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MONETARY DIALOGE OCTOBER 2006
Summary of Monetary Experts' Panel Briefing Papers

1. DIVERGING TENDENCIES OF COMPETITIVENESS

A number of euro area countries have witnessed a loss of external price competitiveness as their unit labour costs have grown faster than in other countries. Others have gained in competitiveness. The experts' papers widely state Germany as the prime example for gaining while Italy is shown as an example for losing price and cost competitiveness. Different reasons are given for this development. The only way to gain cost and price competitiveness within EMU is through a relative reduction of unit labour costs. This can be achieved either by increasing productivity faster than other Member States or by lowering real or nominal costs (wages and non-labour costs) as well as reducing profit margins.
The countries having lost competitiveness do now have an overvalued real effective exchange rate vis-à-vis other euro zone economies. Overvaluation inevitably leads to rising current account deficits. In fact, the by now sizeable German trade balance surplus is countered by a deficit in other countries like Spain and Italy.
When cost competitiveness is gained via wage moderation (as in the case of Germany), the natural consequence of a reduction in real wages is a compression in domestic aggregate demand with direct effects on growth and investment. In the long-term, if investment remains consistently lower than in a situation without wage restraint, this would also effect potential growth.

1) Does this development bear any dangers for EMU?

Gustav Horn states that the economic policy strategy of permanent real depreciation is an unsustainable development with severe consequences. The German trade balance surplus is accumulating at an accelerating pace. The imbalances could grow until economic activity in appreciating countries slows down, possibly leading to a euro area wide recession. Furthermore, the German policy has in his view led to a severe consumption crisis in Germany.

Guillermo de la Dehesa thinks that persistent differentials in inflation would result in countries with below-average inflation rates facing above-average short-term real interest rates and vice versa. This would imply that, under a single monetary policy, countries growing faster and with above-average inflation rates would enjoy a further stimulus while those growing slower and with lower inflation would weaken further – a self-exciting effect of persistent inflation.

Jean-Paul Fitoussi evokes the dangers of a non-cooperative game. Germany's trading partners were negatively affected, their income could decrease, together with their demand for German goods. They could engage in the same strategies reducing the competitive edge that Germany temporarily obtained. The theory then predicts a race to the bottom leaving the competitive situations more or less unchanged and depressing internal demand further each round. Such a non-cooperative game would in the end leave every country worse off.

Charles Wyplosz describes two nightmare scenarios. The first focuses on the current account deficit which can only be sustained as long as it is financed by capital inflows. But those would inevitably stop leaving the situation ripe for a financial crisis. The second scenario focuses on slow growth and

rising unemployment as a recipe for popular discontent. Euro area membership could then focalize this discontent and be subsequently challenged.

Jörg Krämer reminds that politicians may think leaving EMU could solve the problem as a country outside EMU could devalue its currency which would increase price competitiveness. But this would only work in the short-term. Rising import prices and monetary easing would fuel domestic inflation and wage growth lowering cost competitiveness again. An likelihood of an EMU break-up, though currently extremely low, may rise over time if members do not tackle their problems.

Anne Sibert evaluates the situation of Italy stating that its government debt and recent profligate fiscal policy raise the possibility of the market demanding a substantial risk premium which would make Italian growth prospects even more dismal. Poor growth would be damaging to monetary union, if a one-size-fits-all monetary policy is made a scapegoat for member governments' failures to liberalise.

Sylvester Eijffinger provides empirical evidence to show that the relative unit labour costs of Austria, Germany and Luxembourg have declined while they have increased in almost all other euro area countries. Labour costs in Greece, Italy and the Netherlands have increased the most showing a significant loss in competitiveness.

2) What policies are suggested to prevent any dangers to EMU from materializing?

Jörg Krämer is of the opinion that Italy should not leave EMU but implement structural reforms. The wage-setting process should be liberalized. In his view, the Italian government needs to create an economic framework in which it pays off for firms to increase their own competitiveness.

Charles Wyplosz states that the virtuous way out involves wage moderation, rapid productivity advances or a combination of both. Few options can theoretically work to solve the problem. Reducing public spending is the right answer but it is politically difficult. Letting the deficit rise is another option, yet controversial. What is left is the long, slow and painful road of labour cost erosion that occurs when the economy's growth performance is poor and unemployment rises.

Anne Sibert states that no policy response from the ECB is needed. Only the national governments can improve matters by enacting the required reforms.

Jean-Paul Fitoussi pleads for an increase in productivity. The key to increasing competitiveness is strong private investment. Measures to cut costs must be complemented by development of the financial market, implementation of industrial policies, funding of basic research and academic excellence. Active policies may act as an insurance and lower uncertainty.

Guillermo de la Dehesa reiterates findings that trade and competitiveness were increasingly based on increasing returns to scale, on product differentiation and on quality, design, innovation, embedded technology and brand recognition. There are today forms and ways, even more efficient than cost and prices, to compete in foreign and domestic markets.

Gustav Horn presents the view that the wage formation process in the different countries has to converge. This would not mean that it should be equal, but such that there would be no systematic differences in inflation. If this is impossible in the short run, fiscal policy should compensate by being more restrictive in countries with a relatively high inflation rate and more expansionary in countries with a relatively low inflation rate.

Sylvester Eijffinger states that future policies should be focused in the short run on wage moderation being the most effective instrument. In the long run, however, policymakers in all euro area countries should enforce structural reforms in labour markets to stimulate economic growth in the euro zone.

2. HEDGE FUNDS AND FINANCIAL STABILITY

Although difficult to define, a hedge fund (HF) is a private, limited-liability pooled investment partnership whose managers receive performance-related fees. Hedge funds are not available to the general public and can freely pursue various investment strategies. Since the 1998 LTCM collapse, the hedge fund industry has mainly been out of the spotlight. At the same time, this largely unregulated market has however continued to grow and become more complex, albeit recently, this growth has slowed. Currently, the size of assets is estimated at close to 1.4 trillion Euros. The estimates of the number of HF range between 6000 and 9000, depending on definition.
While the net effect of the impact of hedge funds on financial stability is difficult to assess, the ECB voiced concerns in this regard in its Financial Stability Review of June 2006. Problems could result from a potentially high leverage, a rising share of less liquid assets in hedge funds' investment portfolios, an increasingly similar positioning of individual hedge funds within broad investment strategies and rising correlations not only within the same but also among different investment strategies.[1]

What would be the impact on financial and price stability in the euro area if scenario of abrupt sell-offs would occur?[2]

Leon Podkaminer states that financial instability originating in the hedge fund industry would involve a wave of illiquidity spreading through the system. Plummeting asset prices will retard development in the real sector and the probability of deflation will be high. Given that scenario, however, Podkaminer does not believe that the hedge fund sector can cause much harm to the financial markets today, an opinion shared by Jean-Pierre Patat and Norbert Walter. The reasons for this are that the sector may be approaching structural consolidation and its assets and leverage levels in relative terms are quite low.[3] There has been some over-investment in the sector and the capital inflows to hedge-funds peaked in mid-2004. Since then the returns have been inferior to other industries.

Jean-Pierre Patat writes that although largely dominant on the US market, the latest expansion of HF has been towards Europe. Financial market stability is however still at risk in the New Member States, causing some concerns. Consequently, he has a qualified judgement on the impact of the HF industry on global stability. On one hand, hedge funds intensify hoarding and short term attitudes of market operators thus creating a potential instability. On the other hand, HF activity is welcome since they help to detect market anomalies and provide liquidity on the market. Should a collapse occur, Patat suggests deciding on a case by case basis on regulatory relaxation measures to the counterparties involved, as it is not clear whether the ECB could act in a similar way as the Fed.

Norbert Walter observes that recently, HF have become very "normal" in terms of the investor base, their strategies and returns.[4] The danger to stability is not acute since investors now are less willing to bear the risk of highly volatile returns. Also, as more and more HF enter the markets exploiting market inefficiencies has a natural limit. Hedge fund activities enhance liquidity and drive innovation, as HF trade across asset classes. The (controllable) risks according to Walter lie in questions such as investor protection, HF influence on corporate governance and to a certain extent, systemic stability.

2) Which measures could help to increase the transparency of the hedge fund industry?

Norbert Walter states that calling for transparency only makes sense if it enhances market discipline. He also reminds us that for disclosure requirements to work, they would have to be truly global. Measures must also satisfy a cost-benefit analysis and they must be competitively neutral. Finally Walter discusses whether greater disclosure requirements should be direct or rather indirect, over the

[1] Most recently, the US-based hedge fund Amarantha lost USD 5bn in speculation on gas options which did not trigger any major disruptions on a global scale but served as an alert.
[2] The experts addressing this issue included Norbert Walter (Deutsche Bank), Jean-Pierre Patat (formerly Banque de France) and Leon Podkaminer (WIIW Vienna).
[3] LTCMs leverage/capital ratio was 30 1998, a figure that does not exist today by far.
[4] In 2005, according to the Credit Suisse / Tremont Hedge Fund Index investors only received 7.6% return.

banks. Although direct disclosure is very difficult[1], it is still preferable to the idea of supervision through banks which would place additional burden on the banks, who are in the end also competitors of the same HF.

Leon Podkaminer believes that more transparency is not necessarily desirable as it also means higher costs. Instead, the ECB should engage in planning actions to be taken should the symptoms of large scale financial distress become visible. It is up to the business partners of HF to request whatever information they desire. Finally, it is an open question to whom the HF should be transparent? Regulators could better scrutinize the records available from banks and other partners of HF, should they wish more information.

Jean-Pierre Patat notes that a regulatory environment which would not welcome HF would be severely penalized vis a vis all others. The industry could however possibly benefit from an adapted regulation concentrating on leverage effects and concentrations in positions. The European authorities could be leaders in attempts to achieve better disclosure of information by HF. Although much talk has taken place on this since LTCM, no concrete measures have been taken. But as the American authorities also become more and more open towards the idea, the time could be ripe for action.

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[1] It would have to be real-time, global and in addition the regulatory bodies do not possess the resources to carry out this task

BRIEFING PAPER FOR

THE COMMITTEE ON ECONOMIC AND MONETARY AFFAIRS WITH

THE PRESIDENT OF THE EUROPEAN CENTRAL BANK

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DIVERGING COMPETITIVENESS TRENDS IN THE EURO AREA

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The recent "Annual Report on the Euro Area-2006" by the European Commission has stated the following:

"A major characteristic of persistent growth differences within the Euro Area is that price and cost competitiveness have tended to adjust too slowly in some Member States" and that "while fluctuations in intra-euro-area competitiveness are to be expected in the short term, the persistent deterioration of competitiveness in some slow-growing Member States suggests a failure to adjust to economic shocks"

The above-mentioned Report contains a graph (3.18, page 34) which shows how the real effective exchange rate (based on unit labour costs) of Germany has depreciated from an index of 100, in 1999, to 89 at the end of 2005, thus, achieving an improvement of its cost competitiveness against the other 11 members of the Euro Area (EA) of 11 percentage points. By contrast, at the other extreme, Ireland has suffered a loss of competitiveness of 11 percentage points versus the rest of the members and 22 percentage points against Germany, Italy a loss of 10 percentage points against the rest and 21 percentage points versus Germany, and the Netherlands, Spain and Portugal a loss of 8, 7.5 and 7 percentage points, respectively, against the rest of the EA members and of 19, 18.5 and 18 percentage points, respectively versus Germany. Other members which have improved their competitiveness have been Austria 5, France, 2 and Belgium 1 percentage points respectively versus the rest of the EA members.

Are, these apparently large competitive divergences within the EA, going to cause problems for EMU? It all depends of what are their main causes for the appreciation in some cases and the depreciation in others, of their real exchange rates. Given that the nominal exchange rates cannot be adjusted in EMU, the only way to gain cost and price competitiveness within EMU is through a relative reduction of unit labour

costs and profit margins versus the other member countries. This can be achieved either by increasing productivity faster than the other Member States or by lowering real or nominal costs, that is, wages and non-labour costs as well as reducing profit margins on sales of goods and services.

How to gain (or not) cost and price competitiveness

Competitiveness should only be defined as "the capacity of an economy to compete internationally while, at the same time, maintaining increasing and sustainable standards of living". This definition means that any country is not increasing its real long term price and cost competitiveness in the following cases:

First, if it is often depreciating its currency versus the others trading countries, because, in an integrated world, it means deteriorating its terms of trade and reducing the purchasing power and the standard of living of its citizens. Second, if it is subsidizing its exports, because it means misallocating its public resources to non competitive activities, while distorting investment decisions of its economic agents. Third, if in order to compete, it is cutting down the real incomes of its workers and, therefore, its disposable income and its domestic demand.

The first two ways of achieving price and cost competitiveness cannot be done in EMU, the first because of its impossibility (by having a single currency) and the second because it is forbidden by the EU directives and regulations of the Single Market. But the third way can be done at EMU, and this is what, for instance, Germany and Spain have tried to achieve in the last seven years with different results. On the one hand, Germany has been able to negotiate successful wage reductions at the level of the firm, not only thanks to existence of the Supervisory Boards, where company workers are well represented, (avoiding national negotiations with the unions), but also thanks to the fear by workers of seeing their jobs being outsourced or off-shored to Eastern Europe and Asia. But, at the same time, Germany has been able to increase its productivity per worker and per hour, thus, improving its long term competitiveness.

On the other hand Spain, which has also been able to achieve a negative real wage rate of growth to try to compensate for its relative high inflation and its very low relative productivity growth, (the lowest of the Euro Area) has not been able to improve cost and price competitiveness. These ways of trying to gain price and cost competitiveness, as an alternative to reduce over-regulation and to increase productivity, should be only a "second best" solution and it should only be used temporarily, (forced by growing foreign sector disequilibria) when other alternatives are not institutionally or politically feasible.

Moreover, such a way of doing a real devaluation of its exchange rate when changing the nominal exchange rate is not feasible, could be also viewed sometimes as a contradiction. For instance, in the case of Germany, to resort to real (and even

nominal) wage reductions when its inflation rate has not been its main problem but, rather, its low internal demand growth which depends, basically, both on its wage and employment rates of growth. As a matter of fact, a recent studiy, by the Bundesbank about the effects of cost and price competitiveness in Germany (Stahn, 2006) shows that the German export improvement, both in the Euro Area and in foreign markets, has been due much more to an increase of rate of growth of its exporting markets than to an increase in its cost and price competitiveness within them.

Determinants of different export performance and total growth rates

The best analysis available about how, against an overall sluggish economy in the Euro Area in recent years, the external sector has performed very differently among its four largest members is the IMF Country paper by Allard et al. (2005) which stresses both the cyclical and the structural factors which jointly determine their developments in prices and volume of trade and their impact on their total growth rates.

First, In EMU, where there are no national monetary and exchange rate policies, the adjustment to different cyclical positions in demand or to different output gaps is expected to be associated with changes in relative competitiveness. Countries facing a comparatively weak cyclical position will experience relatively low price and wage inflation and enjoy an improvement in competitiveness, which will curb imports and boost exports.

Second, among the structural factors, different degrees of labour and product market flexibility will also affect the responsiveness of individual economies to shocks, and different paces of structural reform will affect to country specific dynamics in competitiveness and trade.

Third, pricing behaviour plays a role as well. Importers tend to fully pass through changes in exchange rates into their prices and exporters, conversely, have to move their export margins across countries in response to developments in the exchange rate or the productivity, affecting export volumes.

Given these three factors, each country's total rate of growth can be affected by the contribution of the external trade results. For instance, in the period 2001-2004, Germany, where domestic demand was very weak, the external sector contributed positively to growth throughout the period. By contrast, in Spain, the country with the highest GDP and domestic demand growth rates, the external contribution to GDP was negative during the whole period achieving a cumulative -6.1 per cent. France's pattern followed the Euro Area average, that is, from a marginally positive contribution in the first two years to a marginally negative in the next two. Italy, which was the exception to the rule, its very weak domestic demand, especially of investment, could not prevent the external sector from detracting growth since 2002.

Although for imports the relative import content of domestic and foreign demand still plays the most important role in trade, while price and cost competitiveness play a secondary role, for exports, both roles are primary so differences in cost competitiveness are more important than in imports, Germany's recent export boom is a good example of the importance of both factors and Italy and Spain are by contrast a good example of the contrary, their export markets were growing but exports were severely affected by their competitiveness loss.

Even if all four countries benefited from the appreciation of the euro, through reducing their import bill in euros: on the one side, all of them were adversely affected by the oil price hike given its magnitude. On the other side in spite of the euro appreciation, France, Italy and Spain's non oil trade balance deteriorated less than expected because they were able to pass through the increases in their unit labour costs to export prices, mostly within the Euro Area, and Germany's non oil one trade balance improved less than expected from the performance of its net export volumes and its competitiveness.

Therefore, price and cost competitiveness is important to explain the large disparities in export performance by the four countries. Even if they share a common currency, in effective terms, their unit labour cost-based real exchange rates have behaved differently, depending on their trade volumes, relative costs and productivity growth between Germany and France on the one hand and Italy and Spain on the other. While the appreciation of the euro has had a limited impact on its real exchange rate, owing to its productivity growth and labour cost reductions, France saw only a modest real exchange appreciation, whereas Italy experienced a very high appreciation ot its real rate, due to a falling labour productivity growth and increases in labour costs and, finally, Spain did experience an even larger real appreciation due to labour cost increases being higher than productivity growth.

There are also global structural trends in trade and sectoral composition of exports that contribute to disparities in export performance. On the trade side, in general, emerging economies that are integrating in the world trade tend to undergo an income "catch up" process leading to along run increase in their global share of trade to the detriment of more advanced economies as the four largest members of the EA, which should show an underlying trend of decline in their own share. Nevertheless, even among them the less developed of the four, Spain, was less affected by this secular phenomenon given that he had still to catch up 15 per cent its GDP per capita to match the other three EA members.

On the sectoral side, Germany has beneficiated by its traditional specialization in manufactured capital goods, which have gone through cyclical upswing by the high growth of some emerging countries. France and Italy, by contrast, which are more specialized in consumer goods, have been more vulnerable to competitive pressure from emerging countries. Spain, very specialized in manufactured goods has suffered the most of competitive pressures coming form emerging markets in Europe, Asia and Latin America.

Asymmetrical developments in domestic demand have also impacted import performance, given the trend correlation between domestic demand growth and import growth, except in the case of Italy. Spain which has had a 3.75 annual average growth in internal demand has had a high import growth and the contrary has happened to Germany, the only exception is the large import growth of Italy in spite of its very low internal demand growth.

Finally, the model or the structure of economic growth in each country also affects competitiveness. Over the period 1999-2005, Spain has been the fastest growing country of the four, both in terms of real annual average growth (3.63 per cent) and in terms of GDP per capital annual growth (2.4 per cent) which may be normal in a process of catching up. The reasons for that have to do with another way to increase cost competitiveness: i.e. a huge reduction in the cost of capital since joining EMU, due to the fall in country risk and the correspondent increase in debt rankings achieving, in the last five years, an extremely low (or even negative) level of real interest rates. This drop in the cost of capital has made possible to have the highest investment rate level (29 per cent of GDP) and the highest employment growth (3.5 per cent on annual average) of the four large member countries.

Thus, Spain has been able to grow so fast mainly out of labour and capital accumulation, helped by zero or negative real interest rates, which have also fuelled a high internal consumption and investment demand, high consumer inflation, and a housing price bubble, but at the expense of a very low productivity growth (the lowest of the four). As a result, it shows the highest current account deficit in the EA and the largest negative contribution by the external sector to GDP growth. This trend growth model shows that no country can grow in the long run out of productive factor's accumulation only. If it is not accompanied by increasing labour and total factor productivities, major internal and external disequilibria will build up and jeopardize its future growth.

By contrast, Italy is again the exception. It has also enjoyed a huge drop in the cost of capital when joining EMU, but it shows three apparent contradictions: First, a relatively high inflation rate with the lowest economic growth rate of the four. Second, a low employment average annual growth rate (1.5 percent) and a low level of capital accumulation (19 per cent of GDP) in spite of very low interest rate levels and, third, the largest drop of the four in its level of labour productivity per person employed (-15.4 percentage points, although gaining a small increase of 2.4 percentage points in its hourly productivity) over the seven year period.

Inflation differentials in EMU

Inflation differentials within EMU have not been large, but they are still persistent, thus affecting also competitiveness within the EA. Their causes may be the following: First, a Balassa-Samuelson effect (1964), that is, differences in productivity gains in the

tradable sector versus the non-tradable sector, producing a dual inflation, higher in the non tradable sector. Second, a “catching up” effect by less developed member countries converging toward the most developed ones, given that by growing at a faster rate than developed ones they tend to have higher inflation pressures than the latter. Third, a “shock effect”, that is, different impact of external shocks in different countries, such as the recent boom in energy prices and other commodities, given that some countries have a higher dependency and vulnerability than others. Fourth, a “cycle effect”, that is, different cyclical positions in different EA countries although trade and financial integration is reducing them. (Alberola and Tyrväinen, 1998) (Alberola, 2000)

Such persistent differentials, under a common monetary policy, will result in countries with below average inflation rates facing above average short-term real interest rates, while countries with above average inflation rates facing below average real interest rates. This implies that, under a single monetary policy, countries growing faster and with higher than average rates of inflation would enjoy a further stimulus and those growing slower and with lower inflation rates would enjoy a further weakening.

But, fortunately, this self-exciting effect of persistent inflation will be counterbalanced by a self-correcting real exchange rate effect.

Countries with lower than average inflation rates will enjoy a real depreciation versus its EA counterparts, gaining competitiveness and increasing exports to them more than imports from them, thus, increasing the contribution of the external sector to their growth rate. By contrast, countries with higher than average inflation rates will enjoy an appreciation of their real exchange rate and a loss of competitiveness vis-à-vis their EA counterparts, reducing the contribution of their external sector to the growth of their GDP. As the real exchange rate depends on relative levels of domestic and foreign prices, the effects of inflation differentials on an economy’s international price competitiveness tend to accumulate over time, so that the real exchange rate effect should, at some point in time, dominate the real interest rate effect and trigger a reversion back to equilibrium (Hofmann and Remsperger, 2005)

There may also be a situation of endogeneity with respect to the persistence of inflation differentials in the EA as it may be the case in optimum currency areas (De Grauwe and Angeloni, 2004). Inflation persistence tends to be significantly lower in the group of countries which have already experienced comparably low and stable inflation rates in the past, while it tends to be rather high in those countries with a history of high inflation rates before joining EMU. Given that monetary policy by the ECB is geared to delivering and maintaining low and stable inflation rates in the whole of the EA and to minimizing the deviations of average area-wide prices from their long-run values is likely to lead also to low cross-country inflation differentials and persistence should also tend to decrease in the latter countries. Nevertheless, the persistence of inflation differentials in the EA may tend to stay longer the more number of new entrants join the euro (Angeloni and Ehrmann, 2004).

Other, and better, forms of gaining long term competitiveness

Nevertheless, we should not forget that cost and price competitiveness are not either the only way to compete or the most efficient one. This form of competitiveness is based on the neoclassical models of perfect competition in international trade and it is still valid in the case of basic commodities (oil and gas, gold, metals, soybeans, coffee, maize, wheat etc.) and some perfectly homogeneous products (some iron and steel products, basic chemicals and even some textiles) which are mostly quoted at international or local exchanges. In these basic homogeneous products, the relative levels of production costs and final prices determine a large part of their competitiveness.

Nevertheless, many decades ago, Nicholas Kaldor (1978) did show already that he could not find a clear correlation between the reductions in relative costs and prices of an economy and its market share or competitiveness in international markets (the so-called “Kaldor Paradox”). Later, in the seventies and eighties, new theories and models of international trade, developed by Paul Krugman (1980), Elhanan Helpman and Paul Krugman (1985), Avinash Dixit and Joseph Stiglitz (1977), Avinash Dixit and Victor Norman (1980) and Wilfred Ethier (1982), gave an answer to that paradox by showing that international trade and competitiveness were increasingly based on the existence of increasing returns to scale in production and distribution, as well as on product differentiation and on their level of quality, design, innovation, embedded technology and brand recognition. That is, there are today other forms and ways, even more efficient than costs and prices, to compete in foreign and domestic markets for heterogeneous goods and services.

Today, most heterogeneous manufactures compete internationally based mainly on these new parameters and not on their relative cost or price. This form of “imperfect or monopolistic competition” is highly important and growing among very similar economies in terms of income levels, tastes and revealed comparative advantages and even more between these type of countries when they have a single currency or a peg to a major international reserve currency, where each competing economy cannot have any recourse to competitive nominal exchange rate depreciations. It is also very important in the case of “intra-industry” and “intra-firm trade”, where trade flows are exchanged among a single industrial sector in the first case, or different companies or subsidiaries belonging to the same company or group of companies, which already represent 40 per cent of the total world trade in manufactures.

Finally, a clear distinction is being made increasingly today between a country “external competitiveness”, based exclusively in short term trade results or export market shares and its “long term global competitiveness”, mainly based on its relative levels of productivity. Any country productivity is determining, in the long term and in the last instance, not only its relative level of competitiveness but also its potential GDP growth, its real wages and its wellbeing. This latter concept is the one used by the World Economic Forum or by IMD to make their annual Global Competitiveness rankings. In their rankings, China, for example, is not considered a highly competitive country, given that it is only very competitive in labor-intensive manufactured products, given that it has lower wages (because of its lower relative productivity) and because it has still a medium level technology (but growing fast) and an artificially depreciated

currency. By contrast, Germany and Japan are ranked as very competitive countries, because they are able to compete internationally in spite of their appreciated currencies and higher costs and wages, showing that their productivity, technology and innovation levels are higher than in many other developed countries.

Technically, the only way that productivity and competitiveness may differ is when a country's purchasing power grows at a slower rate than its output or, what amounts to be the same, when its terms of trade deteriorate, that is, when the average price of its imports becomes higher than the average price of its exports, which means that its purchasing power and its standard of living are deteriorating, when they should not be one of the main results of trading internationally. Nevertheless, this has not been the trend among developed countries until now since their terms of trade have followed an improving long term trend, in spite of their temporary short term falls, due mainly to energy shocks.

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Diverging Tendencies of Competiveness

Briefing Paper for the Monetary Dialogue of October 2006 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

In its *Annual Report on the Euro Area 2006* the European Commission recently stated that "... a major characteristic of persistent growth differences within the euro area is that price and cost competitiveness have tended to adjust too slowly in some Member States. While fluctuations in intra-euro-area competitiveness are to be expected in the short term, the persistent deterioration of competitiveness in some slow-growing Member States suggests a failure to adjust to economic shocks." Calculated on the basis of unit labour costs, some euro-zone countries (e.g. Germany) have over the past few years gained in competitiveness measured against other countries. Moderate wage agreements below the productivity increase have been the main reason for this development. On the other side, some countries (e.g. Italy) have not been able to pursue similar wage moderation and have subsequently lost competitiveness, eventually finding themselves in difficult economic circumstances. Taking into account that in Economic and Monetary Union (EMU) differences in competitiveness can no longer be reacted to by adjusting nominal exchange rates, does this development bear any dangers for EMU? First, we will discuss the concepts of relative Unit Labor Cost (ULC) and the Real Effective Exchange Rate (REER) as indicators for measuring international competitiveness. Then, we give some preliminary emprical results for three euro-area countries with *weak* competiveness (Italy, the Netherlands and Greece) and three countries with *strong* competiveness (Germany, Austria and France). The main conclusion is that differences in growth and competitiveness between the euro-area countries are currently present, mostly due to differences in ULC and wage moderation policies. Each euro-area country finds their REER influenced by different variables, of which ULC of their own country and the average ULC of the other euro-area countries are always significant for estimating REER. By analyzing the factors influencing REER, future policies can be set up to decrease differences in price and cost competitiveness. These future policies should be focused in the short run on wage moderation being the most effective instrument. In the long run, however, policymakers in all euro-area countries should enforce structural reforms in labor markets to stimulate economic growth in the euro zone and to decrease differences in competitiveness further.

