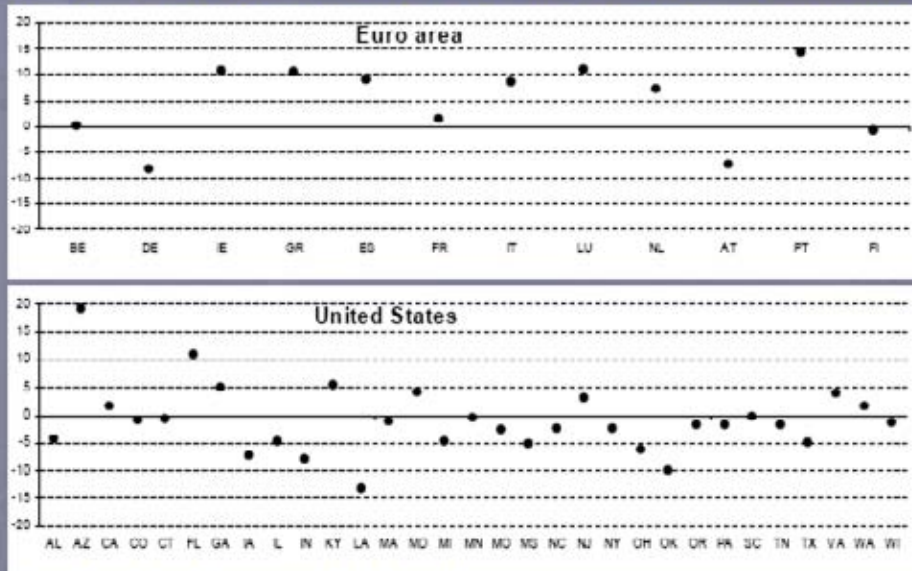
Sources: Eurostat and national statistical offices.

Note: there is a statistical break in the US regional data in 1998.

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## Cumulative ULC growth between 1999-2005 across countries/states relative to the average change, respectively, in the euro area/the United States (%)



Sources: European Commission/U.S. Census Bureau

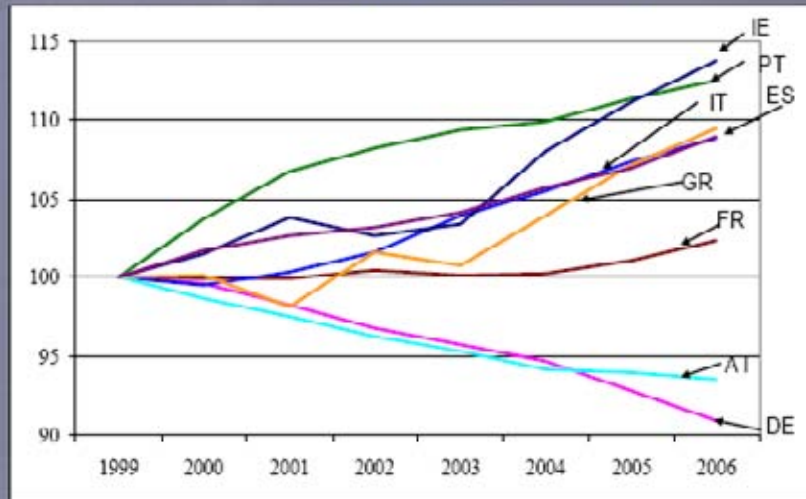
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## Persistent ULC developments in the euro area

ULC developments across euro area countries relative to the euro area average (Index 1999=100)