Introduction

The purpose of this Briefing Paper is to discuss the diverging tendencies of competiveness within the euro area. In its *Annual Report on the Euro Area 2006* the European Commission recently stated that "... a major characteristic of persistent growth differences within the euro area is that price and cost competitiveness have tended to adjust too slowly in some Member States. While fluctuations in intra-euro-area competitiveness are to be expected in the short term, the persistent deterioration of competitiveness in some slow-growing Member States suggests a failure to adjust to economic shocks." (p.35). Calculated on the basis of unit labour costs, some euro-zone countries (e.g. Germany) have over the past few years gained in competitiveness measured against other countries. Moderate wage agreements below the productivity increase have been the main reason for this development. On the other side, some countries (e.g. Italy) have not been able to pursue similar wage moderation and have subsequently lost competitiveness, eventually finding themselves in difficult economic circumstances. Taking into account that in Economic and Monetary Union (EMU) differences in competitiveness can no longer be reacted to by adjusting nominal exchange rates, does this development bear any dangers for EMU? First, we will discuss the concepts of relative Unit Labor Cost and the Real Effective Exchange Rate as indicators for measuring international competitiveness. Then, we give some preliminary emprical results for three euro-area countries with *weak* competiveness (Italy, the Netherlands and Greece) and three countries with *strong* competiveness (Germany, Austria and France). In order to decrease these differences in the short run, the weak competitive euro-area countries have to implement nominal wage moderation. Moreover, we discuss the importance of structural reforms in labor markets to stimulate economic growth in the euro zone and to decrease differences in competitiveness in the long run. Finally, we draw some conclusions.[1]

Indicators for measuring competitiveness: some theoretical background

Since 1983, the IMF has developed an *Information Notice System* (INS) to be able to survey the exchange rate policy of Fund Members. Since 2004, '... a country's competitiveness is evaluated by calculating real effective exchange rate based on relative unit labor costs in the manufacturing.' (Huimin and Ruoen, 2004, p.1). Because of the availability of data in the manufacturing sector, which accounts for 70 percent of world trade, relative *Unit Labor Cost* (ULC) is a useful indicator for international competitiveness. Therefore, a widely accepted measure for price and cost competitiveness is the *Real Effective Exchange Rate* (REER), based on relative unit labour cost, i.e. the sum of labor compensation, added value and producer price index. The REER is '... defined as the relative prices between the Euro Area and its partner countries expressed in a common currency and are constructed by deflating the NEER (Net Effective Exchange Rate) index using appropriate price or cost indices.' (Buldorini, Makrydakis and Thimann, 2002, p.18)

[1] This Briefing Paper is, amongst others, based on the empirical results in an unpublished paper by Vogels (2006).

The REER based on unit labor cost is calculated by the following equation:

$$E_i = \mathbf{\Pi}_{j \neq i} \left(\frac{C_i R_i}{\overline{C_j R_j}} \right)^{Wij}$$

With: E_i = Real Effective Exchange Rate of country i
C_i and C_j: normalized unit labor cost measured in country i respectively j, expressed in local currencies.
R_i and R_j: nominal exchange rate of country i respectively j.
W_{ij} is the weight attached to country j by country i:

$$W_{ij} = \frac{\Sigma_k \, w^k_i \, s^k_j}{\Sigma_k \, w^k_{i\,(1-s^k_i)})}$$

With: k: number of markets in which producers of country i and j compete.
s^k_j: market share country j in market k
w^k_i: share of country's output sold in market k.

In the last equation can be seen that the competitive position of country j in market k is calculated by $\Sigma_k \, w^k_{i\,(1-s^k_i)}$). It shows that an increase in 'elasticity of demand of domestic commodities and the relative price of commodities produced by its trade partners' (Huimin and Ruoen, 2004) leads to an increase in competitiveness weight. Demand for domestic commodities becomes bigger when the commodity prices of other trade partners increase and therefore the international competitive position of the domestic country improves.
When using the model for REER, it can be said that nominal exchange rate within the euro area equals zero, i.e. $R_j = R_i = 1$. This gives the following equation:

$$E_i = \mathbf{\Pi}_{j \neq i} \left(\frac{C_i}{C_j} \right)^{Wij}$$

When calculating the REER for all euro-area countries, it can be assumed that there is only a narrow group of partner countries involved, namely the other euro-area countries. In that case, according to Buldorini, Makrydakis and Thimann (2002) the REER is based on several deflators, namely harmonized Consumer Price Indices (CPI), Producer Prices (PPI) and Unit Labor Cost (ULC). They also announce that GDP deflators, export unit value indices and Unit Labor Cost in the total Economy (ULCE) will be used in the near future to calculated REER.

From this, the following linear regression equation can be specified as follows:

$$E_i = B_0 + B_1 (CPI_i) + B_2 (PPI_i) + B_3 (ULC_i) + B_4 (ULC_j) + B_5 (GDP_i) + \varepsilon, \text{ with } j \neq i$$

E_i = Real Effective Exchange Rate of country i (*IMF: IFS Database*)
CPI_i = harmonized Consumer Price Index of country i (*IMF: IFS Database*)
PPI_i = Producer Price Index of country I (*IMF: IFS Database*)
ULC_i = Relative Unit Labor Cost of country i (*OECD Economic Outlook 79*)
ULC_j = Average Unit Labor Cost of all Member Countries, except country i. (*OECD Economic Outlook 79*)
GDP_i = Gross Domestic Product of country i (*Eurostat*)

The estimated model that will be used in this paper is:

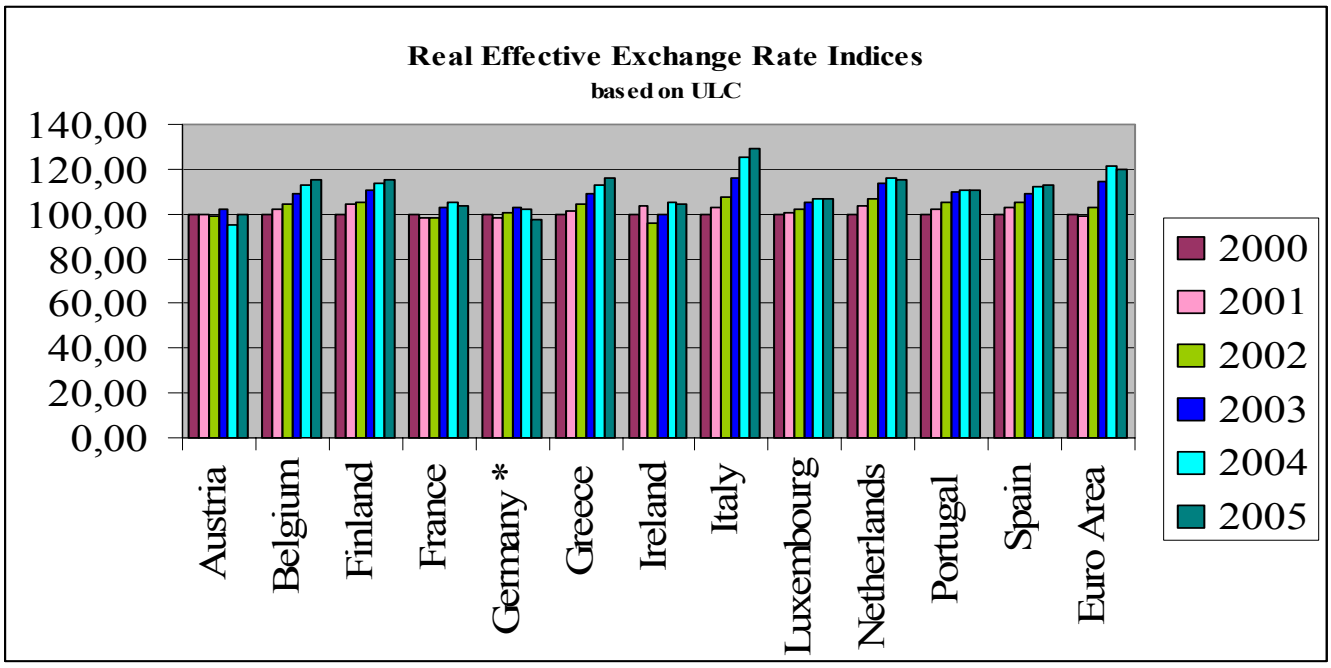
$$\hat{E}_i = \beta_0 + \beta_1 (CPI_i) + \beta_2 (PPI_i) + \beta_3 (ULC_i) + \beta_4 (ULC_j) + \beta_5 (GDP_i) + \beta_6 (ULC_i * ULC_j)$$

Where: $j \neq i$
$\hat{E}_i$ = estimated value for E_i and
β_i = estimated value for B_i
ε = error term of estimation

Empirical results for euro-area countries with weak and strong competiveness

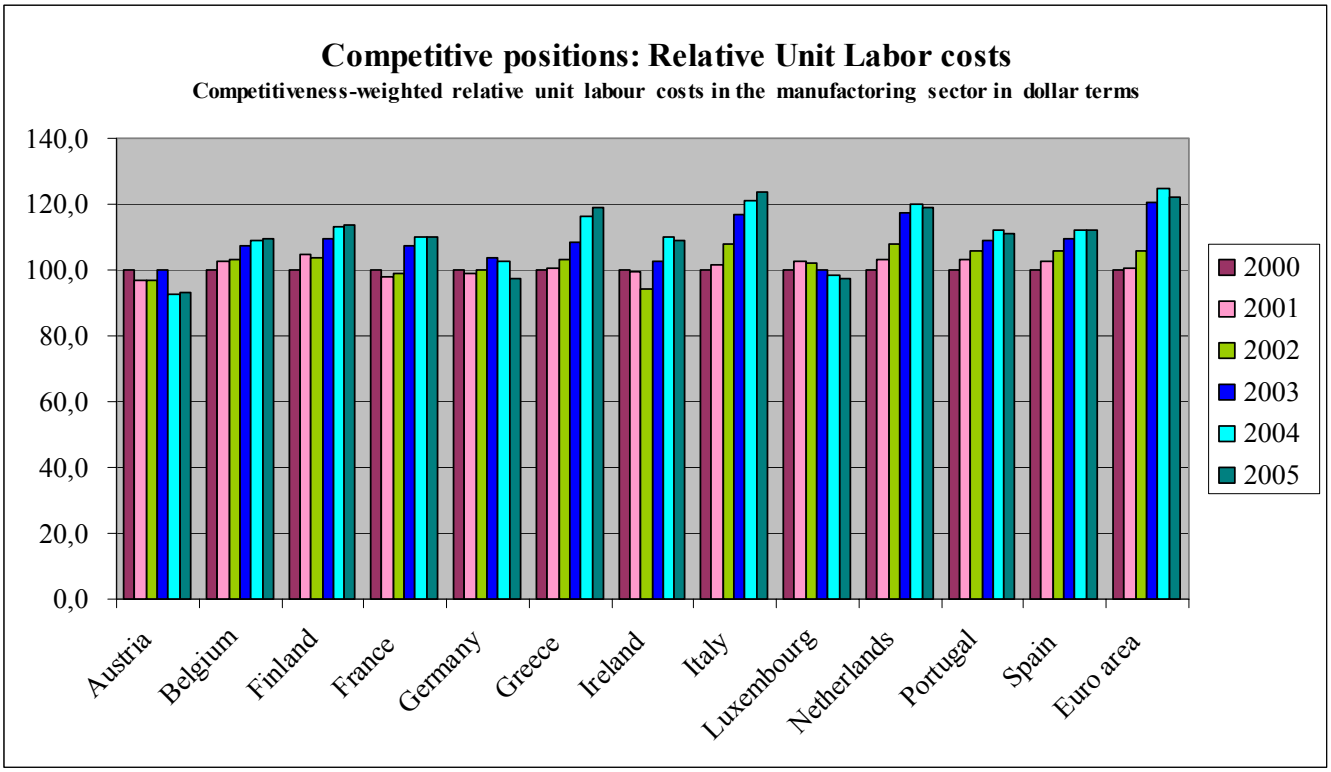
The REER is shown in Figure 1. Italy, Belgium, Finland, Greece, the Netherlands and Spain have a relatively high REER. Countries like Austria, France, Germany and Ireland high a relatively low REER, which implies a good competitive position within the euro area. Figure 2 shows the competitive positions within the euro area, based on relative ULC in the manufacturing sector. While the relative ULC of Austria, Germany and Luxembourg have declined in the last five years, the ULC of almost all other countries in the euro area has increased. Labor costs in Greece, Italy and the Netherlands have increased the most, with a maximum of 23.5 percent growth in five years for Italy. This shows a significant loss in competitiveness for these countries. When comparing Figures 1 and 2, some observations can be made. First of all, Italy shows a relatively high REER and a large increase in relative ULC, which confirms the theory mentioned above. An increase in labor costs leads to a deterioration of competitiveness. Second, while relative ULC in Greece increased by 18.9 percent during the period 2000-2005, its REER was relatively high for that same period. Third, Germany's relative ULC has decreased with 2.5 percent during the same period. Nevertheless, its relative REER is significantly low, which shows a strong competitiveness.

Figure 1. Real Effective Exchange Rates Indices



Source: IFS Database on IMF website

Figure 2. Relative Unit Labor Costs



Source: OECD Economic Outlook 79 database.

Euro-area countries with weak competitiveness

When looking at the overview of all euro-area countries, is can be seen that there are several countries with *weak* competitiveness compared to the total euro area. The three with the *highest* REER indices are Italy, the Netherlands and Greece. This groups will be discussed below, giving a clearer view on the magnitude of these differences, as well as providing a background for these countries to explain their differences with the average competitiveness in the euro zone.

The REER estimation for *Italy* is the following equation with statistics:

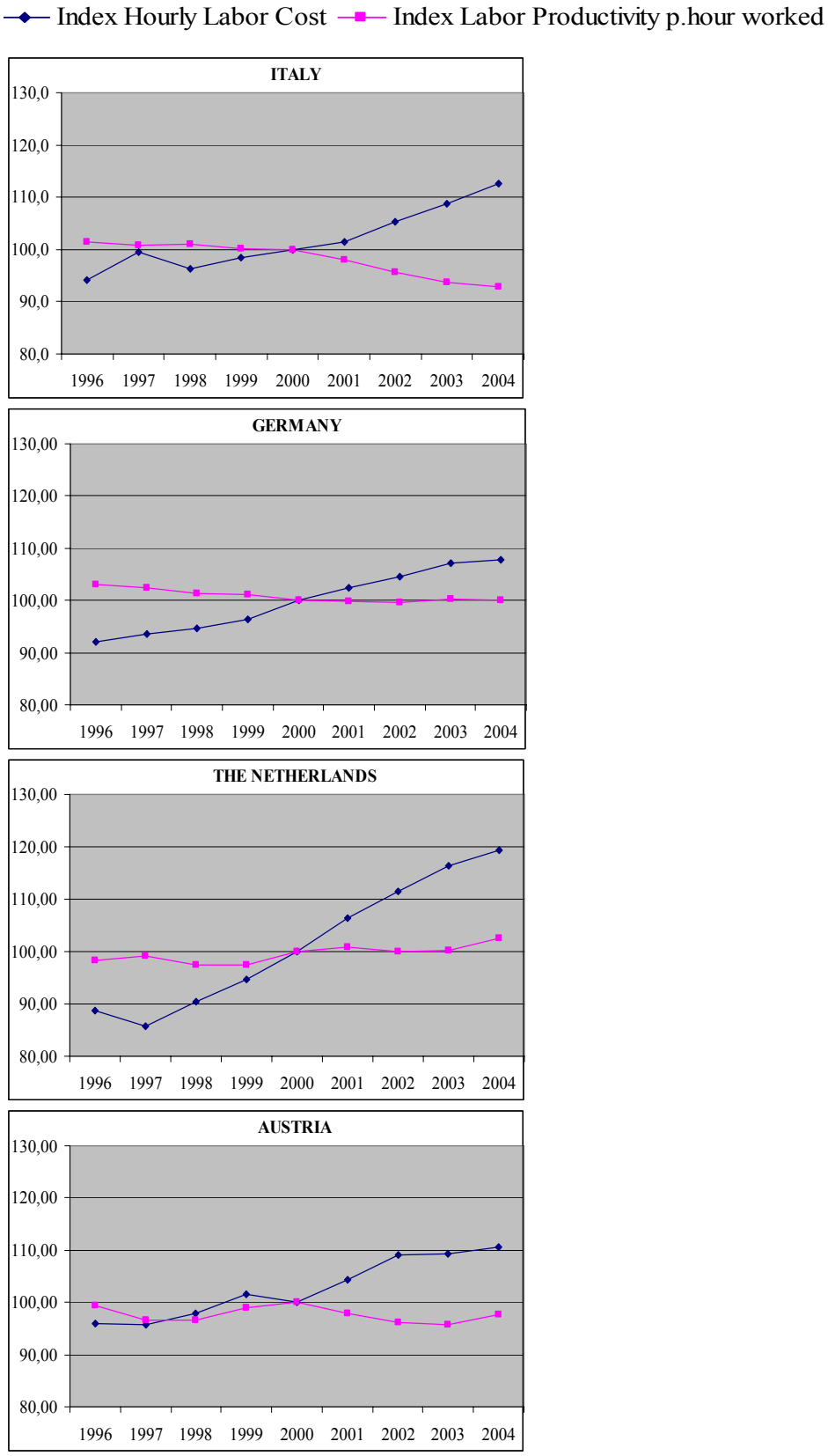
$\hat{E}_i = -66.23588 + 0.56535 * PPI_i + 0.47200 * ULC_i + 0.63372 * ULC_j$, with $j \neq i$

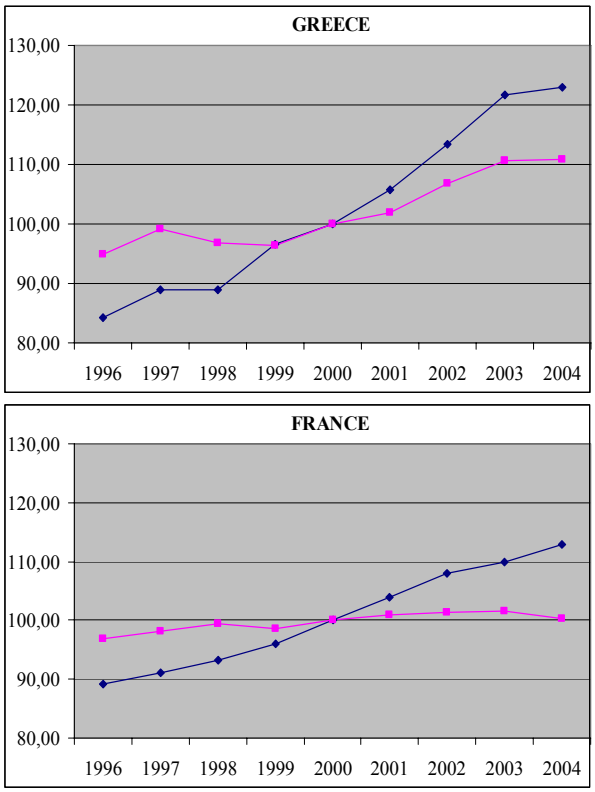
	β_0	β_2	β_3	β_4
Standard error	21.00212	0.19024	0.11462	0.14418
p-values	0.01972	0.024898	0.00623	0.00459

$R^2 = 0.97833$; F statistic = 90.29417; Significance F = 2.2078E-05

From the model above, it can be seen that both CPI and GDP are not significant in order to estimate the REER for Italy. This is remarkable because Buldorini, Makrydakis and Thimann (2002) explicitly mention CPI as one of the estimators for REER.
According to Blanchard (2006), the main explanation for the weak competition position of Italy is the low GDP growth. However, as seen in the estimated model above, GDP growth is not a significant variable to estimate REER for Italy. In Figure 3, the indices are given of hourly labor cost and labor productivity. As can be seen, hourly labor cost increased over the years and even became larger then labor productivity after 2000. This implies that Italy did not manage to implement wage moderations to improve its competitiveness. The relative ULC for Italy is 123.5 in 2005. The average relative ULC for the euro zone in that same year was 109.6. This means that Italy had a 12,7 percent higher labor cost then the total euro area. From the estimated regression, it holds that also PPI is significant for explaining REER in Italy. Therefore, possible reasons for the weak competitiveness are failed wage moderation, a relatively high ULC and a strong growth in PPI, which increased by more then 18 percent during the period 1996-2005.

Figure 3. Indices of Hourly Labor Cost and Labor Productivity





Source: Eurostat - General Economic Background

The REER estimation for *the Netherlands* is the following equation with statistics:

$\hat{E}_i = 12.68535 + 0.39442^* ULC_i + 0.49702^* ULC_j - 0.57419^* GDP$, with $j \neq i$

	β_0	β_3	β_4	β_5
Standard error	5.13796	0.03767	0.05578	0.17453
p-values	0.04853	4.45365E-05	0.00011	0.01661

$R^2 = 0.99053$; F statistic = 209.19594; Significance F = 1.85111E-06

From the model above, it can be seen that both PPI and CPI are not significant in order to estimate the REER for the Netherlands. This is differs from the result found for Italy, which shows that REER is not depending in each country on the same variables. Besides that Buldorini, Makrydakis and Thimann (2002) state that GDP will only be used in the future to calculate REER. In the case of the Netherlands seems to be a misspecification of the model, if GDP would be excluded from estimating REER. Of all variables in the model, GDP has the largest coefficient. GDP growth for the Netherlands is relatively low, which partly explains the weak competitiveness. Figure 3 shows also the indices of hourly labor cost and labor productivity (per hour worked) in the Netherlands indicating a sharp increase in hourly labor cost, which became larger then productivity from 2000 onwards. This implies that also the Netherlands did not manage to moderate wages. Therefore, possible reasons for the weak competitiveness are low GDP growth, a relatively high ULC and failed wage moderation.

The REER estimation for *Greece* is the following equation with statistics:

$\hat{E}_i = -33.375334 + 0.47548^* CPI_i - 0.10143^* ULC_i + 0.95551^* ULC_j$, with $j \neq i$

	β_0	β_1	β_3	β_4
Standard error	4.87712	0.02901	0.04562	0.05757
p-values	0.00048	3.28507E-06	0.06789	3.05187E-06

R^2 = 0,99484; F statistic = 385,75015; Significance F = 2,99599E-07

From the model for Greece, it can be seen that both PPI and GDP are not significant in estimating REER. Remarkable is the p-value for β_3, the coefficient for ULC_i, showing a p-value slightly larger then 0.05, which would normally mean that ULC_i is not significant for estimating REER. However, the IMF uses ULC_i per definition to calculate REER (Huimin and Ruoen, 2004). The estimated model above shows that CPI, besides ULC_i and ULC_j, has an influence on REER. However, CPI is only slightly above the average of the euro-area CPI, so this does not completely explain the weak competitiveness. As mentioned before, ULC is relatively large compared to the rest of the euro zone. Figure 3 shows that labor costs are larger than labor productivity since 2000. This reflects failed wage moderation. Therefore, possible reasons for the weak competitiveness are slightly higher consumer prices, a relatively high ULC and failed wage moderation.

Euro-area countries with strong competitiveness

Some euro-area countries have a *strong* competitive position compared to the other countries in the euro area. The three countries with the *lowest* REER are Germany, Austria and France. Here, these countries will be discussed in order to give an overview on their position in the market as well as providing a background, to explain their differences with the average competitiveness in the euro zone.

The REER estimation for *Germany* is the following equation with statistics:

$\hat{E}_i = 596.27384 - 1.46126^* CPI_i - 4.35301 ULC_i - 3.09794^* ULC_j + 0.03953^* (ULC_i^* ULC_j)$, with $j \neq i$

	β_0	β_1	β_3	β_4	β_6
Standard error	137.08550	0.09089	1.36085	1.27277	0.03953
p-values	0.00736	1.6963E-05	0.02403	0.05909	0.02516

R^2 = 0.99654; F statistic = 360,52817; Significance F = 2.44999E-06

The model for Germany shows that PPI and GDP are both not relevant for estimating REER. Worth noticing is the term ULC_i*ULCj, being the *interaction term* between unit labor cost in Germany and average unit labor cost in the other euro-area countries. Without this interaction term, the p-value for β_4 would be 0.69650, i.e. much larger then the critical value of 0.05. In that case, the model would be misspecified. In this model, the p-value for β_4 is still a bit larger then α, but ULC_j is by definition (see also Huimin and Ruoen, 2004) an explanatory variable of REER and, therefore, still included in the

model. The estimated model above shows that CPI, besides ULC_i, ULC_j and the interaction term ULC_i*ULC_j, influences REER. However, CPI of Germany is still the highest in the euro area and does not explain the strong competitiveness. Figure 2 shows that ULC is one of the lowest in the euro area, which is of course in accordance with the low REER. According to Blanchard (2006), the real reasons for the strong competitiveness are the very low nominal wage growth and decent productivity growth. Figure 3 shows a slight increase in hourly labor cost and a relatively stable productivity growth indicating that Germany has been able to moderate wages, which is even more obvious when comparing Germany with the other weak competitive countries. While labor cost stayed below an index of 110 for the latter country, the index grew up to 124 for Greece. Therefore, possible reasons for the strong competitiveness are a relatively very low ULC and successful wage moderation.

The REER estimation for *Austria* is the following equation with statistics:

$\hat{E}_i = 36.44490 + 0.33543^* ULC_i + 0.27876^* ULC_j + 0.86268GDP_i$, with $j \neq i$

	β_0	β_3	β_4	β_5
Standard error	7.306110	0.01859	0.06853	0.26706
p-values	0.00248	1.86758E-06	0.00659	0.01790

R^2 = 0,98656; F statistic = 146,81512; Significance F = 5,28319E-06

From the model for Austria, it can be seen that both CPI and PPI are not significant for estimating REER. All p-values are smaller then the critical value of 0.05 and $R^{\wedge 2}$ almost approximates unity, which shows that this model is a good fit for the data. For Austria, a change in GDP growth has the largest effect on REER. This is remarkable as GDP growth is currently not included in the estimation for REER as used by de IMF (Huimin and Ruoen, 2004). The estimated model above shows that GDP strongly influences REER. In the last couple of years, GDP growth for Austria accounted for only 2 percent not explaining its strong competitiveness completely. Figure 2 shows that ULC are the lowest in the whole euro area, contributing heavily to the strong competition position of Austria. Figure 3 shows a small decrease in labor productivity growth and a slight increase in hourly labor cost indicating that Austria has been able to moderate wages, but part of the effect of this has vanished due to the lower productivity. Therefore, possible reasons for the strong competitiveness are a very low ULC and partially wage moderation.

The REER estimation for *France* is the following equation with statistics:

$\hat{E}_i = 86.48056 + 1.01980^* ULC_i - 0.87301^* ULC_j$, with $j \neq i$

	β_0	β_3	β_4
Standard error	20.43142	0.15515	0.31085
p-values	0.00387	0.00031	0.02620

R^2 = 0,914420; F statistic = 37,39735; Significance F = 0,00018

The model for France shows that CPI, PPI and GDP are not significant for estimating REER. This may be remarkable at first sight, but both tR^2 and the F statistic show that

this model is a good fit for estimating the true REER. The estimated model above supports that ULC_i and ULC_j have an influence on REER. Figure 2 clarifies that ULC for France is not the lowest in the euro area. Figure 3 shows an overall increase in labor productivity growth and a gradual increase in hourly labor cost, indicating that France has been able to moderate wages to a certain extent. Therefore, possible reasons for the strong competitiveness are a low ULC and partially wage moderation.
When analyzing the current competitiveness in the euro area, it can be seen that the main reasons for growth differences in the short run are differences in ULC and wage moderation policies. In order to decrease these differences in the short run, the weak competitive euro-area countries (Italy, the Netherlands and Greece) have to implement nominal wage moderation. This is the most effective short-term instrument, since ULC_i and ULC_j appear to be significant variables for all countries in order to estimate REER.

Structural reforms and economic growth in Europe

According to Issing (2006), the euro area has experienced a stable dispersion of GDP growth and a strong decline in inflation dispersion in the 1980s. This latter reached its lowest level in 1999, remaining stable thereafter. A distinguishing feature of inflation differentials in the euro area is the higher persistence relative to the one experienced in the United States. Since the introduction of the euro, seven of the twelve member states have systematically maintained either a positive or a negative inflation gap against the euro area average. Remarkably, the process of nominal convergence in the euro area was not accompanied by greater dispersion of GDP growth rates. Moreover, contrary to the case of inflation differentials, GDP growth differentials have shown persistence both in the US and the euro area. Issing (2006) lists three sets of factors as possible determinants of inflation and output growth differentials. The first includes *structural factors*, such as differences among countries in productivity trends, in the degree of openness and exposition to foreign shocks, in the financial structure, and in the degree of rigidities in goods and labor markets. A key role is played by the dynamics of unit labour costs. Interestingly, however, the compensation per employee component has proved to be more important than labor productivity. The second set includes *cyclical factors*. Differentials can arise from asymmetric shocks hitting specific economies or from asymmetric responses to common shocks. In the euro area, common shocks account for the bulk of business cycle fluctuations. Moreover, co-movement of economic activity has increased since 1999, suggesting relatively similar propagation mechanisms. Finally, country-specific shocks have small level effects on output but generate large and persistent effects on output growth differentials (see also Chapter 5 in De Haan, Eijffinger and Waller, 2005). The third set includes *policy-related factors*. Inflation and output differentials can be induced by misaligned national structural or fiscal policies. It is also sometimes argued that in a currency union characterized by inflation differentials, a single monetary policy can act in a destabilizing way by strengthening inflation and output growth differentials. Countries with higher than average inflation rate on account of a demand shock would experience lower real interest rates, which in turn would fuel domestic demand and national inflation. Such a simple analysis, however, neglects important factors. First, the argument depends on the nature of the shock. If a country

experiences a positive productivity shock, higher than average real interest rates will rather signal strong investment prospects. Second, the argument is generally supported by the dispersion of ex-post real interest rates. To capture the effect of inflation differentials on investment and consumption, however, one needs to look at ex-ante measures. Due to the credible commitment of monetary policy to the achievement of price stability, the dispersion of national inflation expectations in the euro area is much lower than that of realized inflation. Hence, the dispersion of the relevant ex-ante measure of real interest rates is also substantially lower.

Issing (2006) states that in EMU there are stabilizing channels that counteract the effect of potentially diverse real interest rates. The first is a competitiveness channel: a country with lower than average inflation and higher than average real interest rates due to weak demand experiences an increase in competitiveness and in the demand of its goods, hence counteracting the initial effect of higher real interest rates. Recent research at the ECB suggests that in the euro area the real interest rate effect is stronger in the short run, while the competitiveness effect builds up slowly but prevails over the long term. The second stabilizing channel is provided by risk sharing. Within EMU capital and credit market integration enables to mitigate the effect of country-specific shocks on consumption through international diversification. This is a key mechanism that can counteract the differential welfare impact of asymmetries among members of a currency union. In the euro area, the share of idiosyncratic shocks smoothed through capital and credit markets is substantially lower than in the US. Nonetheless, it has been increasing since the early 1990s.

National economic policies are according to Issing (2006) better instruments to enhance the ability of individual countries to respond to economic shocks and to divergences. Structural reforms in labor markets contribute to ensure a smooth adjustment to shocks or changing economic conditions. In this respect, the creation of EMU has fostered to some extent capital mobility by increasing cross-border flows, although further integration is warranted also to mitigate the effects of asymmetric shocks on consumption. On the contrary, labor mobility remains low between countries and regions, as well as between sectors and professions. It is important to enhance labor flexibility at the national and regional level, given the existence of differences in languages and cultures that inhibit mobility across countries. Structural policies should also aim at improving the efficiency of the price setting mechanism to reduce the persistence of inflation divergence.

Some conclusions

Because of EMU domestic monetary policy by individual countries is no longer available to decrease the differences in price and costs competitiveness. According to Blanchard (2006), domestic fiscal policy is neither available nor useful in the euro-area countries and improvements in productivity growth are difficult to achieve with high unemployment. Besides that, it would be difficult to cut nominal wages, even more then there already is low nominal wage growth. A possible solution to this problem is a negative nominal wage growth, but in practice this seems impossible to implement. Blanchard (2006) mentions aggressive wage adjustments via national agreements '... together with fiscal policy adjustments' (p.21*)* as the ideal solution. The main conclusion

is that differences in growth and competitiveness between the euro area countries are currently present, mostly due to differences in ULC and wage moderation policies. Each euro-area country finds their REER influenced by different variables, of which ULC of their own country and the average ULC of the other euro-area countries are always significant for estimating REER. By analyzing the factors influencing REER, future policies can be set up to decrease differences in price and cost competitiveness. These future policies should be focused in the short run on wage moderation being the most effective instrument. In the long run, however, policymakers in all euro-area countries should enforce structural reforms in labor markets to stimulate economic growth in the euro zone and to decrease differences in competitiveness further.

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COMMITTEE FOR ECONOMIC AND MONETARY AFFAIRS

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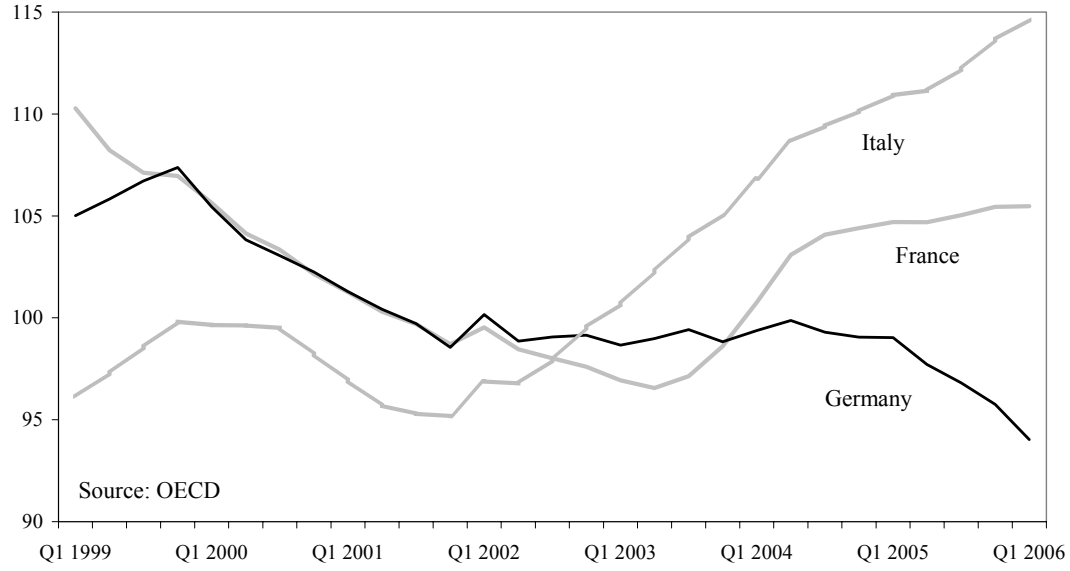
Diverging Tendencies of Competitiveness

Jean-Paul Fitoussi

In 2003 Chancellor Schroeder launched an ambitious structural reform package (Agenda 2010), that simultaneously reformed the pension system and the labour market (following the proposition of the Hartz commission report, of August 2002). This program reinforced a trend already visible since the year 2000, aimed at increasing competitiveness of the German economy by reducing production costs. This effort was rather successful, as figure 1 shows.

Figure 1- Cost Competitiveness: Relative Labour Cost

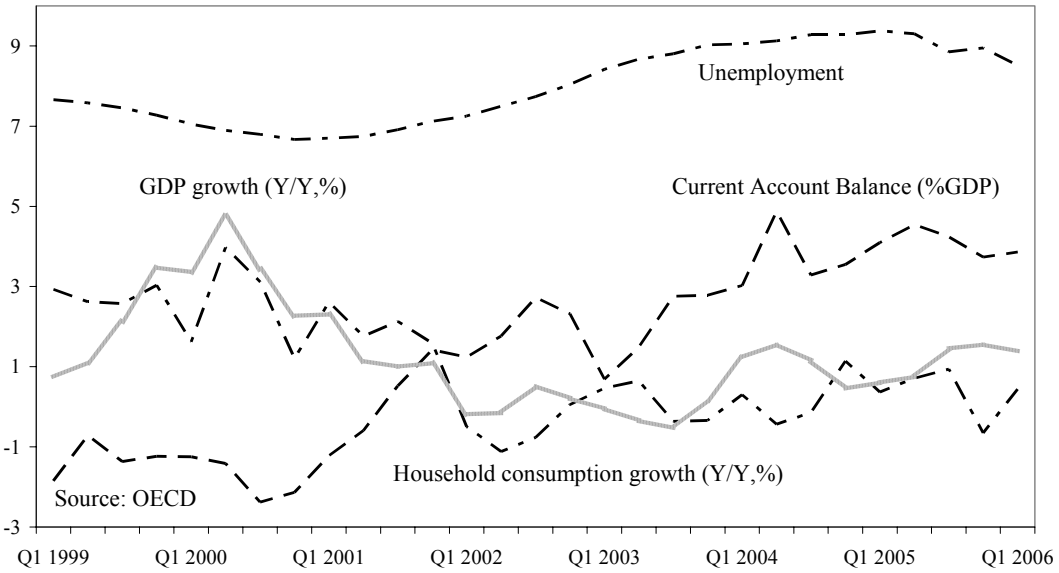


The competitive situation dramatically improved with respect to Italy, which was unsuccessful in controlling wage increases. But relative labour costs significantly dropped also with respect to France, which was in a similar situation at the end of the last decade. Germany became more competitive with respect to the UK and Spain as well.

This impressive performance in increasing cost competitiveness has been greeted as the proof that the sick man of Europe was finally getting healthier, and ready to take its place as the locomotive for growth. The concern then shifted to those countries, like France and specially Italy, which did not engage in a process of structural reforms, thus putting at risk growth and stability for the EU as a whole. The comparative way of evaluating national economic policies may sometimes be misleading. A country may have good reasons to embark in a strategy of cost reduction which others have not. That is especially the case of Germany: as it is well documented, German unification led to a significant loss of competitiveness which should have led to a real depreciation of the mark in the second half of the 90s. In other words Germany joined the euro with an overvaluated currency. Should the other countries have embarked in the same strategy this would have nullified the German efforts without any significant benefit for the euro area. The search for competitiveness in a monetary union amounts to a non-cooperative game.

Because in fact, competitiveness is not an objective *per se*. Rather, it is instrumental to increase growth and welfare, the final objectives of policy action. By taking these variables as an indicator of performance, as seems more reasonable, we can remark that the German disease may not be over after all. Figure 2 shows some selected macroeconomic variables for Germany.

Figure 2 - Germany: Selected Macroeconomic Variables



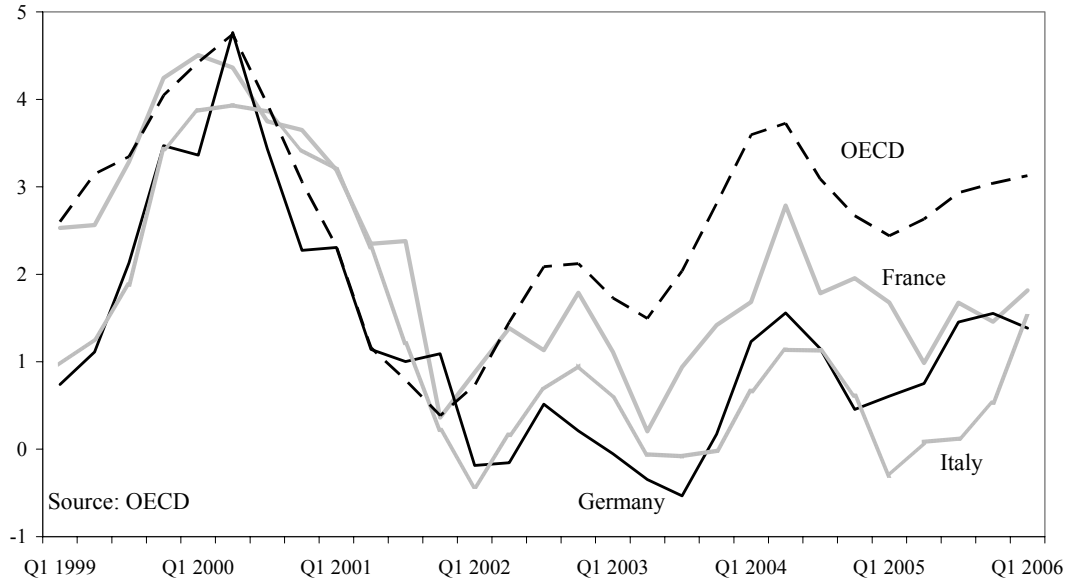
The growth performance since 2000 has been all but satisfying, and the modest recovery that we can observe since the beginning of 2005 is not expected to last well into 2007, when among other things the announced increase in VAT could depress internal demand. Furthermore, the already modest recovery is turning out to be a jobless growth, in spite of the increased flexibility of the labour market. Since 2000, unemployment has increased more than 2 percentage points. Finally, consumption on average has been increasing below the growth rate of the economy, and this is hardly surprising given the stagnation in real wages (real wages increased only by 2.8% in Germany since 2000) and the persisting unemployment.

The only visible effect of the increased cost competitiveness of the German economy is the strong improvement of the current account balance that over the period has yielded a surplus of 125 billions euros. We remark on the other hand that the Euro zone commercial balance increased of 30 billion euros over the same period, which means that the increased competitiveness of Germany has mainly caused a reallocation of market shares within the area. Germany's surplus is mainly absorbed by a corresponding deficit of its neighbours (France's position worsened of 46 billions, Spain's of 44, Italy's of 14). The improved situation of Germany was obtained at the expense of a deterioration of the position for other countries in the Euro zone.

Furthermore, like competitiveness, the ex-post national external balance in a monetary union is not per se an objective (as it could have been for the union as a whole), but an instrument, and as such it is not an indicator of good performance. It could even be said that the benefit of globalization being an optimal allocation of saving, it is not even an objective for a country characterized by its own currency. Otherwise, we should conclude paradoxically that the United States, which experienced important external deficits at least since the early 198Os, is the worst performer of OECD countries.

The growth performance is particularly disappointing if we compare it with the other countries, whose competitiveness position worsened with respect to Germany (figure 3).

Figure 3 - Real Growth Rates (Y/Y,%)



Without even mentioning the average OECD performance, that since 2002 was considerably better, we can observe that France on average grew faster than Germany, and that the situation of Italy is not dramatically worse.

In conclusion, at least so far the bold effort in cost competitiveness, that we can define as a non-cooperative "competitive disinflation", did not bring the results its advocates hoped. The limited increase in growth can be attributed to the external balance, while internal demand and employment stagnated.

One could on the other hand argue that structural reforms, as all phenomena that involve deep modifications of the economy, can entail transitions in which the disruption hurt the economy before the benefits appear to compensate. Furthermore, the deeper is the transformation, the longer is the transition. According to this view, then, the best is yet to come, and we can expect the German economy to experience stronger growth as the system absorbs the structural changes.

In fact, simply by looking at standard economic analysis, it becomes hard to subscribe to this optimistic view. The natural consequence of a strong reduction in real wages (the main channel for boosting cost competitiveness) is a compression of domestic aggregate demand (consumption and investment). This has of course direct short term effects, in terms of sluggish growth. But, prolonged periods of slow growth also have long term effects that are often overlooked. If investment is consistently below normal, long term productive capacity, and hence the potential for future growth are also affected.

Thus, a competitive disinflation strategy to be successful needs an increase in external demand (by means of increased market shares) capable to match and more than compensate the decrease in domestic demand. Furthermore, this effect needs to appear in a sufficiently short time horizon, to avoid the long term adverse effects of low investment on potential growth.

But if the balance between external and internal demand components is the crucial factor determining the success of competitive disinflation, then country size becomes the main analytical element of the analysis. Smaller, more open economies face a very strong price elasticity of external demand. This means that everything else equal, a reduction in the price of their exports will increase the total demand for their goods of a larger amount. Thus, competitive disinflation may prove a winning strategy for a small country, especially when the exchange rate with its large neighbours is fixed (e.g. Ireland, or the Netherlands). A cost reduction will increase the exports of an amount that is significant for the country itself, more than compensating the decrease of domestic demand. The large trading partner, on the other hand will not necessarily feel the competitive pressure, and hence will not retaliate. Ireland is a good example of an export led growth, obtained through aggressive wage and price policies, which triggered a virtuous cumulative process feeding back through expectations and household wealth into domestic consumption and investment.

A large country on the other hand, has a larger share of domestic demand in GDP, and consequently a lower price elasticity of exports. Furthermore, its actions are more likely to affect its trading partners.

As we saw above, the important reduction in Germany's wages and labour costs has depressed internal demand, and the effect on exports has not been sufficient to compensate it. Furthermore, as its trading partners (France, Italy, and Spain) were negatively affected by the loss of market shares, their income could decrease, together with their demand for German goods. Last, but not least Germany's trading partners will most likely engage in the same strategies, reducing the competitive edge that Germany has temporarily obtained. The theory then predicts a race to the bottom, in which successive waves of reduction in costs will leave the competitive situations more or less unchanged, and further depress internal demand at each round. Such non-cooperative game will in the end leave every country worse off.

The constraints on macroeconomic policy set by the European institutions (the Stability and Growth Pact, and the statute of the European Central Bank) further complicate the picture, as the governments are prevented to sustain domestic demand by means of active policies.

The conclusions that we can draw from this analysis are not encouraging. The modest effect of the German competitive disinflation is likely to be structural, i.e. linked to its size with respect to the trading partners. Thus it does not seem plausible to expect substantial benefits from this strategy once the transition is over. Furthermore, if Germany's trading partners retaliate adopting the same strategy, Europe as a whole could be facing hard times. The generalization of non-cooperative behaviour may well lead to a *malaise* in the European Union. The Euro zone will then be threatened if France and Italy follow Germany, not if they don't.

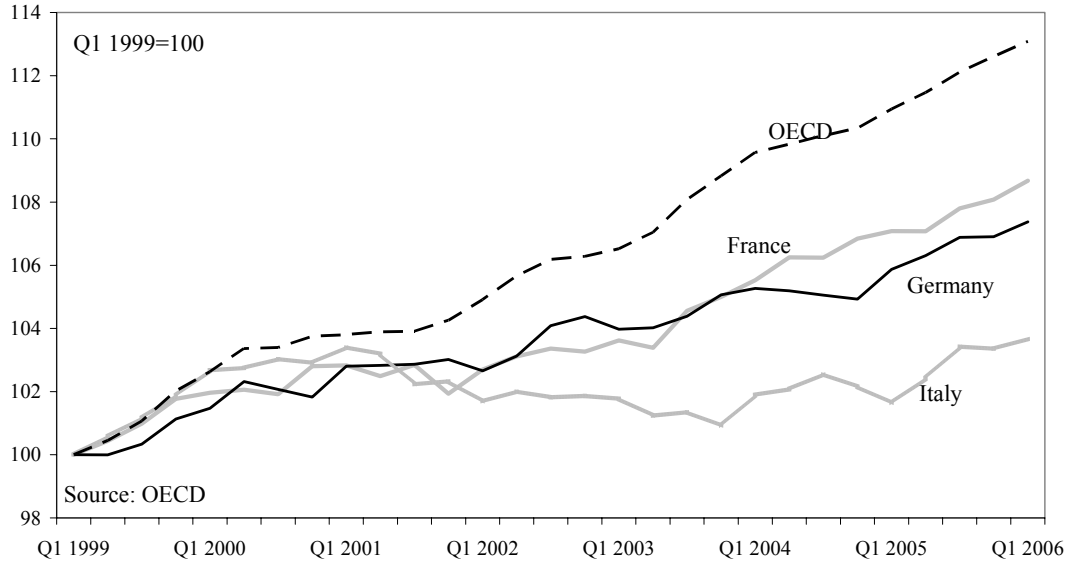
Finally, even if we were to assume that cost competition may work with respect to the European and North American trading partners, it is hard to believe that it would be the appropriate response to the challenge coming from emerging economies. How much will we have to lower wages before we can compete with China's labour costs? How much of our welfare state will we have to give up, to give firms the necessary flexibility? What will be left of the European social model, if we engage in price competition with East Asian countries?

If cost competition does not seem a viable path to walk, another strategy must be put in place to face the increasing pressure that comes from emerging countries

and to counter the tendency to non cooperative behaviour that threatens the European project.

In fact, an increase in a country's competitiveness may come from a reduction of labour costs, with all the problems detailed above, or from an increase in productivity. Better quality goods can compete even with the low cost production coming from emerging markets. Figure 4 shows the evolution of a rough measure of productivity, real GDP over employment.

Figure 4 - Productivity (Real GDP / Employment)



It is immediately apparent that these figures are more coherent than labour costs with the growth figures reported above (figure 3): the OECD average is well above the three largest eurozone countries, and within this group France fares better than Germany and Italy.

The key to increasing productivity is strong private investment, so that policies aimed at increasing competitiveness need to create a business-friendly environment. Measures to cut costs must be complemented and preceded by development of financial markets, implementation of industrial policies, funding of basic research, and academic excellence. Furthermore active policies, by smoothing the cycle, may act as an insurance and lower uncertainty. This sustains investment, and hence both the quantity and the quality of productive capacity.

Research and Development, industrial policy, and even demand management (because of the demand linkages between European economies), are all characterized by increasing returns. This naturally calls for cooperation among European governments that allows exploiting economies of scale. Instead of fighting with each other with the illusion of gaining cost competitiveness, European governments should cooperate to build a business friendly environment, to develop private investment and competitiveness.

BRIEFING PAPER

Diverging Tendencies of Competitiveness

by

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Duesseldorf
September 2006

Executive Summary

The paper outlines the still heterogeneous labour cost situation in the Euro area. Instead of the expected convergence there is divergence. In particular German economic policy follows a strategy of continuous real depreciation. This is not a sustainable situation. Two exit scenarios are outlined, one is benign but unlikely, the other one involves severe hardship and is more likely. As the ECB is only able to manage aggregate developments, it can only try to avoid negative aggregate side effects by either avoiding inflation in the benign case and deflation in the worst case. It is mainly the task of fiscal policy and the wage formation to settle the problem of divergence

1. Introduction

The introduction of the currency union fundamentally changed the competitive environment for the member states. Before the emergence of pegged or managed exchange rate systems divergences in competitiveness of different economies were only relatively short-lived. As soon as firms of one country managed to achieve a significant competitive advantage an appreciation of the exchange rate diminished it or even wiped it out. Germany was almost always in that position, whereas the UK and Italy mostly faced competitive disadvantages that needed to be compensated by a corresponding depreciation of their currencies. Those kinds of adjustment processes occurred in 1992, when the UK had to leave the EMS and in 1995 when Italy faced an unsustainable disadvantage. Consequently the two currencies strongly devalued against the German mark causing turbulences in the currency markets.

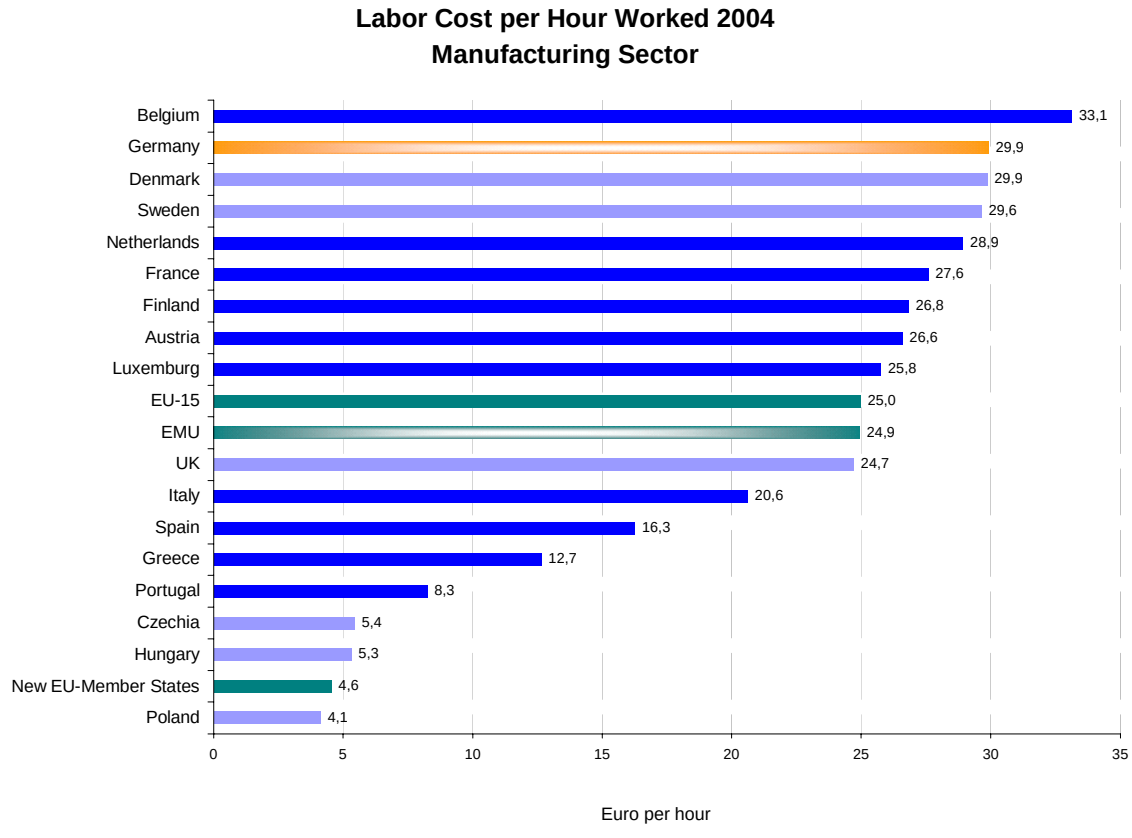
At the root of these movements were not only divergences in the innovative power of the respective economies but rather nominal tendencies. Wage and price formation in many European countries were such that inflationary tendencies prevailed. The consecutive devaluations enhanced these tendencies leading to severe growth distortions in many countries. One reason to establish the currency union was to overcome these tendencies by importing a culture of stability that resembled the German approach. With the introduction of the currency union the previously frequently used adjustment channel of nominal exchange rate changes was closed for those countries that joined the currency union. In an ideal setting, from now on competitive differences would only emerge when there were innovative advantages leading to relatively higher productivity growth. That would be a desirable effect since it determines a strong incentive for innovations. On the other hand nominal processes like wage and price formation would converge across the currency union in a way that price stability is observed everywhere and growth could unfold undistorted. Even if the ideal did not come true and still some divergences prevailed no serious problems would have to be expected. A gain (loss) in competitiveness would lead to external trade surpluses (deficits) and thus growth differentials. Those countries with surpluses would have higher and those with deficits lower growth with the respective consequences for employment. In due course wage increases would be higher in surplus countries and lower in countries with deficits thus correcting the divergences in competitiveness by so called adjustments of the real exchange rates.

Those relatively positive expectations were disappointed. Instead relatively persistent divergences prevail. The question is what went wrong and why.

2. Divergences in Competitiveness

The relevant divergences in competitiveness are still nominal ones. As outlined above it had been expected that they would more or less have vanished in a currency union. In the following it will be shown that this has not been the case. The decisive factor that determines competitiveness is the wage development. So in line with many theories of foreign trade one would expect some tendencies of convergence for these figures. However, wage rates within the euro area are still very divergent.