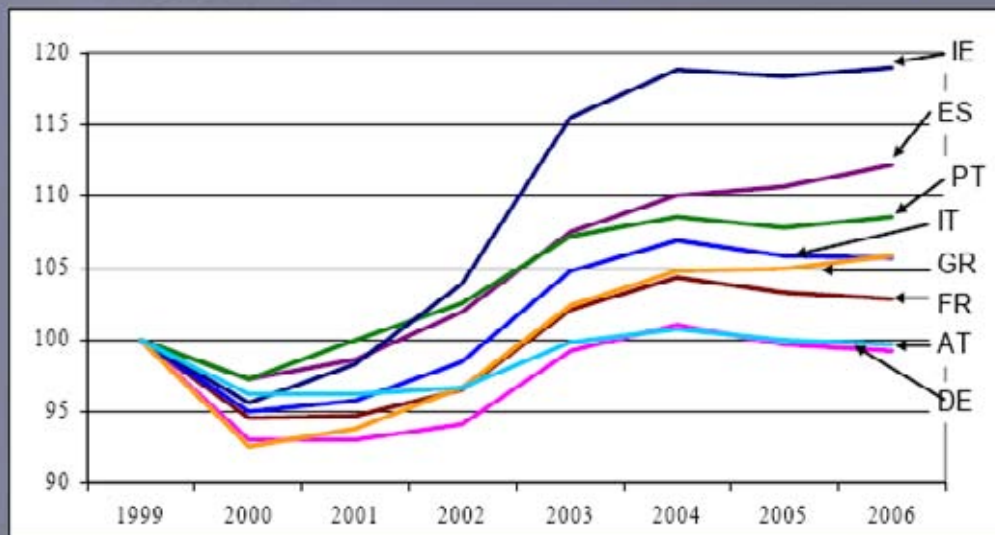


Sources: European Commission (Ameco database)

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## Evolution of Harmonised Competitiveness Indicators across euro area countries (Index 1999=100)



Sources: European Commission (Ameco database)

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## Strong ULC growth mostly stems from compensation growth exceeding productivity growth

Cumulative increases in ULC, compensation per employee and labour productivity (1999-2006)

	<i>(percentage changes)</i>		
	ULC	Compensation per employee	Labour productivity
Belgium	11.9	23.7	10.5
Germany	1.5	15.7	14.0
Ireland	25.6	57.9	25.7
Greece	25.2	63.8	30.8
Spain	23.2	27.3	3.3
France	14.8	23.9	8.0
Italy	22.3	25.9	3.0
Luxembourg	21.8	32.1	8.4
Netherlands	17.4	34.2	14.3
Austria	4.0	16.5	12.0
Portugal	27.7	36.3	6.7
Finland	0.8	20.1	17.6
<b>Euro area</b>	<b>12.0</b>	<b>22.6</b>	<b>8.9</b>

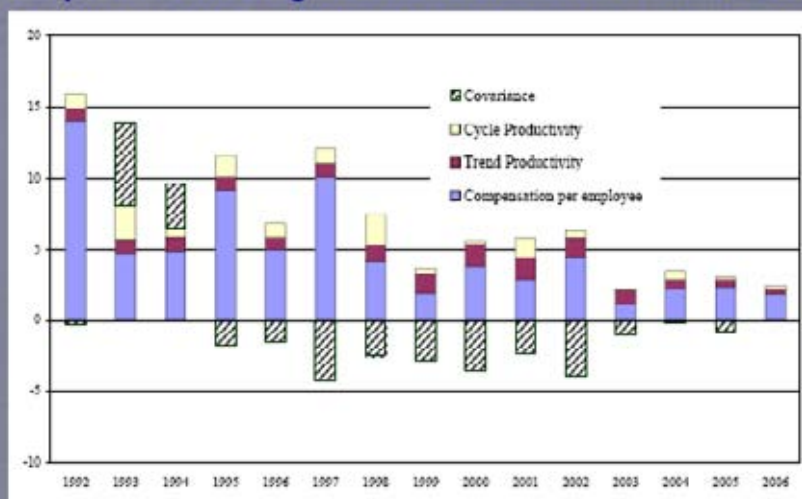
Source: European Commission (Ameco database)

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## Compensation per employee growth most important factor behind ULC differences

Decomposition of ULC growth variance across euro area countries



Source: ECB calculations

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## Similar compensation per employee growth across sectors but lower productivity growth in services

Cumulative unit labour cost growth and components 1999-2005 in the industry and services sectors (percent)