Figure 1



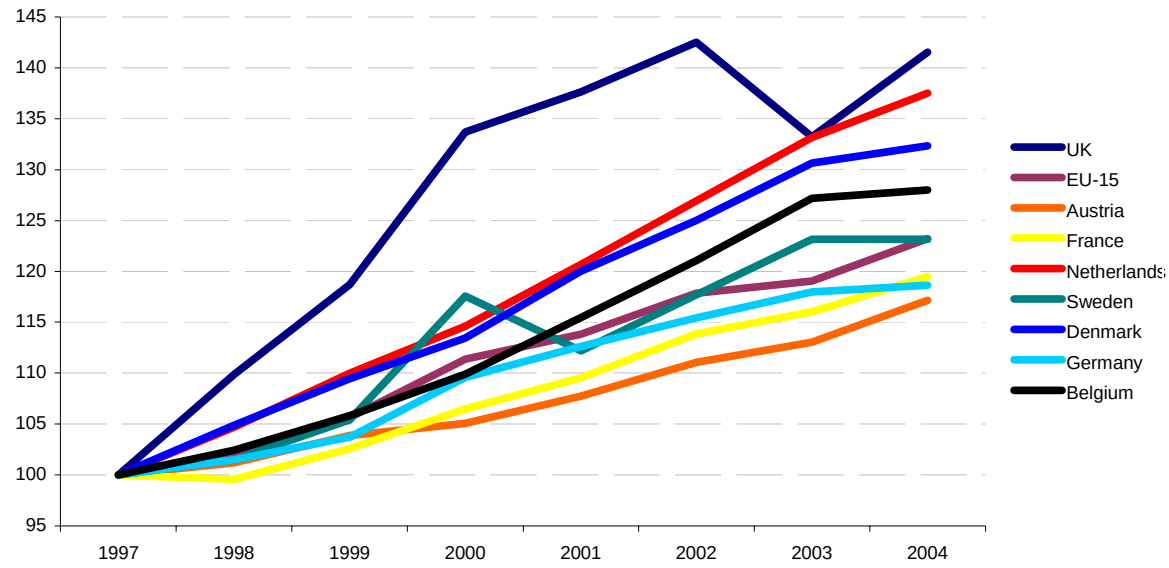
Source: Eurostat.

Figure 1 shows labour costs in the manufacturing sector of the EU. The figures include all wage and non wage labour costs such as contributions to social security. Data for manufacturing are often used because they reflect wage rates in the sector that seems to be more exposed than any other to international competition by trade. Hence the impact of the currency union should primarily occur here. The figure shows that there are still huge differences even within the monetary union. The highest labour costs are paid in Belgium followed by Germany and the Netherlands. In Portuguese labour costs in the manufacturing sector are the lowest, only about 1/8 of those in Belgium.

If one analyses how labour costs have developed since 1997 (Figure 2), when the ERM II was adopted, it turns out that dynamics have indeed been very different in the individual countries.[1]

Figure 2

Labour Cost* per Hour Worked 1997-2004
Manufacturing Sector



*On ECU/Euro-basis.

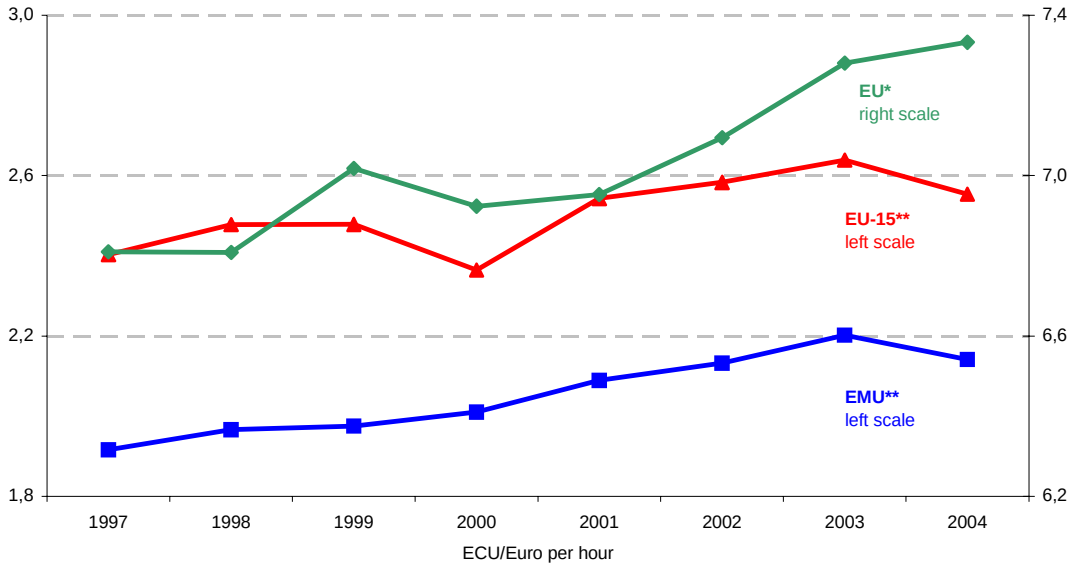
Source: Eurostat.

[1] All wage data mentioned in this paper is published in IMK- Report 11/June 2006. Download : www.imk-boeckler.de/veroeffentlichungen.

Germany having one of the highest levels of labour costs in manufacturing shows one of smallest increase since 1997. On the other hand Belgium, where costs were even higher than in Germany, experienced wage growth well above the euro area average. Convergence should have lead to slower wage rises in Belgium.

Figure 3

Variation Coefficient in Manufacturing Trade in the EU*



* Belgium, Czechia, Denmark, Germany, Estonia, Greece (GR), Spain, France, Italy, Cyprus, Latvia (LV), Lituania, Luxemburg, Hungary, Netherlands, Austria, Poland, Portugal, Slovenia (SI), Slovakia, Finland (since 2000), Sweden (SE), United Kingdom. No data for Ireland and Malta.

** Without Ireland.

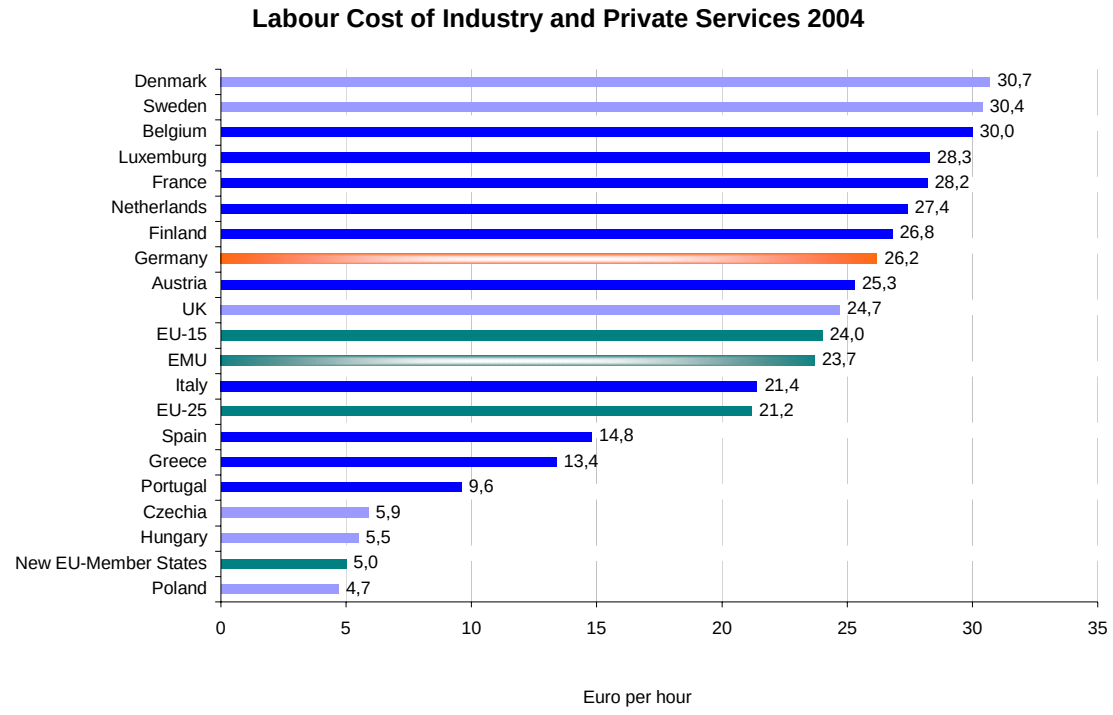
Source: Eurostat, Calculations by the IMK. For GR, LV, SI und SE: approximation for labour cost per hour for 2004.

The coefficient of variation (Figure 3) measures the differences between wage rates at a point of time in relation to their mean. In case of convergence the coefficient should decline over time. The contrary is the true. Differences have increased rather than diminished. This finding does not only apply to the EU as a whole, where new member countries add a lot of divergence, but also to the euro area, where one would clearly expect the opposite.

There are some problems with the labour cost data used. The competitiveness of an economy cannot just be measured by labour costs in the manufacturing sector. Although exports of most countries are still dominated by industrial products, services play an increasing role - both directly and indirectly - for exports. Firstly services

account for an increasing share in exports. Secondly the production of industrial goods includes a growing service content. Therefore competitiveness also relies on a competitive supply of domestic services. In order to capture these effects labour cost of manufacturing plus private sector services are analysed (Figure 4).

Figure 4



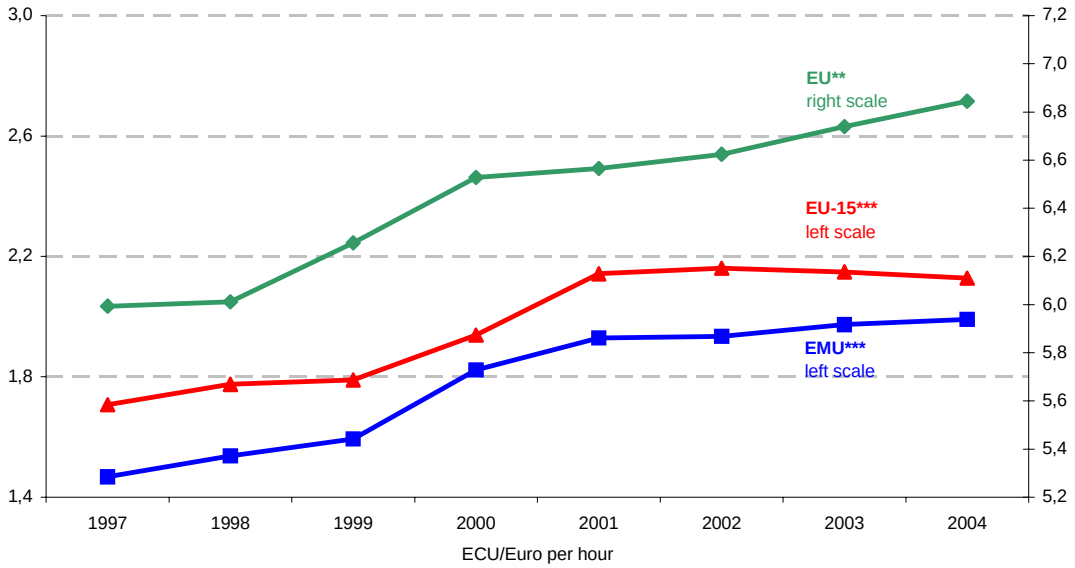
*For Sweden and Greece the numbers relate to 2003. No data for Ireland.

Source: Eurostat.

Again one sees significant divergences for the year 2004. But the order is somewhat different from that in Figure 1. Now the Scandinavian countries are ahead of Belgium. Interestingly Germany, which was second in manufacturing, is only in the midfield, when services are taken into account. In Germany wages in the service sector are particularly low compared to those in the manufacturing sector . The difference between the country with the lowest private sector labour costs in the Euro area, (Portugal) and that with the highest (Belgium), is not as large as in the manufacturing sector. Portuguese costs are roughly 1/3 of those in Belgium. That cannot be interpreted as evidence of convergence either. This impression is corroborated by the coefficient of variation, although to a lesser extent than in the manufacturing sector.

Figure 5

Variation Coefficient[1] of Labour Cost in the EU*



* The variation coefficient is the variance divided by the mean.

** Czechia, Denmark, Germany, Estonia, Greece (GR), Spain, France, Italy, Cyprus, Latvia (LV), Lituania, Luxemburg, Hungary, Netherlands, Austria (AT), Poland, Portugal, Slovenia (SI), Slovakia, Finland, Sweden (SE), United Kingdom. No data for Ireland, Belgium and Malta.

***Excludingt Belgium and Ireland. Source: Eurostat, partly own approximation for labour cost per hour for 2003 (AT) and 2004 (GR, LV, SI and SE) and calculations by the IMK.

Source: Eurostat, Calculations by the IMK. For GR, LV, SI und SE: approximation for labour cost per hour for 2004. For AT: approximation for 2003.

While labour costs show an increasing divergence in the EU, the matter is less clear for the Euro area. This is not very surprising since the new member states are still catching up, which makes the EU a very heterogeneous economy. Therefore, one would not expect convergence in the short run.[2] However, the coefficient has also increased for the euro area – albeit only slightly. This seems mainly the result of different reactions to shocks occurring in 2000/2001. Nevertheless it is not the picture one would expect in case of convergence.

Both indicators presented suffer still from a major drawback. They focus on absolute labour costs. What is more decisive for firms is labour costs in relation to productivity. The assumption that productivity is the same everywhere is very extreme. Education, infrastructure and industrial relations still tend to differ among different countries and this has to be taken into account when measuring competitiveness. Unit labour costs

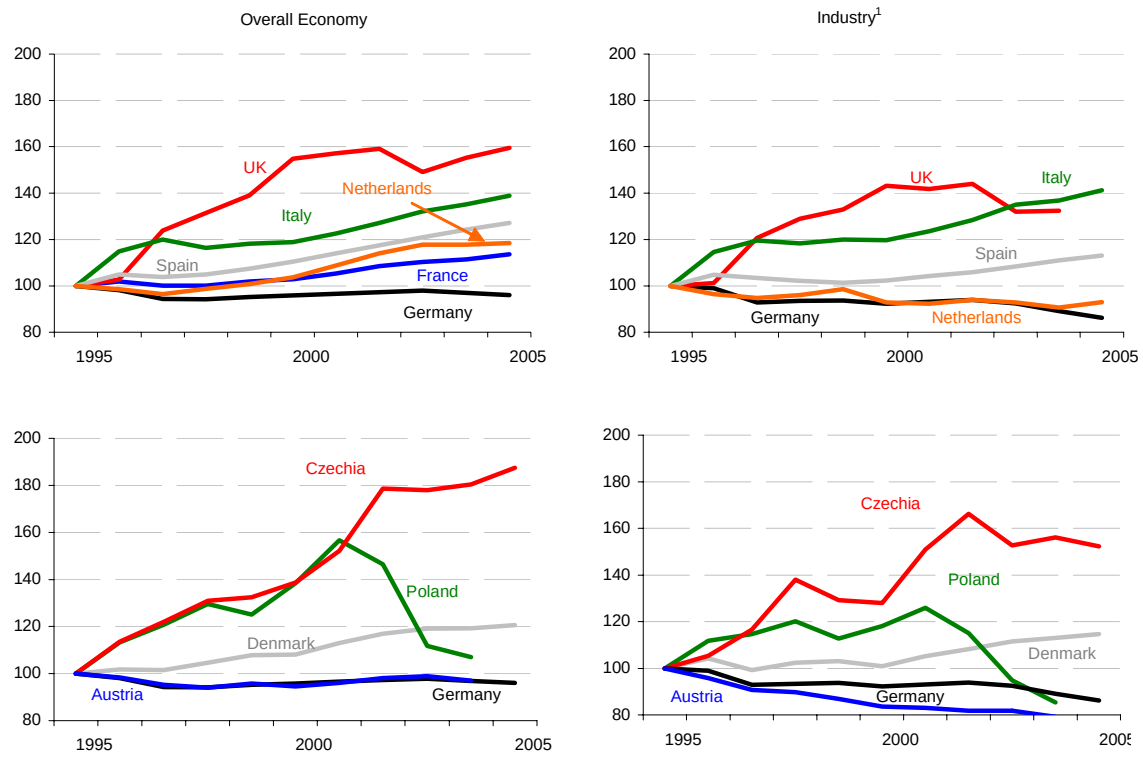
[2] The data for new members were included right from beginning of the time periods analysed in order to avoid a break in the data. So the divergence cannot result just from the inclusion of new member states.

exactly measure the respective relation. Changes in unit labour cost are known to affect changes of the price level, which bring about changes in competitiveness. Therefore, one should look at the change of unit labour costs to assess how competitiveness has developed in the currency union.

Figure 6

Development of Unit Labour Cost European Comparison

Selected Countries (Index: 1995=100, on ECU/Euro-Basis)



[1] Manufacturing Industry including mining, power and water supply (C, D, E).

Source: Reuters EcoWin (Eurostat); Calculations by the IMK; Value added in Industry for France available since 2000 only. Calculation of unit labour cost on the basis of persons since data of hours worked is not available for all countries.

Figure 6 shows an interesting picture. As for the aggregate economy, since the beginning of the currency union, Austria and Germany have strongly gained in competitiveness vis-à-vis all other member states. Taking industry alone Austria has improved its competitiveness more than any other country in the EMU; Germany and the Netherlands follow. What is most striking is that the pattern is very clear cut. It does not change over time. Every year Austria and Germany have gained and the others have lost. In other words, Germany and Austria have followed an economic policy strategy of permanent real depreciation. However, the same strategy shows

different effects in large rsp.small countries. In large countries where domestic demand is more important than exports whereas in small countries it is the other way round. In the end small countries like Austria and the Netherlands indeed benefit from such a strategy whereas large ones like Germany do not.

The currency union thus led to a fundamental change in intra European trade relations. The occasional at times drastic nominal depreciation of currencies has been replaced by a quite persistent real deprecation. Whilst the nominal depreciations served to restore the lost competitiveness the purpose of real depreciations is a permanent improvement of an already existing competitive advantage. Where this leads to will be shown in the following section.

The Effects of Persistent Real Depreciations

To assess the impact of such a strategy one has to keep in mind that the Euro area is a currency union with a common target for price stability.[3] This means that the ECB has to conduct its monetary policy in a way to achieve this target for the euro area as a whole. If each member country shows roughly the same inflation rate in line with the inflation target, there is no problem. If e.g. a country shows a better record in productivity growth, wages and real incomes should correspondingly rise faster leading to relatively higher wealth in the country with better productivity performance without harming any other country or violating aggregate price stability. Neither is there any problem with temporary divergences resulting from diverging business cycle positions. In this case a country in a slump may revive economic activity back to normal while those in a boom loose steam and avoid overheating.

But as shown above the euro area presently faces a persistent real depreciation by two countries. Comparisons with different regions in the US show that such tendencies are unusual within a currency union.[4] The consequences are severe.

[3] Price stability is defined by the ECB in a manner that the inflation rate should be close to but below 2 percent.
[4] See IMK-Report 1 /August 2005. Download: www.imk-boeckler.de/veroeffentlichungen.

Figure 7

Source: Reuters EcoWin (Eurostat);
Calculations by the IMK.

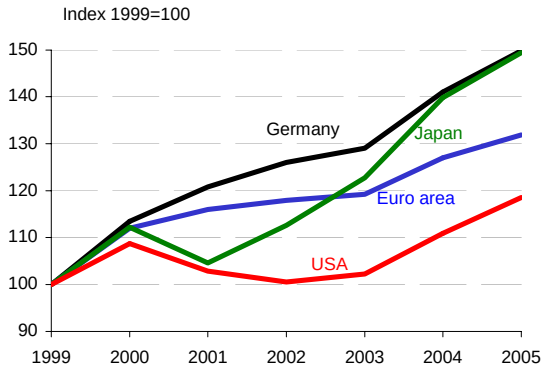
Germany has increased its exports since the beginning of the currency union more than any other member country of the euro area, followed by Austria the other country showing a persistent real depreciation.

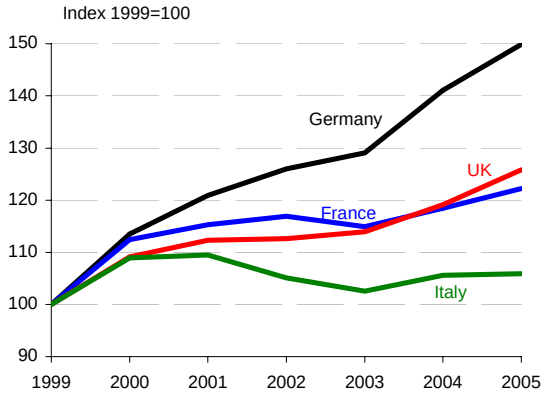
Consequently Germany has acquired a significant trade surplus, which is still increasing. This is the immediate result of the improved competitiveness. The surplus is now higher in terms of percentage points of GDP than the worrying trade deficit of the US economy. Figure 7 illustrates the strength of Germany's export performance. The trade surplus of the German economy is accumulating at an accelerating pace. A surplus in Germany corresponds to a deficit in other countries. Especially those countries where the inflation rate was significantly higher over recent years like Spain and Italy lost competitiveness and accordingly accumulated high deficits in their external balances. What can be observed with respect to foreign trade is a growing divergence instead of a convergence within the euro area.

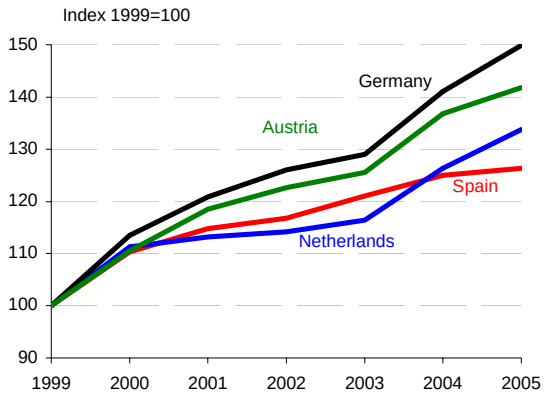
These findings also have a domestic dimension. The real depreciation by wage restraint has led to a severe consumption crisis in Germany.

Figure 8

Exports of goods and services (chain-linked volumes)



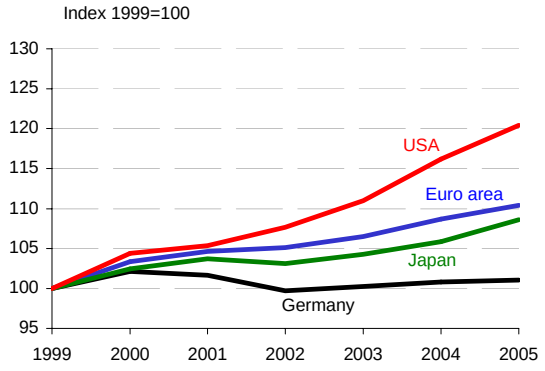


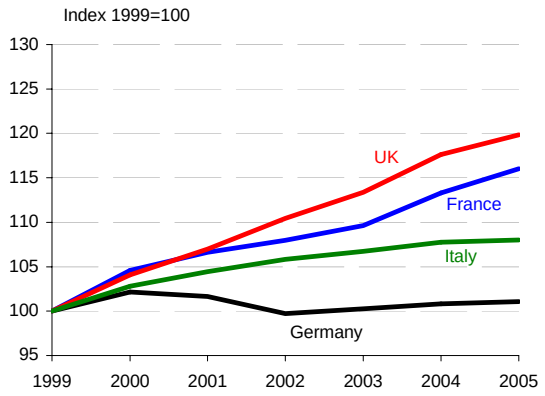


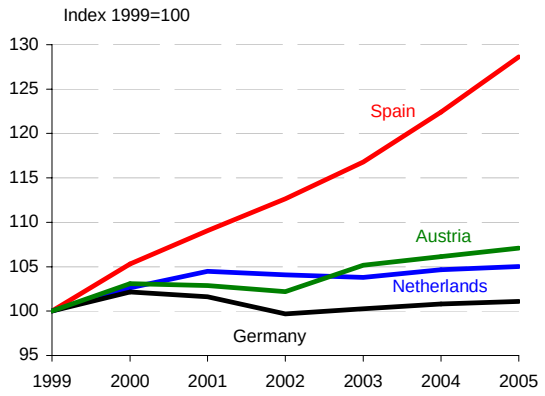
Source: AMECO database of the European Commission.

Figure 9

Domestic demand (chain-linked volumes)







Source: AMECO database of the European Commission.

Domestic demand in Germany until the end of 2005 was weaker than in any other major industrial country, including deflation-plagued Japan. On the other hand, economies like Spain and France had a significantly higher domestic demand. In Spain the high inflation was a cause and a result of the domestic dynamics at the same time. Spain paid a price in terms of lost exports. France achieved a better domestic performance without any excessive inflationary pressure. Thus the loss of export share was not as strong as for Italy and for Spain. Nevertheless even France faces increasing difficulties in export markets against cheaper German products.

The present situation within the Euro area is not sustainable. There are basically two scenarios for future development. The first scenario is that the real depreciation for German products comes to an end. This would either be the case, if the competitive advantages finally lead to a strong German recovery. In the course of this recovery wages and in particular unit labour cost would rise faster than in the rest of the euro area, so that the real depreciation would turn into an appreciation. In order to avoid negative side effects this development is only possible if wage increases in the rest of the euro area slow down. Otherwise aggregate price stability in the euro area would be endangered and the ECB would be urged to raise interest rates. The same result can be achieved if the economic upturn is supported by a more expansionary economic policy stance than in the past. Then trade imbalances should diminish over time. This scenario implies a major change of economic policy that should stop slowing down domestic demand. The probability of this scenario is rather low. Even given the present acceleration of economic activity in Germany there are no signs of wage movements that could lead to a real appreciation. While wage increases in Germany continue to be subdued below productivity, those in the rest of the euro area are still higher.

The second scenario is that German real depreciation continues for the time being. In this case trade imbalances will grow until economic activity in those countries that appreciate slows down. This may even lead to a euro area wide recession. Then wages in these countries will rise more slowly than in Germany. Again in order to avoid additional negative side effects aggregate wage movements have to be taken into account. If German wages do not accelerate at the same time there is the danger of deflation causing potentially long term damage to the euro area.

Both scenarios imply an end to the real depreciation strategy of the German economic policy. The first scenario is a benign one, but clearly lacks probability. The second one is a harsh one and seems to be much more likely.

What could the ECB do under these difficult circumstances? Not much, since the ECB is basically in charge of an aggregate policy that cannot deal with regional differences within the Euro area. The ECB can only try to avoid negative aggregate side effects outlined in both scenarios. In the benign scenario it means to strongly signalise all countries but Germany to curb down wage increases. If this advice is not followed higher interest rates are unavoidable. In the second scenario early reductions of interest are necessary to avoid a deflation. Since from today's perspective the second scenario is more likely the ECB should be prepared to do as soon as it starts to become reality.

In order to solve the basic problem of diverging competitiveness within the Euro area the wage formation process in the different countries has to converge. This does not mean it should be equal everywhere, but it should be such that there would be no systematic differences in inflation and the resulting inflation rate should be the price stability target of the ECB. If this is not possible in the short run, fiscal policy should at least try to compensate the divergence by being more restrictive in those countries where inflation is relatively and more expansionary where inflation is relatively low. But given the present political circumstances the probability of this to happen is rather low. Hence destabilization of the Euro area will continue for the time being.

EMU in danger of break-up?

by Dr. Jörg Krämer, Chief Economist, Commerzbank AG

Executive Summary

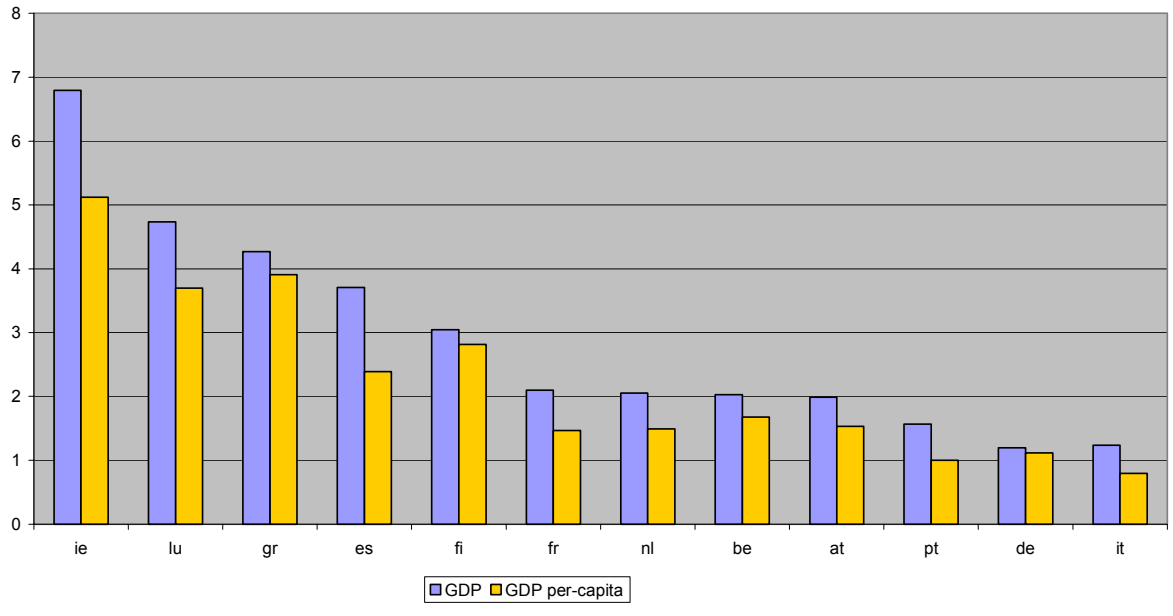
Growth differentials are nothing unusual in a monetary union. However, some countries with below per-capita GDP do not catch-up but fall back because per-capita GDP grows at a below-average rate. This is especially true for Italy. These countries lose export shares which is mainly due to fast rising unit labour costs. This does not yet pose a significant risk for the EMU. But, if these countries fail to liberalize their economies, the political cost-benefit-relationship may further shift towards leaving EMU.

1. Growth differentials within EMU

Within a monetary union GDP growth usually differs a lot. This is also true for the US. One reason for different growth rates are differences in population growth. **Chart 1** shows that per-capita GDP growth rates differ less between EMU members than simple GDP growth rates. For example, Irish GDP growth declines by nearly 2 percentage points when adjusted for population growth.

Eurozone: growth differentials partly due to differences in population growth

change in real GDP from 1999 to 2005, annual average in per cent

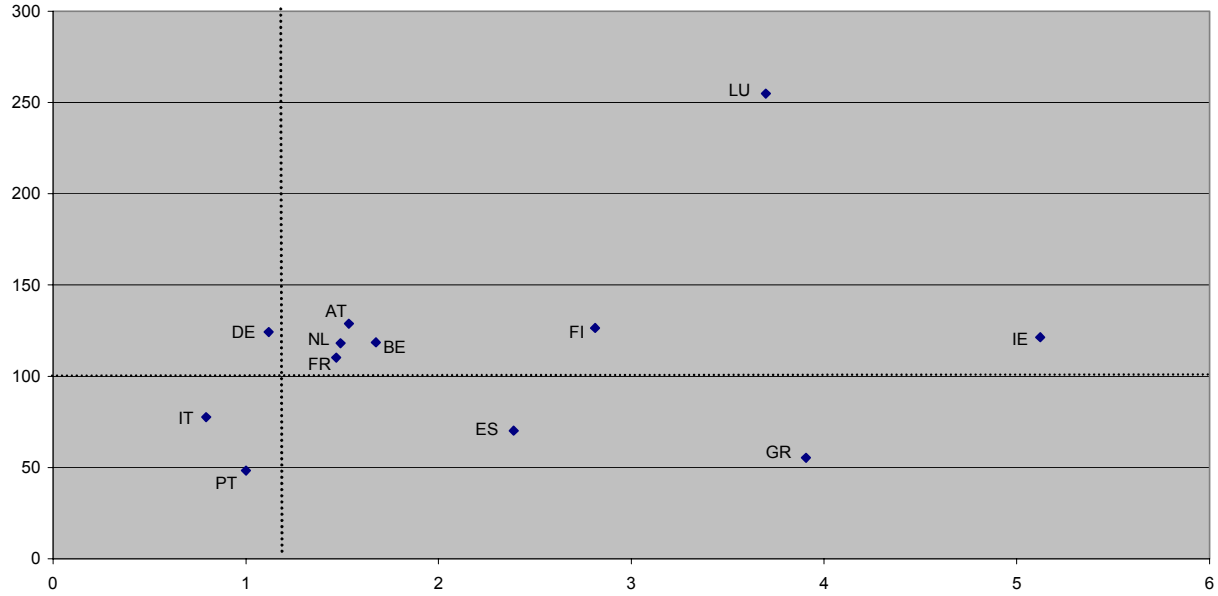


- Chart 1 -

But even differences between per-capita GDP growth make sense. Countries which had joined EMU with a low level of per-capita GDP should raise the standard of living of their people by achieving above-average per-capita GDP growth. A good example for such a catch-up country is Spain which has moved closer to the average EMU per-capita GDP by achieving above average growth rates.

Eurozone: Italy and Portugal falling back

Real GDP per-capita (EU12=100, vertical axis) and annual average real GDP growth from 1999 to 2005 in per cent



- Chart 2 -

However, it is problematic if a country has a below-average per-capita GDP and a below average growth rate. Such a country would increasingly fall back. Italy and Portugal fall in this category.

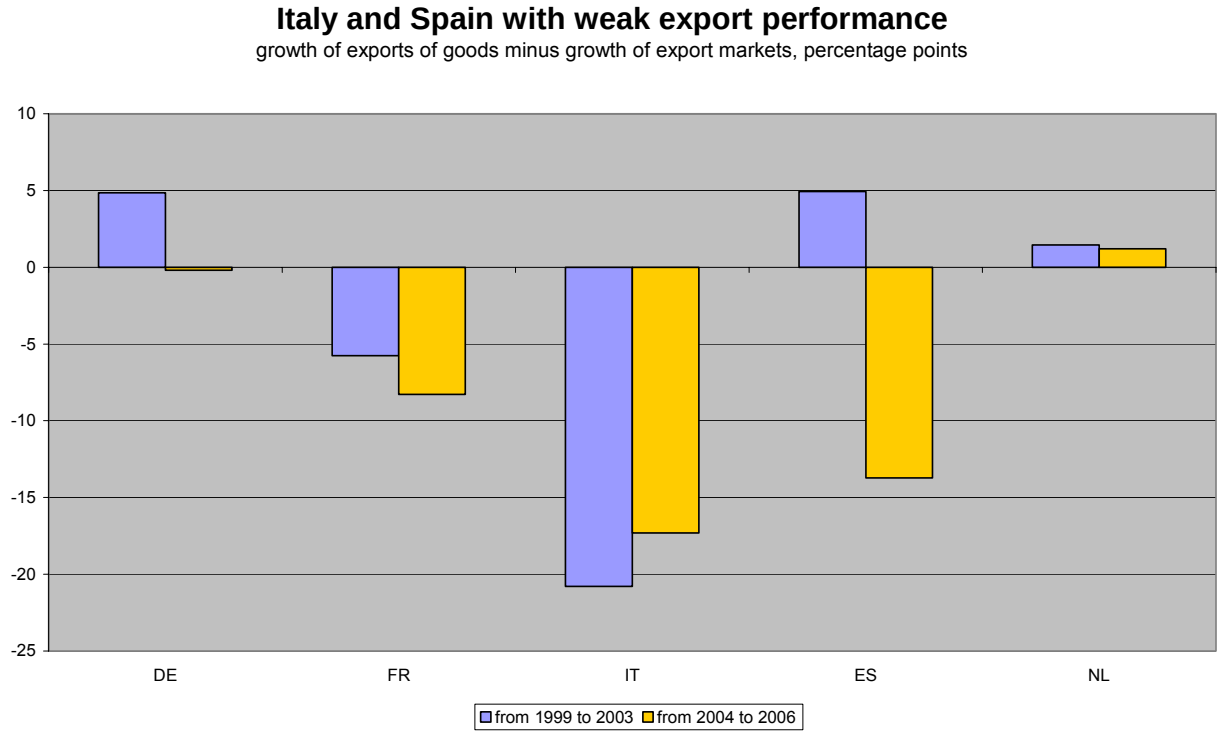
2. The role of exports

One important reason for growth differentials which can not be explained by differences in population growth or by the level of per-capita GDP is the export performance of the economies. If a country has a very successful export sector, its per-capita GDP may grow at an above average rate despite an already above-average level of income.

A country will enjoy a positive export performance, if their exports grow stronger than their export market, i.e. the weighted sum of the imports of their trading partners.

-

The export performance of the five biggest euro-zone economies has moved in different directions in recent years (**chart 3**). German exports have grown by 5 percentage points in excess of the growth of its export markets since the introduction of the euro; Germany has thus raised its export market share. In contrast, Italian export growth has undershot the growth of its export markets by as much as 37 percentage points. France and Spain have also lost ground in their export markets.



- Chart 3 -

3. The role of unit labour costs

Divergences in the export performance of different countries are often caused by divergent developments in price competitiveness. Price competitiveness is often approximated by unit labour costs, i.e. labour costs per one unit of output. Unit labour costs will rise if per-capita wages rise in excess of productivity (output per capita). Labour costs make up about two thirds of all costs.

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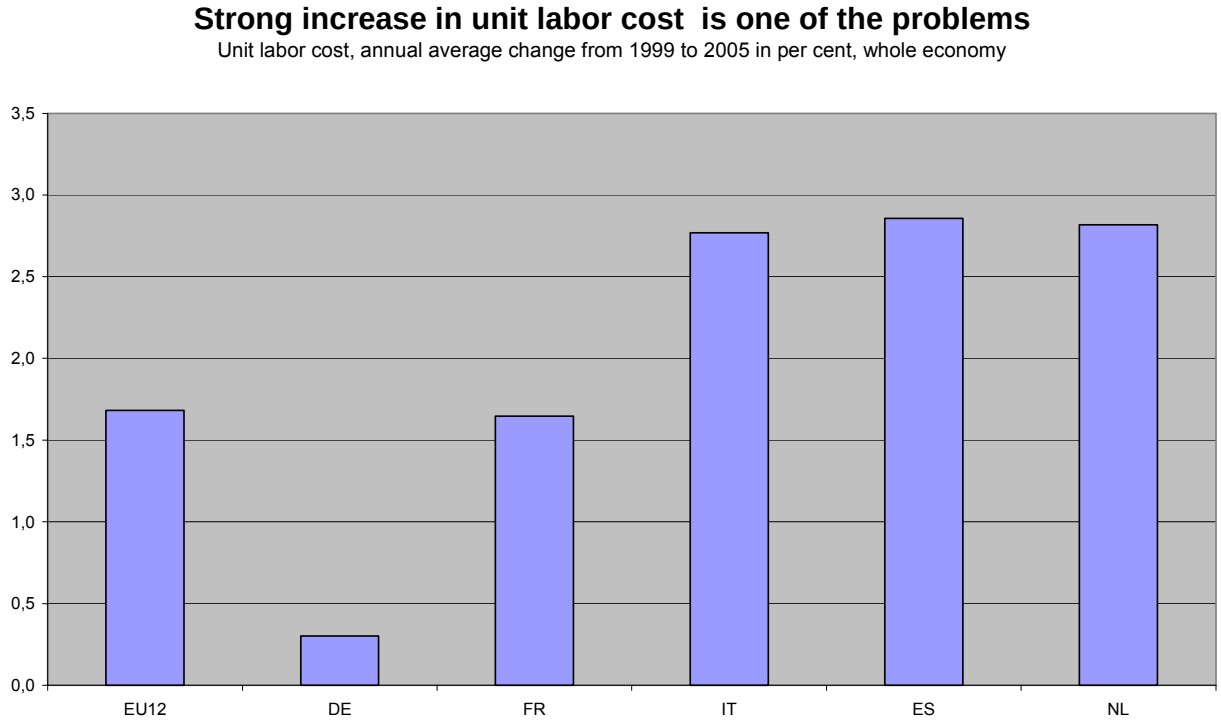
Based on data on the whole economy (not only the export-dependent industry, but also services etc.) EMU unit labour costs have risen by 1.6% annually since the start of EMU (**chart 4**). However, German unit labour costs have hardly risen which explains why Germany was able to raise its export market shares. On the other hand, Spain and Italy allowed their unit labour costs to rise in excess of the EMU average (Spain: 2.8%; Italy: 2.7%) which helps to explain why both countries lost market shares.

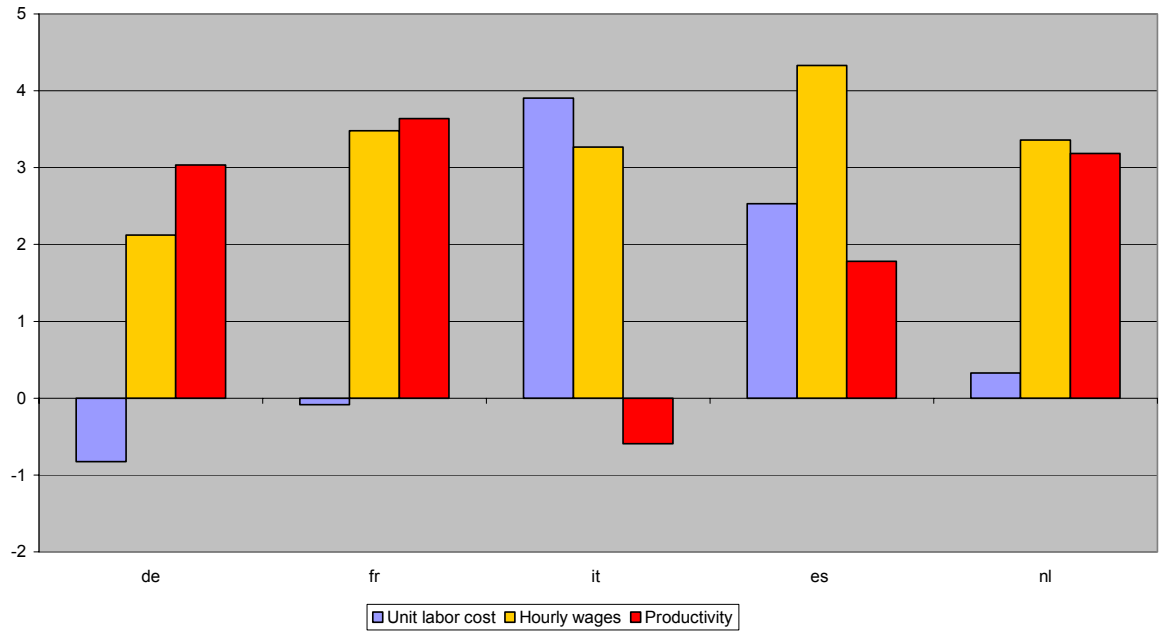


- Chart 4 -

Even more pronounced conclusions can be drawn if one does not analyse unit labour costs for the whole economy but only for the export-dependent industry (**chart 5**). This concept is insofar more appropriate as only the export sector is affected by international price competition. Based on this analysis, it is Italy whose unit labour costs have risen much more strongly than in other countries.

Unit labor cost differentials still more pronounced in industry

annual average change from 2000 to 2005 in per cent, industry



- Chart 5 -

If a country sees its unit labour costs rise in excess of the EMU average, this can be caused by an above-average rise in wages and by an below-average rise in productivity. In the case of Italy, it is not so much excessive wage growth but an unusual decline in productivity which has caused the very strong increase in unit labour costs in the industrial sector. This does not mean that wage moderation is not a need for Italy, but other factors should also be taken into consideration.

One reason why Italy was not able to raise productivity in its manufacturing sector was the unfavourable product mix. The Italian industry specialises in low-skilled labour-intensive goods such as fashion, furniture, food etc. The Italian industry was not able to move its production towards high-skill production which typically allows dynamic productivity growth and thus gains in competitiveness.

4. Can an EMU exit raise the competitiveness of problem countries?

Politicians may think that leaving EMU could solve the above-mentioned problems with regard to price competitiveness. The rationale behind this is that a country outside EMU could devalue its currency which would increase the price competitiveness of its products. However, this does work only in the short-term: After a devaluation, import prices tend to rise. Moreover, a devaluation involves monetary easing which raises the supply of money. These two channels fuel domestic inflation and wage growth and thus lower the price competitiveness over time which had risen immediately after the devaluation. In the long run price competitiveness can not be raised by a devaluation. Economically, the inability to devalue or – in other words – the EMU membership is irrelevant to lowering divergences in price competitiveness.

5. Politicians may nevertheless favour an EMU exit

In the long run a devaluation strategy does not work to regain lost ground in price competitiveness. However, politicians tend to have a short-term orientation. And in the short run leaving EMU and devaluing its own country does bring some relief. However, politicians do not only look at this short-term benefit, they also look at the political costs which are indeed high. An EMU exit would mean a violation of the Maastricht treaty and could trigger the collapse of the whole EMU project. The country which would be the first to leave EMU would thus isolate itself in political terms. Moreover, EMU exit and devaluation would dramatically raise the value of debt which would still be denominated in euro. This would be a huge problem for both the government and private firms. Finally, foreign investors would likely withdraw direct investment which however is crucial for the development of a country. All in all, a cost-benefit analysis currently makes it very unlikely for "problem countries" such as Italy to leave EMU. However, one should keep in mind that a cost-benefit analysis is not static. Costs and benefits change over time. If a problem country such as Italy does not solve its competitiveness problems, the benefits of leaving EMU may be perceived to be higher as time goes by. The likelihood of an EMU break-up, though currently extremely low, may rise over time if the problem countries do not tackle their underlying problems.

6. What really needs to be done?

Italy should not leave EMU but implement structural reforms. Liberalizing the wage setting process is only one issue among others. The Italian government needs to create an economic framework in which it pays off for firms to increase their own competitiveness rather than to try to look for subsidies or barriers against competitors. This involves deregulation of markets, a cut in subsidies, better education, strong infrastructure and a simplified tax system.

Questions for the hearing

1. The ECB forecasts the euro-zone economy to grow by 2.1% in 2007 which is slightly above trend growth. However, several leading indicators (ZEW expectations indicator, Ifo business climate) have recently given downswing signals. Moreover, the US housing market seems to slow down significantly. Isn't the ECB's tendency to raise rates further based on a too optimistic growth outlook?

2. The ECB forecasts euro-zone inflation to come in at 2.4% in 2007. However, the crude oil price has significantly declined in recent weeks and the September inflation rate has fallen in many member states. Isn't the ECB's tendency to raise rates further based on a too pessimistic inflation outlook?

Diverging Competitiveness in the Euro area[1]

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Executive Summary

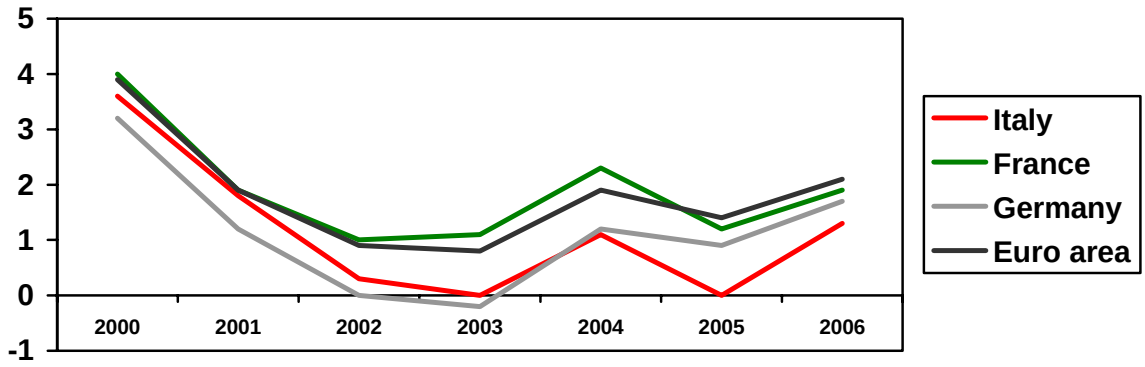
- Italian growth has lagged behind growth in the rest of the Euro area as Italian unit labour costs have risen.
- The rapid rise in unit labour costs in Italy is due in part to rises in nominal wages, but primarily to a decline in labour productivity in Italy relative to that in the rest of the European Union.
- Poor labour productivity in Italy is due to structural rigidities in Italian product and labour markets and impediments to doing business.
- A dire Italian fiscal situation should lead to increases in Italian interest rates, reflecting default risk and further dampening economic growth.
- Without further market reforms in Greece, Portugal and Spain and fiscal reforms in Greece and Portugal, growth prospects in these countries are likely to be poor as well.
- The prospect of prolonged low growth in several Euro area member states calls for no monetary policy response. But, it threatens the European Monetary Union if member governments use the one-size-fits-all monetary policy as a scapegoat for their failure to enact needed reforms.

Italian economic performance over the past seven years has been poor relative to that in the rest of the Euro area, with real GDP (as shown in Figure 1) growing more slowly than the Euro area average and more slowly than in either France or Germany. In its 2006 Annual Report on the Euro Area, the European Commission stated that, "a major

[1] Briefing paper for the Committee on Economic and Monetary Affairs (ECON) of the European Parliament for the quarterly dialogue with the President of the European Central Bank.

characteristic of persistent growth differences in the euro area is that price and cost competitiveness have tended to adjust too slowly in some member states."

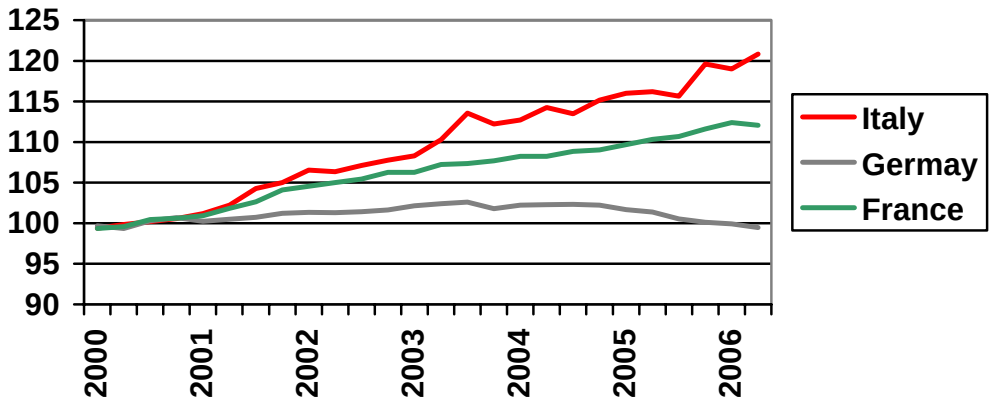
Figure 1. Real GDP Growth (Percentage Change)



Source: Eurostat

Indeed, as shown in Figure 2, unit labour costs, defined as compensation per employee divided by labour productivity, have risen dramatically in Italy in comparison

Figure 2. Unit Labour Cost Index (2000=100)

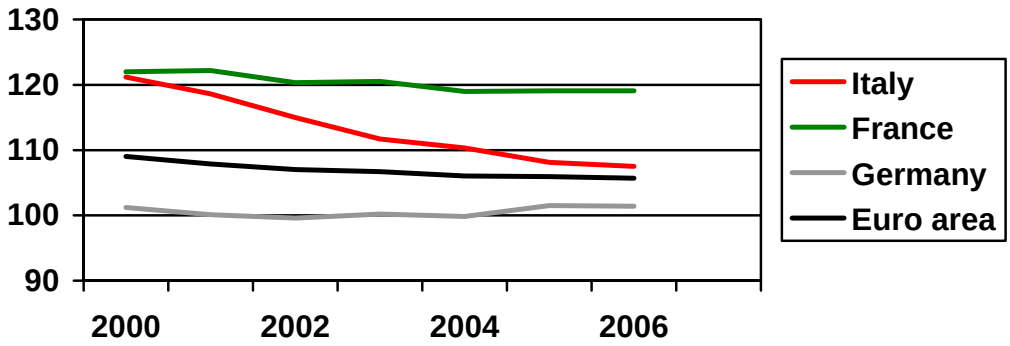


Source: European Central Bank.

with those in France and Germany. The increase in unit labour costs could lead to the conclusion that, with no possibility of nominal exchange rate adjustment in a common

currency area, Italy's loss of competitiveness is due to a failure of Italian *nominal* wages to adjust. This, however, would be an unwarranted conclusion. While nominal wage growth in Italy over the period 2001-2004 was slightly higher than nominal wage growth in the Euro area as a whole, it was lower than in either France or the Netherlands.[2] Instead, the primary reason for the decline in Italian competitiveness is the dramatic decline in labour productivity, defined as GDP divided by people employed; this is shown in Figure 3.

Figure 3. Labour Productivity Relative to the EU-25 (=100)



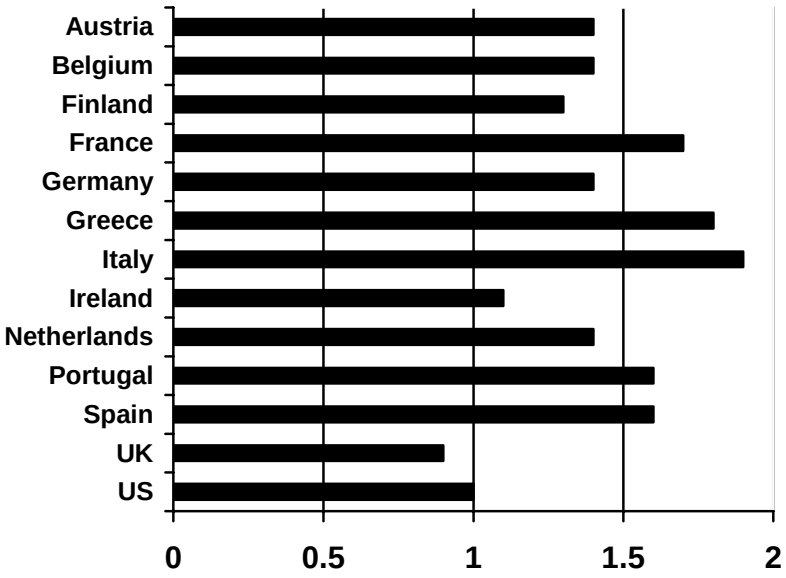
Source: Eurostat

Italy's poor competitiveness relative to the rest of the Euro area is only minimally affected in anything other than the short run by the nature of its nominal exchange rate regime. Instead, the decline in labour productivity is a consequence of real inefficiencies and a disastrous fiscal policy. An example of the real distortions that characterize the Italian economy are those induce by its intrusive product market regulation. Figure 4 provides a measure of product market regulation computed by the OECD, including such factors as the pervasiveness of state ownership, the prevalence of price controls, the

[2] International Monetary Fund, *Italy: 2005 Article IV Consultation, Staff Report*, 2006.

administrative burdens and the barriers to ownership. As is seen, Italy has the most regulated product markets in the Euro area. This discourages entry and distorts the allocation of resources.

Figure 4. Product Market Regulation



Source: OECD[3]

It takes 48 days to enforce a debt contract in the Netherlands and 1,390 days in Italy, longer than in any other country in the world except Guatamala.[4] Another indication of why Italy is performing so poorly is given by its ranking in the World Bank's Ease of Doing Business Index. This is computed by measuring such things as how easy it is to start a business, to employ workers and to enforce contracts. As seen in Table 1, Italy ranks as the 82nd easiest country in the world to do business, down from number 69 in 2006 and behind Kazakhstan (63rd), Nicaragua (67th) and Pakistan (74th).

[3] Conway, Paul, Véronique Janod and Guiseppe Nicoletti, "Product Market Regulation in OECD Countries: 1998 to 2003," OECD, 2005.
[4] World Bank, *Doing Business 2006: Creating Jobs*, 2006.