Country	Industry			Services incl. construction		
	ULC	Compensation per employee	Labour productivity	ULC	Compensation per employee	Labour productivity
Belgium	3.0	20.6	17.1	14.4	21.8	6.5
Germany	-7.3	14.9	23.9	4.2	6.7	2.4
Spain	14.9	21.0	5.3	27.6	23.6	-3.2
France	-5.0	18.4	24.6	18.0	22.3	3.7
Italy	20.4	19.1	-1.0	20.9	19.0	-1.6
Luxembourg	8.1	33.4	23.5	26.5	28.6	1.6
the Netherlands	2.1	28.5	25.8	20.3	28.6	6.8
Austria	-9.6	14.1	26.2	8.9	11.8	2.7
Finland	-14.9	28.2	50.7	23.3	24.6	1.0
Euro area 0	0.0	16.0	16.0	15.6	16.6	0.0

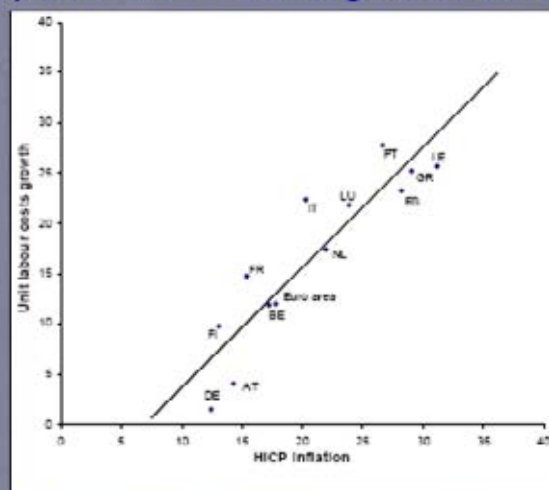
Source: European Commission (Ameco database)

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## ULC developments have contributed to shaping the inflation dynamics in the euro area

Unit labour cost growth and HICP inflation in euro area countries (cumulative rate of change 1999-2006, in %)

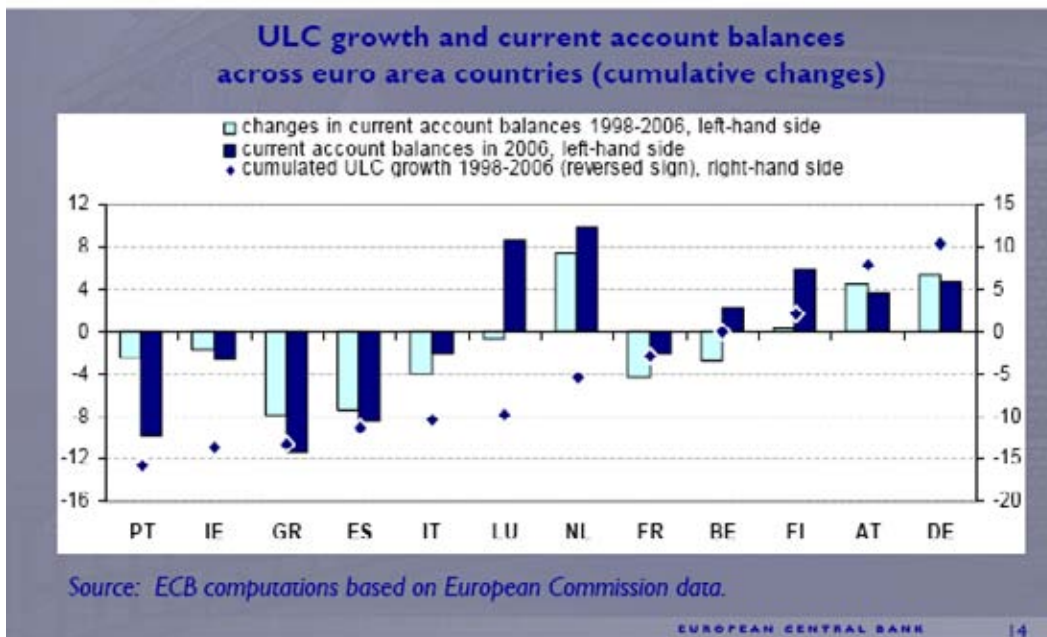


Sources: European Commission and Eurostat

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## Some correlation between ULC developments and current account balances across euro area countries



## No clear link between ULC and real GDP developments in the euro area