Table 1. Ease of Doing Business Index

	2006	2007
United States	3	3
United Kingdom	5	6
Ireland	10	10
Finland	13	14
Belgium	20	20
Germany	21	21
Netherlands	22	22
Austria	30	30
France	47	35
Spain	38	39
Portugal	45	40
Italy	69	82
Greece	111	109

Source: World Bank, *Doing Business 2007: How to Reform*, Report Overview, 2006 and World Bank, *Doing Business 2006: Creating Jobs*, 2006.

As shown in Table 2, part of Italy's poor ranking can be accounted for by its rigid labour markets. As can be seen, Euro area labour markets are rigid compared to the United Kingdom and especially compared to the United States and Italy has one of the more rigid labour markets in the Euro area. It is the fourth most difficult country in the Euro area both in which to hire workers and in terms of the rigidity of employment. Along with many other Euro area countries it scored an 80 in the rigidity of its hours, compared to zero for the United States. Hiring costs are 33 percent of a worker's salary – the third highest in the Euro area and compared to 8 percent in the United States; firing costs are 47 weeks of salary, compared to nothing in the United States.

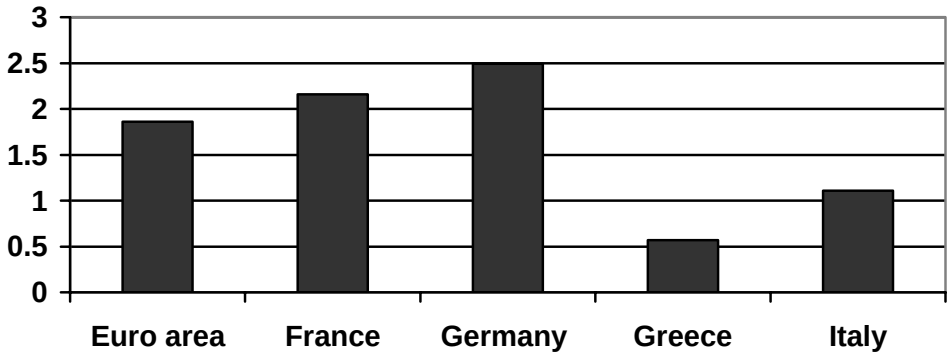
Table 2: Hiring and Firing Workers

	Difficulty Hiring*	Rigidity of Hours*	Difficulty Firing*	Rigidity of Employ-ment	Hiring Cost**	Firing Cost***
US	0	0	10	3	8	0
UK	11	20	10	14	9	34
Austria	11	80	40	44	31	55
Belgium	11	40	10	20	55	16
Finland	44	60	40	48	22	24
France	78	80	40	66	47	32
Germany	44	80	40	55	21	67
Greece	78	80	40	66	30	69
Ireland	28	40	30	33	11	52
Italy	61	80	30	57	33	47
Nether.	28	60	60	49	16	16
Portugal	33	80	60	58	24	98
Spain	67	80	50	66	32	56

Source: World Bank, *Doing Business in 2006: Creating Jobs*, 2006.
*Index: 0 – 100
**Percentage of Salary
***Weeks of Salary

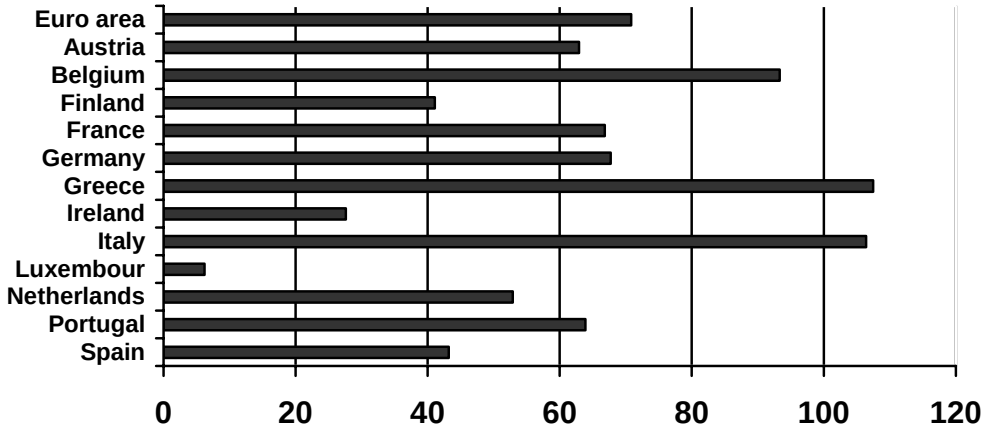
A consequence of the detrimental product market innovation and other barriers to entrepreneurship is that spending on R & D as a share of GDP is among the lowest in the Euro area. This is shown in Figure 5.

Figure 5. Gross Domestic Spending on R&D as a Share of GDP in 2004



As a member of the Euro area, Italy has benefited from interest rate convergence. Currently, the spread between German and Italian long-term interest rates is very small, although Standard & Poor's rates Italian debt as AA- with a negative outlook, as opposed to AAA with a stable outlook for Germany. Italy has one of the highest debt-to-GDP

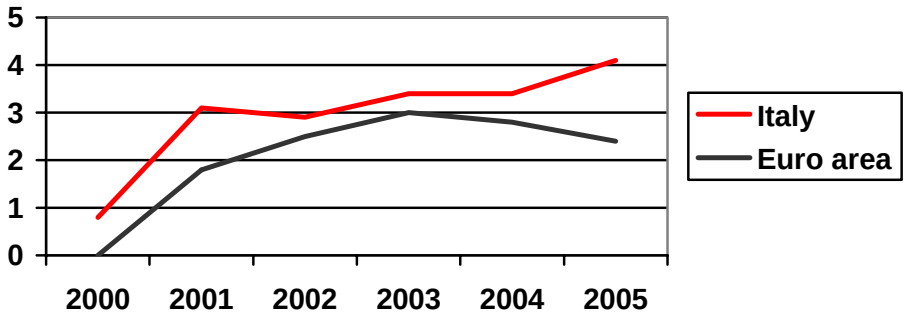
Figure 6. Government Debt as a Percentage of GDP



General Government Consolidated Debt as a Share of GDP. Source: Eurostat.

ratios in the world (shown in Figure 6). This coupled with a profligate fiscal policy in recent years (shown in Figure 7) raises the possibility that at some point the market will demand a substantial risk premium to be willing to hold Italian debt. Significantly higher Italian interest rates would make Italian growth prospects even more dismal than they currently are.

Figure 7. Government Defict as a Percentage of GDP

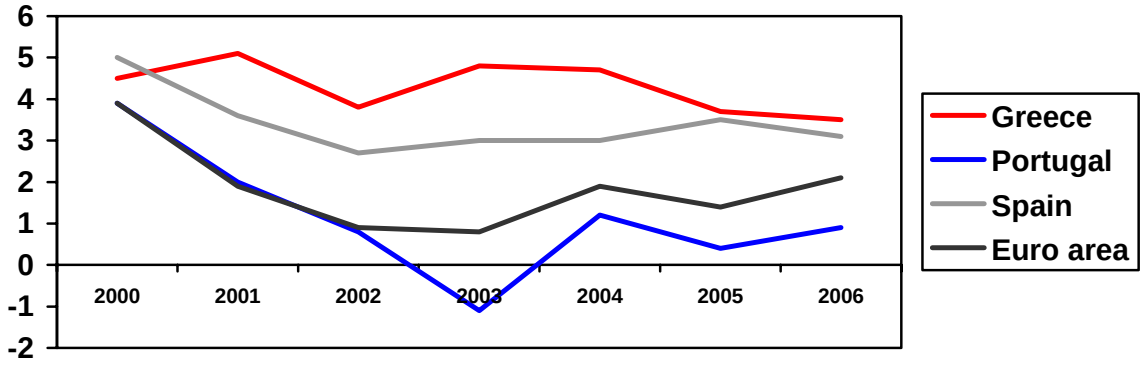


Net borrowing of consolidated public sector as a share of GDP. Source: Eurostat.

Italy is not the only Euro area country that can expect to see diminished competitiveness and lowered economic growth. Spain, Portugal and especially Greece are also characterized by inflexible and distorted economies. As seen in Figure 4, all three of these countries have highly regulated product markets. Spain and Portugal rank 39th and 40th, respectively on the World Bank's Ease of Doing Business Index. In 109th place, Greece is edged out by Uganda (107th) and Nigeria (108th).

Growth in these three countries is shown in Figure 8. Interest rate convergence and catching up initially led to high growth in Portugal and has sustained high growth in Spain and Greece. Growth in Portugal has since declined and growth in the Spain and Greece will not continue without significant economic reforms.

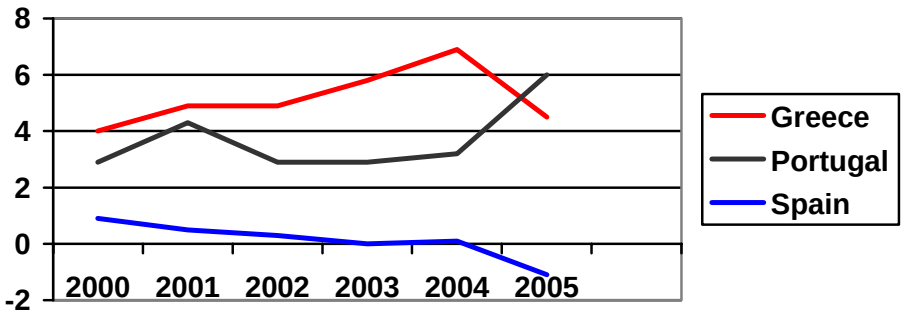
Figure 8. Real GDP Growth (Percentage Change)



Source: Eurostat

Debt-to-GDP ratios for Greece, Portugal and Spain are seen in Figure 6 and their current budgetary policies are shown in Figure 9. Greece and Portugal are in particular danger of higher interest rates and lower growth in the future. Spain at least has a moderate level of public debt and is pursuing a conservative budgetary policy. Portugal has a moderate level of public debt, but is unlikely to maintain this, given its current policies. Greece has an even higher level of government debt than Italy and is also following an unsustainable policy. Standard & Poor's gives Greek debt only an A rating and recent Greek attempts at creative accounting are unlikely to affect market opinion.

Figure 9. Government Defict as a Percentage of GDP



Source: Eurostat

Divergence in competitiveness among member states requires no policy response from the ECB; only the national governments can improve matters by enacting the required reforms. Poor growth relative to the Euro area as a whole will be damaging to monetary union, however, if a one-size-fits-all monetary policy is made a scapegoat for member governments' failures to liberalise.

BRIEFING NOTES TO THE COMMITTEE FOR ECONOMIC AND MONETARY AFFAIRS OF THE EUROPEAN PARLIAMENT

Charles Wyplosz
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Third Quarter 2006

DIVERGING TENDENCIES OF COMPETITIVENESS

Executive Summary

A number of Euro area countries have witnessed a loss of external price competitiveness as their labour costs have grown faster than in other countries. To different degrees, it currently concerns Greece, Italy, Portugal and Spain. In effect, these countries have an overvalued exchange rate. Being members of a monetary union, they have lost the devaluation tool, the normal way of solving an overvaluation problem. This possibility has long been identified as the monetary union's most dangerous risk.

Overvaluation inevitably leads to slow growth and rising current account deficits. The virtuous way-out involves wage moderation, rapid productivity advances, or a combination of both. Virtue is unlikely to come by in countries that have witnessed excessive wage increases, or poor productivity gains, or a combination of both.

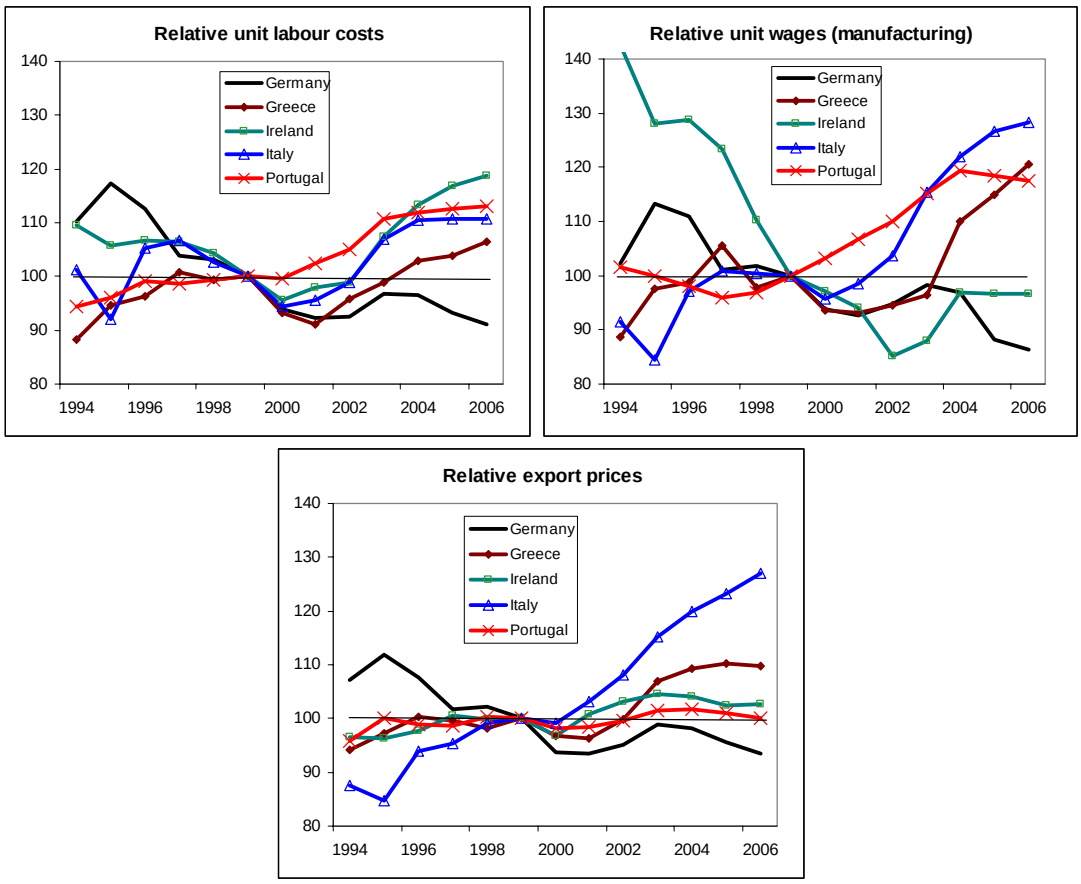
Should the trend continue, it is easy to imagine nightmare scenarios. A first scenario focuses on the current account deficit. This deficit can be sustained as long as it is financed by capital inflows. Inflows can take the form of foreign investment, but an increasingly overvalued currency will eventually be unattractive. Alternatively, firms and households can borrow abroad, but this cannot go on forever. When capital inflows come to an end, which they must eventually do, the situation is ripe for a severe financial crisis, which could call into question membership into the Euro area. A second nightmare scenario focuses on slow growth and rising unemployment. This is a recipe for popular discontent. Even if the root cause of the situation is entirely domestic, the easy solution – a devaluation – is made impossible by Euro area membership. Membership is then likely to focalize popular discontent and therefore to be challenged.

Unfortunately, there are few options that can work. Import tariffs and export subsidies within the EU are ruled out. Higher external import tariffs would violate the WTO agreements and, anyway, would not succeed in changing the relative price competitiveness of member countries. In addition, it would require an overly expansionary monetary policy, in violation of the Eurosystem's mandate to deliver price stability. A reduction in labour taxes is potentially interesting, but requires great care. One risk is that wages be then adjusted upward. In addition, tax cuts must be financed somehow. Raising other taxes is likely to undermine the intended effect. Reducing public spending is the right answer, but it is politically difficult. Letting the deficit rise is another option, but a controversial one. What is left is the long, slow and painful road of labour cost erosion that occurs when the economy's growth performance is poor and unemployment rises.

1. The Facts

The three figures below document the evolution of prices and costs in the euro area over the last twelve years. Three indicators are used. The first one compare unit labour costs in one country vis à vis the average of unit labour costs in partner countries (the other euro area members and twelve non euro-area countries). The second one does the same thing for unit wage costs in the manufacturing sector. The third figure compares export prices for those countries that have deviated most from the average.[1] Note that the index is set to 100 in 1999, but this does not imply that costs and prices were equal.

Figure 1. Indicators of price competitiveness (Index: 1999=100)



Source: European Commission

The first clear fact is the compression of costs in Germany. The compression is most spectacular in the manufacturing sector, which forms the bulk of German exports. It has been translated into a 6.5% gain in export price competitiveness since 1999.

The second clear fact is the loss of export price competitiveness in two countries: Italy (27%) and Greece (10%). Spain has suffered a similar loss of 12%. In both cases,

[1] The Commission's *Annual Report on the Euro Area – 2006* provides the first figure with all euro area countries (Graph 3.18, p. 34).

prices have undoubtedly been pushed up by the previously observed increases in unit wage costs in the manufacturing sector. Since these are unit costs, they measure the increase of wage costs over and above labour productivity. Overall labour costs, which include the other industries (mostly public and private services) have also increased but less than in the manufacturing sector.

Portugal, the third case is less simple. Labour costs have considerably risen throughout the economy but this has not been translated into higher export prices. This suggests that profit margins have been seriously squeezed in the export sector. The overall price level (measured by the GDP deflator) has increased by some 7%, an indication that the profit squeeze has been less severe in the non-export sector. The most likely explanation is that Portugal has little market power, i.e. that its firms, which are not market leaders in their respective segments, struggle to maintain a presence in their markets.

Finally, Ireland displays yet another evolution. Its overall unit labour costs have considerably increased, but this does not concern the manufacturing sector. Nor have export prices increased relatively to those in Ireland's partner countries. The likely interpretation is that rapid productivity gains in the manufacturing sector have been matched with equally rapid increases in wages in that sector, but also in the other sectors (chiefly services) where productivity gains have been much lower. This is a normal process when productivity rises fast; it allows for productivity gains in manufacturing to be spread throughout the whole economy with no loss in external price competitiveness.

2. Economic implications

Some of these diverging trends are disquieting. Italy, Greece and Spain are losing ground in terms pf price competitiveness. Portugal is not, but only because profit margins are compressed. Ireland is clearly not in difficulty. How serious is this evolution? Table 1 suggests that, so far, the effect has been quite limited. The table shows the change in world market shares between 1999 and 2006. There are very few changes and certainly no serious loss, either within the EU area or vis a vis the rest of the world. This is mildly reassuring. It takes time for price changes to affect trade flows, so more dramatic changes may be coming in slowly. More importantly, a continuation of the current trend is not sustainable.

With no exchange rate to make up for higher production costs, price competitiveness can only be restored through productivity advances or through wage cost moderation costs, possibly both. Importantly, to make up for lost ground, it is not enough to do better, it is necessary to do better than the other Euro area countries. If all Euro area member countries achieve a similarly better performance, this will eventually finds its way in the area's exchange rate vis a vis the rest of the world and no country will achieve any price competitiveness gain. (Productivity gains will still generate a gain in terms of trade.)

Productivity gains are slow to come by and hard to engineer, as the lacklustre performance of the Lisbon strategy amply demonstrates. Reducing labour costs through wage moderation is even more difficult in most countries. Labour costs can be reduced by cutting labour taxes, but this raise a host of issues that are considered below.

Table 1. Changes in world market shares (percent) – 1997-2004

Excluding intra-EU trade

	Euro area	Belgium	Germany	Greece	Spain	France	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland
1999	13.8	0.9	4.7	0.1	0.7	2.8	0.6	2.2	0.0	1	0.4	0.1	0.4
2000	12.7	0.9	4.2	0.1	0.7	2.5	0.6	2	0.0	0.9	0.4	0.1	0.4
2001	13.8	0.9	4.7	0.1	0.7	2.6	0.7	2.2	0.0	1	0.4	0.1	0.4
2002	14.2	1.1	4.9	0.1	0.7	2.5	0.6	2.2	0.0	1	0.4	0.1	0.4
2003	14.3	1.1	5	0.1	0.7	2.5	0.6	2.2	0.0	1.1	0.5	0.1	0.4
2004	18.5	1.4	6.5	0.1	0.9	3.1	0.8	2.8	0.0	1.4	0.7	0.1	0.5
2005	17.6	1.3	6.1	0.1	0.9	3	0.7	2.6	0.0	1.4	0.7	0.1	0.5
2006	16.5	1.2	5.6	0.1	0.9	2.7	0.6	2.5	0.0	1.6	0.6	0.1	0.5

Including intra-EU trade

	Euro area	Belgium	Germany	Greece	Spain	France	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland
1999	32.3	3	9.6	0.2	1.8	5.7	1.3	4.2	0.1	3.9	1.2	0.4	0.7
2000	29.7	3.1	8.7	0.2	1.8	5.1	1.2	3.8	0.1	3.7	1.1	0.4	0.7
2001	31.2	3.4	9.3	0.2	1.9	5.3	1.3	4	0.2	3.8	1.2	0.4	0.7
2002	31.8	3.4	9.6	0.2	2	5.2	1.4	4	0.2	3.8	1.2	0.4	0.7
2003	32.6	4	10	0.2	2.1	5.2	1.2	4	0.2	3.9	1.3	0.4	0.7
2004	38.4	3.9	12	0.2	2.4	6	1.4	4.7	0.2	4.7	1.6	0.5	0.8
2005	36.5	3.7	11.5	0.2	2.2	5.4	1.3	4.3	0.2	4.8	1.5	0.5	0.8
2006	34.5	3.7	10.7	0.2	2.1	5.1	1.2	4.1	0.2	4.6	1.4	0.4	0.7

Source: AMECO data base, European Commission.

3. Nightmare scenario No. 1

What if nothing is done and the trend of the past years continues? Eventually, those countries where price competitiveness continues to be eroded will face a decline in exports and a rise of imports, which will reduce demand for domestic goods and services. This will hurt growth unless domestic demand keeps growing, which can indeed happen as the result of wage increases. It is unlikely that domestic demand can substitute for world demand for long, however, because the decline in exports and the increase in imports will lead to a growing current account deficit.

A current account deficit means that the country is borrowing abroad. As export earnings fall below spending on imports, the difference must be made up by capital inflows. Capital inflows can take several forms. Foreign firms can invest domestically, either by buying existing firms, partially or entirely, or by creating new establishments (greenfield investment). This is very unlikely to happen in countries that are becoming increasingly less cost-competitive.

Another possibility is for consumer credit to be financed from abroad. This may go on for a while, possibly even several years, but growing indebtedness is bound to eventually slow external lending down; eventually the flows will be reversed fresh loans stop and old loans are being serviced. What happens then? When there is a domestic currency and therefore an exchange rate, this process takes the form of a "sudden stop", which invariably triggers a currency crisis, often accompanied by a financial crisis. Within the Euro area, there can be no currency crisis, but a financial crisis is entirely possible.

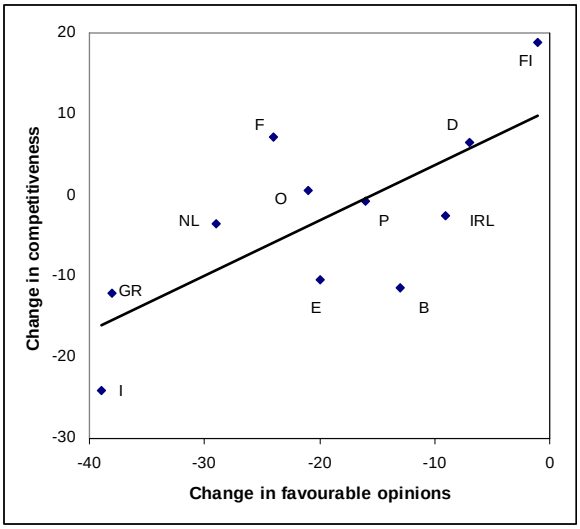
What would a financial crisis look like? As highly indebted borrowers find that they can no longer borrow their way out, they must cut down on spending. This leads to a recession. Matters could stop there, but it is unlikely. As the economy suffers, firms go into bankruptcy and individuals are thrown into unemployment. Unable to serve their debts, firms and households default. Lending institutions, banks especially, are suddenly flooded with non-performing loans and fail. The rest is familiar financial melt-down, complete with depositor panic.

What would be new, this time, is how central banks would respond. Conventional wisdom is that, when they face bank failures, central banks intervene as lenders of last resort. They quickly lend to failing banks whatever it takes to keep them in operation; later on, they either close failed banks down or arrange for a recapitalization under new management. But Euro area national central banks are not really central banks anymore; they cannot decide on their own to inject money. This is a decision that must be taken by the Eurosystem. At this stage, it is totally unclear how the Eurosystem would react. When they act as lenders in last resorts, central banks know pretty well the situation of the commercial banks under their jurisdiction. In the Euro area, national central banks have an intimate knowledge of their banks, but what will they report to the Eurosystem in the midst of a panic as they ask for permission to bail them out?

4. Nightmare scenario No. 2

Even assuming that price competitiveness can be restored, it takes time. Meanwhile, the most likely effect is protracted poor growth, which also means continuing high unemployment. While the reasons for this unfortunate evolution will be purely domestic, the fact that the devaluation solution is ruled out could well turn public opinion against the single currency. This may be already happening as Figure 2 illustrates. It appears that the countries were price competitiveness deteriorated the most between 1998 and 2005 are also those where favourable opinions regarding monetary union membership declined the most during the same period.[2] There will be no lack of politicians to spot and exploit this shift in public opinion. The events in Italy last year provide a vivid example. Currently, public opinions remain positively oriented toward the monetary union, but the robustness of this unique experiment whose should not be taken for granted.

Figure 2. Opinions toward the monetary union and loss in price competitiveness



Source: Eurobarometer and European Commission
Note: The change in favourable opinions is the difference between the percent of respondents who were in favour of the monetary union between December 1998 and October 2005. The change in price competitiveness is based on relative export prices as shown in Figure 1.

[2] The correlation coefficient is a respectable 0.72.

5. Policy implications

The preceding nightmare scenarios are not meant to be realistic. They only illustrate that a continuation of cost and price divergences represents a serious challenge to the monetary union. The risk that prices may become increasingly out of line has long been identified as a potentially severe challenge to monetary union. There are few options, none of which is particularly appealing. They are now reviewed.

The rules of the Single Market definitely rule out import tariffs or quotas and export subsidies within the EU. External import tariffs could be raised, but that would be highly problematic within the WTO agreements. Even if a way could be found, it would not even help. Since any exetrnal tariff must be common to all EU countries, it would not change the relative price competitiveness of member countries. As all member countries would become more competitive, the exchange rate would probably appreciate, in effect nullifying the sought-after gains. Tariffs or quotas could be targeted to goods that matter most for the countries that suffer from competitiveness losses but this could elicit retaliation. If cleverly designed to hit the other EU countries, those that do not suffer from a competitiveness disadvantage, such retaliation could easily induce disagreements. In fact, the mere prospect that it could happen is probably enough to prevent any EU agreement on selective tariffs or quotas.

Another idea would be to depreciate the euro. This would affect equally all member countries. While it could help the uncompetitive countries, it would create inflationary pressure among the others, which is only to be expected since it would require an overly expansionary monetary policy. Such a move would be in violation of the Eurosystem's mandate to deliver price stability. Yet, it would go along way toward solving the divergence problem, which is why it is dangerously tempting. Indeed, it would severely affect the Eurosystem's credibility, which very much depends on the central bank making it clear that it will never inflate the Euro area in support of countries that fail to exercise wage and price discipline. This "solution" should be ruled out.

Labour costs are made up of wages and specific taxes. Labour taxes mainly include compulsory contributions to health and retirement programs. Reducing taxes is a tempting way of cutting labour and production costs, but it is not that easy. To start with, even if labour markets do not work perfectly, the pre-tax reduction situation is the outcome of wage negotiations where presumably each side, employer and employee, has achieved the best that it could. A reduction in labour taxes would disrupt that equilibrium. Noticing a reduction in labour costs, employees will see some room for wage increases and, indeed, hard-pressed employers might be willing to pass some of the tax reduction on to wages, thus lessening the expected benefits from the measure. Even assuming that the measure can succeed in lowering labour costs, we need to consider how to finance the tax cut. A possibility is to raise other taxes. But raising taxes that affect production costs – e.g. profit taxes – would simply undermine the intended effect. VAT or income taxes would reduce employee purchasing power and soon trigger call for compensatio through higher wages. It is very hard to imagine which specific tax increases would not have offsetting effects. Reducing public spending is the right answer, but it is politically difficult. The only remaining alternative, then, is to just let the budget deficit increase. In those countries

where the deficit situation is favourable, this is indeed a reasonable solution. For the other countries, which still suffer from excessive budget deficits, a case could be made that letting the deficit increase is justified since it finances productive investment in competitiveness. This is bound to be controversial, however, after years of undisciplined budgets.

Yet another possibility is to reduce minimum wages, at least in countries where they bind, directly or indirectly, a significantly proportion of labour costs. The idea of pressing the least paid employees to solve a labour cost problem is of course politically dangerous, in addition to being inequitable.

In the end, maybe with the exception of labour tax reductions, direct attempts at manipulating wage costs are generally unlikely to be successful and they are politically unappealing. Whether they call for wage moderation or public spending cuts, such measures require the kind of social compact that has been previously missing when labour costs were rising. What is left is the long, slow and painful road of labour cost erosion that occurs when the economy's growth performance is poor and unemployment rises. This is what worked in Germany over the last several years. This is also what undermined Argentina's currency board – an arrangement close to monetary union as it removes the devaluation option – until popular uprising led to its abandonment in the midst of an acute currency and financial crisis.

QUESTIONS

1. Divergent cost and price evolution has deteriorated competitiveness in several Euro are countries. Such an evolution is beyond the Eurosystem's control and reflects a lack of wage and price setting in the afflicted countries. But this is the world we live in. Calling for wage and price restraint is the obvious response of the Eurosystem, but it is clearly not working. How serious is the situation and what can be done about it?

2. Some countries intend to respond to their growing cost and price divergencies by permanently cutting labour taxes. Would you support such a policy? Would you agree that these tax reductions can be financed through higher budger deficits? If not, what alternative financing solution would you suggest, given that public spending cuts are politically difficult?

Hedge funds and financial stability
by Jean-Pierre Patat

Executive summary:

The LTCM episode in 1998 was a temporary crisis for the hedge fund industry despite which it has continued to grow very rapidly. Although counterparts of hedge funds, especially the banks, have significantly improved their risk management standards and their approach to relationships with high leverage institutions, there has been no progress in the domain of the regulation of hedge funds.

Even if some of these institutions seem now to be diversifying their investment style, risky attitudes, especially large-scale and concentrated positions can still at the moment be observed.
The possibility of a turmoil of the size of the LTCL episode can be considered as low: banks have improved their management practices, and the ability of the markets to cope with sudden demand for liquidity is better than eight years ago, with the introduction of new marketable instruments and a much more broad range of investors for absorbing massive sell. But recent examples show that risks of collapse of a large hedge fund are not at all excluded with possible consequences on counterparts.
The euro area, with good macroeconomic fundamentals, a sound banking system and skilled bank regulation, well monitored markets, a modern and safe interbank gross settlement system, presents positive features which could protect it against a major disruption.

Nevertheless, several reasons can justify some concerns. The recent expansion of the hedge funds industry is particularly affecting the European segment of the markets. Low interest rates and little returns of conventional investments foster increasing risk exposures. In a context of rapid growth of exposures to hedge funds and pressures owing to more competitive market conditions, large European banks have some difficulties to correctly assess the risk of their counterparts. In some new members of the European Union, macroeconomic conditions and fragile banking systems can encourage international financial markets defiance.

In the case of difficulties of market operators or banks caused by the breakdown of a hedge fund, a liquidity injection by the European System of Central Bank as a lender of last resort would seem very unlikely as creating a dangerous moral hazard and implying a potential risk for price stability. Nevertheless the ECB would also be very cautious to an action like the one the Fed managed in 1998 (In a situation of severe turmoil of the markets, the central bank organised the rescue of LTCM by a creditors‘ consortium and unexpectedly reduced interest rates twice). According to the assessment of the risks at the moment, one has to ask if the best issue would not be to let the hedge fund to collapse and to eventually decide case by case, measures of temporary relaxations of banks prudential ratios.

With impressive growth of hedge funds which become increasingly available to retail investors, the absence or regulation of these institutions has become a total anomaly. A specially adapted regulation with some transparency requirements would be in the interest of financial stability and in the interest of hedge funds which give to the market and the public a negative image when they face heavy losses.

American financial and monetary authorities seem more and more inclined to propose some measures.
The European financial authorities and the ESCB could be leaders on these questions.

While no legal or accepted definitions exist for hedge funds, one can describe these institutions as investment partnerships which operate very flexibly to obtain important return targets, whose managers receive performance-related fees, and whose providers of capital were initially a small number of wealthy individuals or other institutional investors. Although the partners have now become more numerous and diversified, and hedge funds investments increasingly available to retail investors, the hedge funds remain, as originally, subject to very few regulation and disclosure commitments.

Mixed judgements on the impact of the hedge fund industry on global stability

Assessing the impact of the activity of hedge funds on financial stability and price stability requires to be aware of the large diversity of sizes and strategies of these institutions. Probably more than 6 000 hedge funds are presently operating on the financial and exchange market. Most of them do not at all threaten financial or price stability and only endanger the investments of their wealthy share holders who accept risk in the hope of good returns.

Many types of hedge funds exist but in fact, four main types of investment styles characterise this industry.
1) The macro funds speculate worldwide on prices change of bonds, stocks, currencies, commodities with presumed changes in the economic or economic policy setting.
2) The market neutral funds take up long and short positions that are more or less hedged in term of value; generally speaking, they buy undervalued assets and sell overvalued instruments.
3) Event driven funds seek to take advantage from specific events in the life-cycle of an enterprise.
4) The funds of funds invest their resources in a portfolio of different hedge funds and make it possible to small investors to indirectly invest in large funds.
The first type is probably the one which can the more threaten the global stability, as it tries to take advantage of major economic or financial trends, and is using the leverage effect to take large positions. But a market neutral fund can have the same effects with huge long positions.

During most of the nineties, the activities of some large hedge funds had in many occasions, endangered the stability of some markets, but did not seem to raise major concerns about any risks for global financial stability.

Accordingly, the massive speculative attacks against the EMS (92-95), the Hong Kong currency and stock market (98), the Australian dollar (98), initiated by big hedge funds and amplified by herding and short term attitudes of market operators, created huge troubles on the markets, inopportune surges in interest rates and large interventions of central banks and conversely, real macroeconomics and macro-financial troubles. Nevertheless, hedge funds did not seem to justify any concern, except for the victims of the raids which claimed unsuccessfully for more regulation and more transparency obligations for these institutions. Indeed, some analysts have been convinced that hedge funds may have a positive role on financial stability in detecting market anomalies and in providing liquidity to the market. It is true that these institutions often try to take advantage of presumed situations of over- or

underestimated prices of stocks, bonds, or currencies. However some circumstances in which they failed and lost money can justify some doubts concerning their total cleverness. One can agree on their role in providing liquidity, but having in mind that, in most cases, the first providers of this liquidity are the banks or brokers which lend money to hedge funds.

A new regard on hedge funds with the LTCM misadventure

It has been the near failure of LTCM, a large mixed market neutral and macro fund which brought hedge funds to the attention of the financial and monetary authorities.
At this occasion, the observers realised that some hedge funds activities could endanger not only a currency, or central banks reserves, or macroeconomics conditions of a specific country, all consequences which were quietly judged as the avatars of the financial globalisation, but also other financial institutions, and conversely the global financial stability.
The near bankruptcy of LTCM was considered as sufficiently serious and potentially dangerous for the stability of the market and the banking system to convince the Federal Reserve Bank of New York to organise the rescue of this institution by a creditors' consortium.
Furthermore, this debacle raised a number of concerns to the authority and the international financial community. A lot of public and private task forces issued recommendations, mainly for the hedge funds counterparts and especially banks, for improving the risk management standards and the approach of the relationship with high leverage institutions.
It seems crucial to assess if the market actors have followed these recommendations and if the present regulatory and prudential framework fits and would prevent events similar to the 1998 crisis. Many reasons can justify such a concern, especially in the euro area.
Firstly, the LTCM episode has been a temporary crisis for the hedge fund industry which has continued to grow very rapidly as, according to estimates, total capital under their management exceeds 1 trillion dollars, i.e. roughly a tenth the assets of 98.
Secondly, low interest rates during the recent years have led investors to search for alternative high returns. If rates have been raised in the US, they remain at a relatively low level in the euro area. Accordingly, the monetary conditions and conversely the little returns of conventional investments foster a strong development of hedge funds operations and increasing risk exposures.
Thirdly, if the hedge funds industry remains largely dominated by US financial institutions it appears that its recent expansion has particularly affected the European segment. Therefore, if most of the involved speculative funds are managed at London, they operate on all European markets.
Before inquiring about the possibility of new crisis and circumstances which could threaten financial and monetary stability, especially in the euro area, it seems useful to expose why and how liquidity problems can occur and affect strongly some institutions.

Issuing of liquidity problems

Liquidity can be described as a situation where all the market participants can smoothly transact in any circumstances. It involves the market ability to cope with sudden or temporary demand for liquidity without major disruption. Concretely, a liquid market must allow participants to sell important positions in bonds, stocks, currencies on spot, future and derivative segments, without sharp widening of spread on the price of the traded asset.
Liquidity shortening can have many origins: insufficient number or lack of diversity in market participants, lack of adequate collaterals, credit restrictive attitude from banks which can

result from a tightening in monetary policy. Furthermore, some financial instruments, often with expected high returns have no adequate market for important “two ways” transactions. Although hedge funds are considered as sources of liquidity, especially on the derivative market, they can be strongly affected by a liquidity shortening. Indeed, as opposed to regulated investment companies, hedge funds are not encumbered by restrictions on leverage and are free to take concentrated positions in a single firm, industry or sector, positions which can be considered as imprudent by other institutional investors. This freedom allows them to take huge positions on specific values with the view to get high returns and, more broadly, to hold in portfolio relatively illiquid instruments. That was typically the case of LTCM. In late 1997 and early 1998, this large hedge fund purchased, for entering in to derivative contracts, enormous amounts of high yielding and rather illiquid bonds of emerging markets, as it believed that the spread would narrow when investors would reassess the risk. In fact, the inverse situation occurred, as a consequence of the so-called “Russian crisis”. In a very nervous climate, LTCM was unable to sell its main assets as the market participants were obsessed by the “fly to quality” (which obviously contributed to widen the spread between low risky and more risky assets), and could not find any counterparty to buy the illiquid instruments it massively owned. LTCM misadventure is typically the example of the link between a lack of market liquidity and the collapse of an (imprudent) institution.
This crisis occurred eight years ago and the current economic and financial framework is very different of the context of 1998.
Nevertheless it seems important to question about 1) the conditions for a hedge fund to face again such a situation, 2) the reasons of a contagion to the market and the banking system with the risk of endangering financial stability and 3) in which circumstances such a breakdown could have incidence on the price stability.

Circumstances under which a large hedge could face a massive default of liquidity

Coming back to the sources of the problem of 98, overstated concentrated and massive positions on specific assets are the primary factor of risk of illiquidity; this risk is of course fostered if positions have been accumulated in assets with short market.
The experience of LTCM did not allow to really progress in the domain of the regulation of these institutions (in infra) but both the international financial community and the profession itself felt concerned. Hedge funds could have concluded that it had to find a balance between high return research and a more prudent policy.
In fact, in spite of some changes in the management of these institutions, imprudent attitudes continue to be observed.
Many smaller hedge funds with a tight group of wealthy investors still remain aggressive and audacious in their portfolio management, but they endanger the fortune of their partners which are capable to assume the risk they take.
Inversely, most of the larger hedge funds seem now diversifying their investment styles and looking for more modest, while consistent, returns.
It can be also assumed that banks and securities firms would no more massively loan to a hedge funds without holding a minimum of information on their investment policy. More generally speaking, there is a presumption that no hedge fund would now use leverage effect as LTCM did. It is important to underline that this company, with only 5 billions of equities, borrowed more than 125 billions from banks and securities firms, which means a leverage effect of more than twenty-to-one. Probably LTCM was able to finance so large amounts of operations because of the reputation of its partners who welcomed Myron Schole, the man who had elaborated with Black, a superb and famous model for derivatives transactions!

If such an extreme event like the growth and fall of LTCM cannot be considered nowadays as impossible, it seems less probable than eight years ago. But some examples of dangerous expositions can still at the moment be observed.
In May 2005, some hedge funds found it very difficult to exit or hedge swap positions, as their dealer counterparts had similar liquidity needs.
Some larger hedge funds continue to manage large scale positions, as it is shown by the example of this fund (Amaranth) which invested massively in US natural gas, using loans to finance leverage, on prediction of another season of hurricanes in the Gulf of Mexico which would have sent prices higher. It recently informed that its main funds were down more than 35% this year with losses of 6 billions dollars.
These examples show that risky attitudes, even if they can be less frequent than 8 years ago, remain consubstantially linked to the nature of the profession and its inexistent regulation.

The conditions for a contagion to the market and other financial institutions

High exposure of counterparts, especially the banks, on some large hedge funds operations and massive similar positions held by other market actors are the main factors which can transform an initial individual problem into a market liquidity crisis.
In the first case, banks directly exposed can support substantial losses and be in default on their obligations vis-à-vis other parties.
The second situation can worsen the liquidity conditions and, if the transactions on the concerned assets remain impossible, strongly threaten the solvency of some major banks and security firms with the eventuality of a state of credit-crunch as a final issue.
The consequences of these two negative factors can, of course, be seriously reinforced if the financial market is itself in a relatively fragile state. It was the case in the second half of 1998. Following the Russian default, the "fly to quality" and explosion of risk premium for all emerging market securities, even these not connected with Russia (for example, spread demanded by investors on Venezuelan government bonds in October 1998 implied a probability of default of 99,9%!), triggered a general breakdown in the trading of high yielding financial instruments.

Evolutions since 1998 can a priori justify a relatively positive assessment about the present situation and risks.

-Public and private initiatives in favour of sounder risk management practices of the counterparts of hedge funds.
The Basel Committee on Banking Supervision has issued guidance which requires banks to establish clear policies and procedures for credit risk management specifically adapted to their interaction with hedge funds: it has been in particular required to collect adequate information with a view to correctly measure the credit exposures, reinforce formal limits to exposures, enhance the disclosure about their relationships with hedge funds, review the guaranties regardless if to the specific activity and risks of the hedge funds industry. A particular emphasis has been put on the use of "stress tests" for the appreciation of potential risks. Stress tests are not based on the observation of the past crisis during a more or less number of years (as it is the case for the "value at risk" procedure), but on the search and consideration of a lot of situations which can be very diverse and extreme and, for some of them, have still never occurred. This risks appreciation model seems more customized to the present framework as we must be convinced that, in any area, political, economic, financial, or strategic, the unthinkable is now possible.

Efforts of the financial industry have complemented the public sector initiatives to improve risks management standards. The Counterparty Risk Management Group which encompasses major internationally active commercial and investment banks has issued recommendations for individual firms, for the global industry, and also for the authorities.
Moreover, the new capital requirement included in the risk sensitive framework so-called "Basel 2" provides more differentiation than "Basel 1" in terms of risks level. So, even if Basel 2 does not give specific issues for exposures to hedge funds, it can better accommodate the increased risks that the activity of this industry demonstrates.
Finally it can be observed that, since 1998, the markets have improved in efficiency and grown in size as there is now a much broader range or investors for absorbing eventual massive sell of a hedge fund.

- *A better situation of the markets*
The markets context is presently very different from the situation of 1998. The short term possibility of crisis on emerging markets is presumed low. Historically narrow spreads on the debt of these countries have unlighted this relatively optimistic view. In spite of some large movements, stock markets don't seem over- or under-evaluated.
Another factor is the dramatic change in the currencies market: in 1998, a lot of fixed exchange rate regimes existed, but nowadays most of the currencies are totally floating (cf the euro) or no more rigidly linked to an anchor money (cf for instance the exchange rate regime of Korea, Thailand or Malaysia).
Financial innovations have allowed improvements in the management by banks of their claims on hedge funds: for example, some vehicles, as collateralised loan obligations, CLO are now largely traded and are used by hedge funds for funding liquidity and by banks for holding loans until they are paid off.
Moreover, concerning in particular the euro area, the existence and the perfect functioning of an interbank gross settlement system (TARGET) is a factor of reduction of risks of chain reactions whenever a market operator faces difficulties.

But, in spite of these improvements, the eventuality of a big shock can not be excluded.

Let us firstly remind that the relative optimism on the market can rapidly be questioned, as it has been shown in a lot of circumstances. Crisis potentialities still exist, even in Europe (see infra).
Moreover, some specific concerns are remaining.

-Further efforts are still needed for improving the conditions of banks exposures to hedge funds
A recent paper in the ECB bulletin, referring to a survey of the European System of Central banks (ESCB) pointed out the rapid growth of exposures to hedge funds of larger EU banks and the difficulties of some of them to correctly assess the risk of their counterparts. One can be worried by such a situation in a context of strong concurrence and pressures owing to more competitive market conditions which allow larger hedge funds to deal less rigorous credit terms.
The main reasons for difficulties of banks in this area are shortcomings regarding the quantity, quality and timeliness of information provided by hedge funds. That is an absolutely crucial issue as the opacity of hedge funds can be considered as a major factor of potential crisis. We emphasised in a precedent development on the example of this large fund which faced huge losses after having massively invested in commodities derivative market. The fund did not collapse, because it owned sufficient marketable assets (collateral loans obligations. in supra)

for avoiding losses which would have provoked liquidity crisis. Nevertheless the fund was obliged to sell more than half of its portfolio of loans on the European market which, in those circumstances, could absorb them. But some large banks have supported losses on this occasion and the lack of precise information for banks and brokers on the position of their counterparty could have had serious repercussions if this hedge had not been in the situation to preserve its liquidity.

- *Special risks remain attached to the derivative market*

Most of high leverage investments of hedge funds are engaged on the derivatives market, and especially the off-exchange derivatives market, with swaps and other various option contracts. Trading in this compartment is concentrated in the hands of a relatively limited number of banks and securities firms (even if that number has increased since 1998). That situation implies a risk of chain reaction possibly leading to a systemic risk if one of these institutions was led to withdraw from trading as a result of a counterparty default. Consequences can be amplified as derivative contracts are not submitted to some dispositions of the bankruptcy code and include clauses that give parties the right to liquidate any assets of the defaulting counterparts they have, even assets that are not related to the specific contract. In the previous example of recent difficulties of hedge funds having difficulties to exit from portfolio swap positions, the situation could have worsened if new investors and primarily hedge funds with a more diverse investment strategy did not enter the market as they felt prices to be well below normal levels.

Price stability issue

Financial and banking crisis can lead to a state of deflation and price decreases, as it was observed in the thirties or in Japan during the ten last years. A sound banking system would preserve the euro area market from such an extreme situation.

On the contrary, there is no direct link between a situation of financial instability and rising inflation. In fact this issue can be questioned through the impact on the global liquidity of an eventual reaction of the central bank faced with a financial turmoil.

An improbable direct rescue from the central bank

A liquidity injection by the central bank as a lender-of-last-resort act seems very unlikely in the case of potential difficulties of market operators or banks caused by the breakdown of a hedge fund. If we refer to the LTCM rescue by the Fed, the central bank did not “spend one penny of public money” (W. Mac Donough). Such an attitude is justified by at least two reasons.

Firstly, it would be abnormal, and even rather scandalous to spend public money to rescue a non-regulated and non-transparent non-bank institution. That would create a very dangerous “moral hazard” and incite firms which already take excess risks to be more and more audacious.

One can argue that the rescue of LTCM has created moral hazard even without central bank money injection.

But we consider there is a difference between a central bank operation which can be decided and implemented very rapidly and the call to a consortium of banks for convincing them to help a near collapsed hedge fund. Such an operation is much more complicated and hazardous as the banks cooperation is quite uncertain, especially if they consider they were not sufficiently informed about the hedge fund positions. To be clear, most of the banking and market operators are not convinced that a new rescue of this type could be possible.

The second reason is that an abundant flow of new liquidity can create conditions of a less adequate control of the interbank market rates (even if a central bank has the instruments for sterilising excess created liquidity) and implies potential inflationary risks.

To sum up, the lender-of-last-resort intervention is a "deterrent" which must not be wasted and a central bank which would act that way in such an occurrence would lose credibility.

Easing markets conditions in apparent similar circumstances could be risky for price stability and for the reputation of the ECB.

Referring once again to the LTCM episode, we remember that the Fed, unexpectedly reduced interest rates twice, signalling a strong commitment to a risk of recession as a possible (almost "sure" said at this time some US financial authorities) consequence of the bank and market turmoil. In fact, the real concern of the central bank was not recession (which did not happen) but the risk of a banking sector crisis.
At this occasion, the central bank was in contradiction with the holy principle of "Chinese wall", according to which monetary policy and prudential considerations can not be mixed. But we think that the action of the Fed can not be criticised for that reason. According to the growing concern about financial stability and considering the general agreement to recognise the necessary involvement of central banks in the preservation of this worldwide public good, the "Chinese wall "principle seems no more accurate and operational in all circumstances. But it is true that the Fed action has "legitimated" the use of interest rates for preventing a financial and banking turmoil of which the origin was not a specific bank problem but the consequences of the irrational investment policies of an opaque and non-regulated non-bank institution.
We can assume that if an apparent similar situation occurred in the euro area, there would be strong pressures of the market operators and probably of the governments, for the ECB to ease interest rates, even if the risk of breakdown would not be evident. The example of the Fed would of course be advanced. Observers would probably argue that the Fed succeeded, by minor policy changes to provoke significant and rapid recovery of confidence. But it was telling evidence that the markets have hugely overshoot and it can be questioned if it is normal to encourage so fragile and irrational behaviours.
Furthermore the concerns of the Fed are not the same than those of the ECB. For the American central bank, preserving the attractiveness of the US financial market is a crucial issue for financing the permanent and huge current account deficit. The ECB is not, of course, indifferent to the competitiveness of the European markets, but is a multinational institution in charge of the price stability in the euro area and, as its second mission, it is in charge of supporting the economic policy of the European governments if its primary objective is not endangered. So, it might be very cautious to a global action which could be not in line with the situation and with the general macroeconomic conditions and might strengthen inflation expectations and affect its credibility.

Can financial instability threaten price stability via the exchange rate?

The euro area, with its good macroeconomic fundamentals, its sound banking system, and its well monitored markets, seems preserved of a confidence crisis which could menace financial stability.
But, in the European Union, some countries, banking system and markets, which are future members of the Monetary Union don't present the same guarantees of stability. In some new members of the Union, public and current account deficits are huge, the situation of the banks

remains fragile and surges doubts about their ability to respect the Basel 2 requirements. As it appears that, in some cases, the situation is worsening, there is a risk of loss ofcredibility, with international financial markets defiance. Such an occurrence could incite some financial institutions and specially hedge funds, to try to take benefit from the situation by audacious positions against currencies or markets. It could result by a contagious effect to a weakening of the euro which could endanger price stability.
Indeed, it is important to realise that, if progress has been made in the worldwide financial stability, some areas of potential instability are still existing, some of which in Europe.

Conclusion on stability issues

Finally, markets can not be considered to be protected against of the risk of a more or less serious crisis linked with the default, or simply the activity, of large non regulated financial institutions.
As already underlined, the euro area financial and banking market presents some real positive features which could protect it against a major disruption. Very skilled and adequate banking regulation and supervision, probably the best in the world. Furthermore, even if supervision bodies remain under the control of national authorities, they have a global look on the whole situation of the area, thanks to the ESCB Banking supervision committee. As a consequence, the results of the European banking activity show that they are able to manage both dynamic and prudent strategy. Concerning the regulation of the financial markets, the implementation of the Lamfallussy recommendations for a harmonised transposition of the European directives and a global approach of the monitoring of the markets developments are other elements which can warrant that a specific problem would be quickly detected and managed whenever a risk of a propagation would occur. Finally, as already mentioned, the existence of a very modern and safe settlement system is another precious protection.
But the impressive growth of the hedge fund industry and the perspective of a particularly strong development on European markets, on which they were until recently not very active, and the risks of market instability in some new members of the Union, surge a challenge for all the actors of the financial area, banks, brokers, investment firms, market and supervision authorities, central bank. Even if significant progress has been made by the euro area banks in a better handling of their relationships with hedge funds, these institutions remain very modestly regulated and continue to be relatively opaque vis-à-vis the public and even vis-à-vis their counterparts. As mentioned already, one must also consider that the low interest rates in the euro area, even if appropriate to the objectives of the ECB, and unsatisfactory performances of the traditional assets can be an incentive to risky investments strategy for institutions of whose the main purpose is to offer high returns to their shareholders. Accordingly, recent examples show that risks of collapse of a hedge fund are not excluded with some possible consequences on counterparts. But, thanks to the progress made by banks in assessing their hedge funds counterparty risks and by the markets to deal with liquidity demand, the eventuality of turmoil of the size of the LTCM episode can be considered as low.

So, in the case of troubles, one can ask if the best issue would not be to let the hedge fund to collapse, as it is normal for a risky institution to assume the consequences of its policy. Nevertheless, if it appeared that some banks had difficulties, it could be more preferable to a global monetary policy action, if the regulator was to decide, case by case, measures of temporary relaxations of capital standards or other prudential ratios.

Hedge funds regulation issue

Balanced opinions on the hedge funds generally exposed in the economic papers opened the question of knowing if these institutions are or are not useful.
In fact this debate has probably no more signification if we observe the reality.
The reality is that hedge funds have shown very impressive growth, and that they are now so familiar in the financial field that a market which would not welcome these institutions would be penalised vis-à-vis the other financial centres. Even in countries with a very well regulated banking system, the authorities are now welcoming the creation of lightly regulated risky financial institutions: in France the regulation about mutual funds has been modified for allowing the introduction of risky funds for professional or wealthy investors. In January 2004, the European Parliament adopted a resolution with proposals to adopt a light regulatory regime for sophisticated alternative investments vehicles. So hedge funds are now existing and operating on all world financial markets.
Another reality is that investments in hedge funds are becoming increasingly attractive for a lot of economic agents (pension funds invest part of their resources in hedges funds) and available to retail investors, through the fund of funds but also directly as some institutions require less important participation than in the past to their new members.
Finally we also have to be aware of the very large diversification of the hedge funds investments, some of them being now important shareholders in large worldwide firms, and in situation of playing a decisive role in the strategy of these firms and in the appointments of their managers (cf Deutsche Börse, Euronext, Arcelor…).
All these evolutions are showing, in our view, that the absence of regulation of the hedge fund industry, which was already questionable at the end of the last century, has presently become a total anomaly.
Regulation is of course in the interest of the global financial stability, as it could avoid damageable crisis and costly rescue operations and in the interest of investors who are no more limited to wealthy shareholders. Furthermore, regulation is also in the interest of hedge funds which give to the market and the public a negative image when they face heavy losses and must sell a large part of their assets for surviving. We consider the industry would benefit from a specially adapted regulation which imposes some limits to leverage effects and concentrations in positions. Such regulation could perhaps reduce potential returns but more surely losses, and would probably attract more investors who are presently balancing with the hope of good returns and the fear of huge losses. (Some hedge funds are probably not far to agree with this analysis as they ask to be registered at the SEC).
A crucial issue remains the problem of transparency of hedge funds. These institutions are very reluctant to give any information about their investments policy as they consider that the core element of their strategy is to benefit from asymmetric information. But it is obvious that the asymmetric information state can worsen contagion effects in the case of a crisis, when, for example, market actors are not informed if a hedge fund massive sell of assets is due to specific information or to a margin call.

After the crisis of 1998, the international financial public and private actors asked a working group to elaborate on the possibility of greater disclosure by hedge funds. The first conclusion of the group was that it would be easy and advantageous for the larger hedge funds to periodically disclose investments and derivative positions, at least in a first step to financial authorities. But disclosures to the markets were also envisaged as they could discipline and reduce herding attitudes of the other market operators which are often overshooting because they act more in function of rumours than realities(one comes back to

the problem of asymmetric information). Finally, no concrete measures have been implemented.

Those who are reluctant to regulation issue argue the difficulty, if not the impossibility, to have an international agreement on regulation and disclosures measures.

This agreement is of course necessary but time has passed and minds are moving. The Fed and US financial authorities have been worrying about the last misadventure of a large hedge fund and are more and more inclined to propose some measures.

The European financial authorities and the ECB could be leader on these questions, as the European market will be probably the more concerned by the apparently unabated growth of the hedge funds industry.

Hedge Funds and Financial Stability

by Leon Podkaminer

Summary

Financial instability is a systemic phenomenon which has the potential to engulf the whole financial system, irrespectively of the origins of the initial impulse that set it off. An eventual instability originating in the hedge fund sector would not be much different from an instability triggered by, let us say, an imploding real estate bubble. Whatever an instability's origins, it involves a wave of illiquidity/insolvency spreading rapidly through the financial system, with plummeting asset prices, slacks developing in the real sector and high probability of goods' price deflation.
The hedge fund sector, which performed very well at the beginning of the 2000s, has been much less dynamic recently. The whole sector may be approaching a structural consolidation. Its eventual shake-up will constitute a financial stability risk - especially against the background of tightening global liquidity conditions and rising correlation between/within groups of the funds' investment strategies. However, the risk of a distress in the hedge fund sector igniting a serious disruptions in the financial markets does not seem significant. The share of the sector's assets is still rather low. Its leverage levels are on the whole quite low. Besides, much of their exposures seem to have been carefully monitored by counter-parties, including large banks. Finally, from the financial stability perspective, 'more transparency' of the hedge fund industry does not seem to be particularly desirable and productive. Instead of calling for more transparency (and, implicitly, for more regulation and supervision) the ECB could rather engage in planning actions to be taken should the symptoms of larger-scale financial distress become visible.

Financial (In)Stability

Financial stability is the term applied to characterise 'smooth' operation of the entire financial system which consists of diverse financial markets and their participants. As the major national financial systems are - under progressing liberalisation and globalisation - closely interlinked, it makes sense to see the financial stability as a global phenomenon. 'Smoothness' of the financial system operations requires prevalence of fairly stable expectations (e.g. concerning prices of 'products' traded in the financial markets) and of fairly high levels of confidence in the existing arrangements. At the most elementary level, under financial stability depositors take it for granted that their bank deposits are safe. At a slightly less elementary level, the financial stability means that investors into more sophisticated financial instruments are not unduly preoccupied with the prospects of their investments suddenly becoming worthless.

Individual financial markets, or individual participating agents/institutions can, occasionally, fail to function 'smoothly' - or can even stop functioning altogether (e.g. some banks may become illiquid, or even insolvent) - without precipitating an overall financial crisis, or systemic instability. Occasionally, however, difficulties surfacing in some places may have more general repercussions. Financial markets tend to be highly integrated not only though 'binary' relationships between parties to separate contracts. The fortunes of a participant of the financial market (e.g. an investment fund, or a bank) may be closely linked to the fortunes of tens of thousands of other participants. Apparently unrelated financial institutions operating in seemingly separate markets may turn out to be linked, even if indirectly. A bank extending a loan against a collateral consisting of securities issued by a third party, is indirectly linked to

that third party. A sudden default of that party (or a fall in the value of its securities) may negatively affect the financial position of the bank. This in turn could, occasionally, affect the financial position of other parties (e.g. the creditors of the bank, or its depositors). Thus, there is often a possibility of a disruption appearing in one sub-segment of the financial system to cascade rapidly throughout the whole segment. The propagation of a disruption usually involves pre-emptive actions of market participants whose expectations can change instantly. Panicked investors expecting a fall in the value of their assets may try to dump their assets on the market - and thereby precipitate (or even cause) the fall itself. Depositors fearing a bank's insolvency will run on that bank - and this may well cause its actual bankruptcy. Even rumours of a financial institution (be it a bank, or a hedge – or any other type of investment - fund) facing liquidity problems may well augur the institution's ending in insolvency. Attempts by an illiquid institution at raising cash may involve fire-sales of its financial assets, whose price may then collapse. In effect the net worth of an illiquid institution can quickly become negative. Under such conditions the usual safeguards (e.g. regulatory requirements concerning capital adequacy or permitted exposures) are violated - not because of individual institutions' reckless behaviour in the past, but because of the fast, sentiment-driven, depreciation of assets which have been solid - until the outbreak of the crisis. The market turmoil can quickly turn solid investments into bad loans[1].

The real effects of financial instability: 'bad' deflation-cum-recession

Financial instability is a systemic phenomenon - it engulfs the whole system, irrespectively of the origins of the initial impulse that set it off. An eventual instability originating in the hedge funds' sector would not be any different from an instability triggered, let us say, by an exploding real estate bubble. In any case an unchecked financial instability would involve a fast-spreading wave of illiquidity/insolvency throughout the financial system. Further, it is likely to involve: (i) falling prices of financial assets; (ii) increased preference for holding liquidity (cash); (iii) disruption of normal payments and elementary financial intermediation (also shortage of credit needed even for financing of the working capital in the real sectors of the economy). These developments would most likely be associated with falling prices of goods, associated with the emergence of production/employment slacks in the real sectors. Losses suffered by individuals on the financial markets reduce their wealth - and this is believed to be reducing the demand for consumption goods and services. Losses suffered by firms reduce the size of planned fixed investment. Real investment tends to plummet - also on account of shortage of credit, the expectation of goods' deflation and high real interest rates (a likely consequence of deflation). All in all, an unchecked financial crisis has the potential for playing havoc to the real economy. It creates conditions conducive to 'bad deflation', with falling prices of both goods and financial assets - accompanied by recession. Needless to say, deflation-cum-recession would then be reinforcing the financial crisis.

Hedge funds

Hedge funds are private, limited-liability, pooled investment partnerships. Their equity is usually funded by wealthy individuals or/and institutional investors. The latter include pension funds whose involvement, though currently not very high yet, seems to be on the rise. The common assumption is that partners (investors) in the hedge funds are fairly sophisticated financially. There is a wide range of instruments and investment strategies (often innovative and usually rather complex) used by individual hedge funds. Extensive use is made of

[1] Strict regulatory requirements on risk exposures work very well in 'normal times' - i.e. when they are not much needed anyway. But in 'abnormal' situations they may fuel financial instability: first, they may stock up expansions during the booms, and then they amplify cutbacks during the crises.

leveraged positions and holding large short positions. The set of possible investments and strategies is virtually unrestricted (also on account of the missing regulation). The investments run across many asset categories and geographical locations. It should be stressed that not all of the hedge funds' business is actually 'hedged' - some strategies seek gains from plain speculation.

In contrast to more traditional investment funds (for example mutual funds), the hedge funds fall outside most of national regulations. This reflects the preferences of the interested parties ('appetite for risk') - and is also consistent with the fact that hedge are domiciled primarily offshore (in places like Cayman Islands, Bermuda and British Virgin Islands[2] where regulations are fairly lax and taxes low). In contrast to more conventional private equity funds (such as venture capital funds) which are also 'lightly' regulated, the hedge funds have, on the whole, preferred to invest in relatively more liquid assets.

In the early 2000s the hedge fund industry generated returns consistently higher than those in other sectors of the financial industry. This not only attracted high inflows of capital into the industry - but also increased the number of active funds. Moreover, some other participants of the capital markets started emulating some of the strategies developed by the hedge funds. A number of large banking institutions have set up hedge funds (or funds investing in various hedge funds, the so called funds of hedge funds) of their own.
It has been argued that high capital inflows into the hedge funds (peaking at mid-2004) resulted in the industry's being 'over-invested'. Since about that time the returns generated by the hedge funds have been inferior to those of other financial industries.
The under-performance has been slowing down the inflow of fresh capital. In effect the hedge funds are now less liquid, generally. This has been forcing some changes in the orientation of investment - away from relatively more liquid assets into the less liquid ones. This tendency may be expected to strengthen, especially as the recent era of exceptionally low interest rates seems to be nearing its end. In effect the whole industry may have entered the stage of maturity. Lower returns generally (due to over-investment), combined with fiercer competition and lower availability/higher costs of liquid funds may well increase the 'selection pressures'. This would be reducing the number of hedge funds. Only the fittest may survive (arguably those linked to/backed by established financial institutions, such as large banks). Of course, an eventual industry shakeout would be a natural (and thus welcome) development. Nonetheless, it may – at least theoretically - also produce some potentially destructive systemic instabilities.

The hedge fund sector is moderate in size

Currently the size of assets under management of hedge funds globally, estimated at close to 1.4 trillion USD, is not overwhelming when compared to the size of global capital markets. The assets of the hedge funds amount to less than 1% of the sum of the assets of commercial banks', debt securities and stock market capitalisation. At end-2004 the assets under management of hedge funds were dwarfed by assets under management of mutual funds. The latter managed assets worth over 16 times the assets managed by the hedge funds.

An often voiced concern is about problems that could arise from a potentially high leverage of individual hedge funds (which enables taking larger positions in the financial markets than their assets under management). However, the available estimates indicate that on the whole

[2] At end-2005 close to 70 % of total (global) capital under management of the hedge funds (excluding funds of hedge funds) was domiciled offshore. The share of offshore-domiciled hedge fund capital managed from Europe (predominantly from London) was even higher (close to 77%).

the levels of leverage are quite moderate. Typically, the leverage is less than two times the fund's capital. Of course, the levels of leverage differ widely across funds or strategies. Nonetheless, the extreme leverage levels (as that of the Long -Term Capital Management, with the leverage/capital ratio of about 30 in 1998[3]) seem to be very rare nowadays. It is generally believed that the counter-parties to hedge funds (primarily banks) have learned to control their exposures to the hedge funds. Besides, of course, because much of the hedge-fund business is now managed, directly or indirectly by the largest banks themselves (either through own propriety hedge funds, or through own funds of hedge funds) the problems over excessive levels of leverage/exposures of the majority of the hedge funds may have become less important.

Hedge funds: a limited risk to the system stability

Hedge funds, like other capital market institutions normally play a positive role by increasing liquidity of the market, improving pricing, diversifying risks etc - thus, presumably - increasing the size and efficiency of real productive investment. But, like other capital market institutions, the hedge funds could, under imaginable circumstances transmit, strengthen, or even spark off destructive systemic instabilities. The ECB Financial Stability Review of June 2006 is rightly concerned with some recent developments: 1) rising share of less liquid assets in hedge funds' investment portfolios; 2) increasingly similar positioning of individual funds within broad investment strategies; 3) rising correlation not only within the same but also among differing strategies. The FSR warns of *'potentially adverse effects of disorderly exits from crowded trades'*. High homogeneity of strategies followed, and the resulting similarity of assets held throughout the industry, obviously magnify eventual negative price and balance-sheet consequences of fire-sales of assets. While it is rather difficult (or rather impossible) to identify possible impulse, or impulses, triggering massive sales of hedge funds' assets (FSR mentions the possibility of negative impacts of the tightening of global liquidity conditions[4]), the risk of correlated sell-off of the hedge funds' assets seems to be higher than ever. But, whether or not the recent development culminate in a crisis hitting the hedge funds cannot be known at present. There can be even less certainty about eventual contagion effects, disorganising other segments of the global financial markets.

Although keeping a watchful eye on the financial sector is always commendable, there are some good reasons for not sounding alarm over the position of the hedge funds - at least for the time being.
First, as already mentioned, despite dynamic growth over the last decade, the hedge fund industry still accounts for a relatively small share of the financial market. Moreover, more recently growth of the industry has slowed down – this may indicate that the whole industry may be approaching its maturity.
Second, the levels of leverage in the hedge funds do not, on the whole, seem excessive. (Quite certainly, the levels of leverage in the commercial banking are generally much higher).
Third, the overall financial system seems to be in a pretty good shape. There is little evidence of over-inflated bubbles in the assets' markets likely to burst soon. The present, credit-driven housing booms cannot be compared to the exuberant IT booms of the late 1990s. In particular, the commercial banking and insurance sectors - the really big players - are in a very good

[3] The Long Term Capital Management was a hedge fund which became illiquid and only narrowly escaped insolvency in late 1998, losing close to 5 billion USD in the course of a few weeks. LTCM was huge by the present-day standards. At the beginning of 1998 it had equity of 4.7 billion USD and assets of around 129 billion USD (with debt of around 124.5 billion). Its nominal off-balance sheet derivative positions stood at 1.25 trillion USD.
[4] That is, the major central banks, including ECB, raising their interest rates.

shape globally (with moderate, and on the whole controlled, exposures to hedge funds[5]). Thus, the whole financial system is more likely to absorb eventual distress originating in the hedge funds than would be the case should the system itself be in a bad shape. Hedge funds weathered recent market turmoil (downgrades of GM and Ford debt, bankruptcy of Delphi) quite well. This suggests that the funds are in fact more resilient than sometimes believed. (Or, that the whole financial system is - at present - more capable of neutralising even significantly large negative shocks).
Fourth, an eventual failure of a group of large hedge funds would still be potentially less damaging than larger-scale failures in the banking system. Unlike the latter, the hedge funds do not play any role as far as the operation of the payment system is concerned (and they play no role in traditional financial intermediation - deposit taking, provision of loans). Thus, the most vital functions of the financial system would not be directly (and immediately) affected by a crisis in the hedge fund sector. Only if a crisis in the latter sector is allowed to spill over into banking, it could have truly disastrous consequences.
Finally, one can be pretty sure that should some signs of larger-scale distress in the hedge fund industry become visible, there would be a prompt (and probably effective) response from the major (or at least the US) regulatory, monetary and – if need be - fiscal authorities. The US FED responded quickly and decisively to the symptoms of liquidity crisis at LTCM in 1998. It sponsored a prompt bail-out funded by the private sector. The rescue operation was to prevent 'falling domino effects' running throughout the domestic – and then global - financial system. The confidence in the financial system was supported in violation of the formal legislation. The regulators did not insist on immediate write down of many virtually worthless assets held on the balance sheets of financial institutions in London and New York. (Facts became LESS transparent then - and that served a good purpose of preventing panic/contagion). Simultaneously, FED eased its monetary policy. At present the probability of the LTCM crisis spilling over in 1998 into banking and other segments of the financial market is sometimes judged as rather small. Nonetheless, as on several other occasions, Mr. Greenspan preferred playing things safe. This may have reflected the memory of Big Crash of 1929 when an unattended financial turmoil transformed into a catastrophic recession.

More transparency needed ? Rather not

The opinions over insufficient transparency of the hedge fund industry abounded in the aftermath of the 1998 LTCM debacle. Numerous national, as well as international bodies urged tightening regulation, supervision and transparency. Increased transparency was believed to be necessary to achieve effective market discipline and contain systemic risk. But as the memory of the LTCM crisis faded, the concerns about the insufficient transparency of the hedge fund industry seemed to be losing on validity. However, concern over inadequate transparency has been recently voiced by the ECB. (*'On several occasions, the ECB emphasised that more transparency was needed in order to be in a position to better assess financial stability risks arising from the activities of the hedge fund industry.')*

However, from the financial stability perspective, 'more transparency of the hedge fund industry' does not seem to be particularly productive or desirable.
First, the provision of greater transparency (whatever that means) is likely to involve greater costs to the hedge funds. This may only strengthen the tendency to stay (or move) offshore.
Second, it is up to the partners of the hedge funds (assumed to be financially clever themselves) to demand whatever information they desire from their funds' managers.
Third, it is not clear at all to whom the hedge funds should be more transparent ('general public' ? national regulators ? ECB ? IMF ? BIS ?); for what specific purpose (just for the

[5] See FSR 2006, pp.109-10.

sake of 'more transparency' ? to justify specific regulatory (or other?) measures ? which measures and executed by whom ?). Needless to say, it is not clear at all what specific pieces of information should complement information which is already available to the funds' partners and counter-parties.
Fourth, it is up to the banks and other big players, including insurance companies and pension funds, to watch their hedge funds' exposures. Much of the potential information (relevant as well as irrelevant) on the hedge funds' activities is already potentially available (at least theoretically) from the funds' counter-parties which have to report to their national regulators. The regulators could - should they wish to - be well informed on what is going on in the hedge fund industry - by scrutinising the existing records regularly submitted by the regulated segments of the financial market.

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Creating more transparency over hedge funds

"Greater transparency should help provide counterparties, other market participants and regulators with early warning signals about the risk profile and extent of leverage accumulated by HLIs. If mechanisms for enhanced transparency are properly designed they will enhance the effectiveness of market discipline." (FSF report on HLIs, para. 92)

It has repeatedly been argued that there is a lack of transparency regarding hedge funds. In this view, hedge funds are the "black holes" of the financial system, i.e. virtually invisible objects that are only observable by their impact on nearby objects such as banks and prime brokers.

Greater transparency may therefore be desirable. However, calling for greater transparency only makes sense if it enhances market discipline. For market discipline to work, the entities being subjected to greater transparency obligations must be clearly identifiable; comprehensive, if not full information must be available at reasonable cost; no bail-out must be expected; and the management of both borrowers and lenders must have an incentive to react to market signals.

1) Definition

It is important to start with a note on the definition of hedge funds. Any potential regulatory action concerning hedge funds – including a consideration of measures designed to enhance transparency – requires as a precondition that the object of the measures considered is clearly identifiable.

There is some general consensus that the following elements form part of a hedge fund definition: *any pooled investment vehicle that is privately organised, administered by professionals who are paid performance-related fees, is not widely available to the general public, and can freely pursue various active investment strategies to achieve positive absolute returns*. Having said this, it must clearly be pointed out that **there is no generally accepted definition of hedge funds**.

Moreover, the hedge fund universe comprises many different forms and strategies (see table at end). Hence, it is impossible to generalise about their impact on financial markets. This is not trivial, because when one talks about regulating these entities obviously one first of all needs to identify what perceived market failure one wants to safeguard against. Thus, e.g. an opportunity hedge fund that limits itself to speculating on corporate restructuring, M&A, etc. is unlikely to cause systemic risk, whereas a macro hedge fund may well do.

While solutions to the issue of identifying hedge fund properly are feasible, finding such solutions is complicated by the fact that unlike traditional investment funds, hedge funds can invest in all types of assets and may thus change their nature and strategy at any time. (Admittedly, though, as specialised expertise is needed to run a hedge fund successful, but is not available without limit, most hedge funds choose to concentrate on a particular strategy. As a hedge fund is usually marketed under this strategy, changing strategies at will is difficult. This is all the more true to the extent that institutional investors gain in importance and make their investment decision on the basis of a particular strategy. Especially those investors that invest in several hedge funds to diversify their risk do not tolerate style drift, as subsequent changes in the original asset allocation can cause risk concentrations in certain asset classes, see below).

Beyond definitional issues in the narrow sense, it needs pointing out that any data on hedge funds – be it their number, their assets, leverage, asset allocation or performance – is based on estimates by consulting firms, not on systematic data compiled by an official institution.

There is, by now, substantial evidence that statistics on hedge funds are biased towards the positive, amongst other reasons due to survivorship bias. Hence, all of these surveys and this data must be considered with substantial caution.

2) Recent industry developments

The huge attention that hedge funds still receive stands somewhat in contrast to the fact that hedge funds, in many respects, have become a normal part of the financial industry.

- Normal in terms of the investor base, which now includes pension funds, foundations, and even central banks, who, by some estimates, collectively account for 50-60% of assets managed by hedge funds already. 60% of all US endowment funds have invested in hedge funds. This changes the nature and behaviour of hedge funds: these groups of investors have professional expertise and clout; they demand transparency and do not tolerate style drift. While these changes make hedge funds more accountable and arguably more stable, they may also change hedge funds' behaviour: For instance, as hedge funds' performance comes under closer scrutiny by funds of funds and institutional investors, it becomes more likely that hedge funds cut losses and exit riskier positions. This may increase volatility in markets.
- Normal in terms of their strategies: Recently, hedge funds have become substantial players in credit markets assuming the role banks traditionally held in the economy. Credit-oriented hedge funds have become an important source of capital to the credit markets. According to FitchRatings, they grow faster than other types of hedge funds. They would act similar to other creditors, or even more pro-cyclical as they have to cover their leveraged positions. Also, their investment is concentrated in the high-yield, high-risk segment of the credit market, which tends to be more volatile anyway
- Normal in terms of hedge funds becoming part of the financial establishment: There are more large funds, greater media exposure, and greater name recognition. Overall, greater maturity is likely to have lead to better risk management and improved operational structures and will continue to do so.
- Normal also in terms of the returns: in 2005, according to the Credit Suisse / Tremont Hedge Fund Index investors received a return of 7.6% – an investment in Germany's DAX, to name but one, would have given them 26%.

The latter point is of particular importance: It is as of yet unclear whether the lower returns recorded in the recent past reflect a fundamental trend or just the market situation of recent years. Certainly, the extended period of low volatility has made it difficult to earn super-normal returns. But low returns may also reflect two more fundamental trends:

- Exploiting market inefficiencies has a natural limit: as more and more hedge funds enter the market seeking out and chasing arbitrage opportunities there will be fewer of them. While there are still a huge number of arbitrage opportunities out there, exploiting them may require ever higher research costs and possibly higher risk.
-
- As investor base has broadened, it now includes investors that are less willing to bear the risk of highly volatile returns and want to see more stable, if less exceptional returns. This has led some hedge funds to favour portfolio strategies where a broad portfolio of traditional assets provides a stable basis of returns, to which a range of riskier, higher-yielding assets are added in order to achieve higher returns.
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In any case, if extraordinary returns cannot be maintained then hedge fund managers may find it more and moiré difficult to justify high management fees, which, in turn, may create incentives to test the limits of accepted standards vis-à-vis clients and in the market.

3) Benefits of hedge funds

Hedge funds provide benefits to capital markets and have contributed to the greater resilience of financial markets in the recent past.

- Hedge funds activity enhances liquidity and drives innovation, as hedge funds trade across asset classes. They increase the liquidity in financial markets, especially in high-risk, less liquid market segments. (The flip-side of hedge funds providing liquidity, of course, is that some market segments depend on hedge fund activity to maintain liquidity. Put differently, in some market segments, hedge funds provide so much liquidity that these markets could not efficiently work without them.) While hedge funds account for only about 2% of global securities market value, …
    - … they account for more than half of all trading activity in some US fixed income segments,
    - … in the cash markets, hedge funds account for 45% of trading volume in EM bonds, 47% of annual trading in distressed debt securities, one third of leveraged loans and one quarter of high-yield bond market volume.
    - … they account for 25-30% of global trading volume in credit derivatives and are net protection sellers;
    - … according to Greenwich and other sources, hedge funds account for more than 50% of all trading volume in credit derivatives and even more in the more complex structured CDx products.
    - … they control 30% of trading volume in high yield bonds, 26% in leveraged loans, 80% in distressed debt (Greenwich Associates, 2004).
- They increase the efficiency of financial markets and, hence, resource allocation in the economy, as arbitrage opportunities are exploited and thereby, ultimately, eliminated.
- They help to spread risk within the financial system. Hedge funds are willing to take (contrarian) risks and assume the riskiest portions.

Consequently, given their beneficial role for modern and dynamic financial markets, it would be disadvantageous if excessive regulation drove hedge funds out of Europe's financial markets.

4) What are the risks?

Again, if pondering regulation of hedge funds it is important to be clear about which of the various risk categories one intends to address.

a) Investor protection

Recently there have been cases of outright fraud in the hedge fund industry. One reason why fraud is easy is that valuation of complex trading positions leaves large room for discretion, which makes it easy for hedge fund managers to disguise the true value of the portfolio. However, fraud is already covered by existing penal laws. As long as hedge funds are being sold by means of private placements, not public offerings, and as long as the investor base is being limited to high net worth individuals and institutional investors, greater transparency obligations are not needed, as these investor groups can fight for themselves.

The case for enhanced transparency would be greater, if hedge fund were to be marketed to retail investors and by means of public advertisement. In this case, there would be an asymmetry of information that would warrant a tighter regulatory framework.

More recently and also with an eye to investor protection, the UK-FSA has contemplated to have hedge funds notify so-called side-letters. These are agreements that grant more favourable terms to some investor (e.g. shorter lock-up periods, lower management fees).

Unlike is the case with mutual funds, differentiated terms for investors in the same fund are possible in the case of hedge funds. Nonetheless, there might be an issue as regards investor protection, if it is not transparent to all investors that side letters are allowed. In addition, side letter arrangements could conceivably also have financial stability implications (e.g. lower lock-up periods would potentially increase the danger of a sudden outflow of funds) and are therefore of legitimate interest to financial supervisors.

b) Influence on corporate governance
Recently, there have been cases in which hedge funds acquired sizeable stakes in listed companies and challenged the management of these companies (Deutsche Börse being the most prominent example).

Contemplating any kind of regulation first requires answering the question: Do hedge funds behave different to other investors?

- Unlike many shareholders, hedge fund managers – as financial professionals – tend to have a good understanding of the business of a company, especially the financial side of it. Assuming that a constructive dialogue can be organised between them and management, this makes hedge funds valuable advisors.
- Hedge funds tend to be active shareholders; in principle, this is welcome. Most public companies tend to have too passive shareholders, which often leads to a lack of control of management and, as a consequence, a lack of focus on shareholder value. Like any shareholders, hedge funds – as co-owners of the firm – have a right to criticise management decisions and to demand a different course of action.
- As they are active shareholders, hedge funds – like other active shareholders – might attain a disproportionately large voice. However, this cannot be blamed on the activist shareholders, such as hedge funds, but must be blamed on the passive shareholders that do not exercise their ownership rights.
- Hedge funds may have a shorter time horizon, which might lead management to succumb to “short-termism”, reduce investment budgets etc. However, it needs to be realised that (1) other shareholders can have short time-horizons, too; (2) hedge funds rarely are the majority shareholders; (3) if necessary it is up to management to convince shareholders of the virtues of a long-term strategy

If, despite of the above-mentioned arguments, enhanced regulation is contemplated, then it must be clear that this kind of regulation would fall into the domain of corporate law, rather than financial supervision. It should also be clear that all other investor groups including private equity funds and groups of individual investors must be treated in the same way to the extent that they take the same kind of action as hedge funds.

There are essentially two instruments that would be suitable to address the issues raised as regards corporate governance. First, the definition of thresholds that trigger announcements about investments in publicly listed companies. These have long been used to ensure that information is made public to all investors when an investor acquires a controlling stake. Against the background of highly publicised cases such as Deutsche Börse, it has been contemplated to define additional, lower thresholds (traditionally, 5% has been the lowest) – sometimes, thresholds as low as 1% or 2% have been suggested. However, it is necessary to recall the original intention of these notifications: They are designed to inform existing shareholders about substantial shifts in the investor base which might materially affect the value of their investment – they are not designed to warn management.

Second, in order to preserve market integrity, acting in concert – i.e. coordinated action by several minority shareholders that is not disclosed as joint action vis-à-vis other shareholders and the company concerned – must be identifiable and be prohibited. The challenge here is that supervisory authorities be equipped to investigate whether acting in concert was happening even in those cases where investors are located in other jurisdictions.

c) Systemic stability

The objective here needs to be defined clearly:

- Is it to prevent a hedge fund from taking positions so large that, if these go wrong, the stability of the fund, its lenders or these market segments are threatened?
- Or is it preventing building positions that cause huge price swings in particular markets (such as a certain currency), possible exacerbated by herding of other market participants? (Note that the likelihood of large market swings is larger the narrower the market segment is.)

The distinction is important as the potential regulatory response would have to be different. As regards the first objective, controlling leverage and stricter risk management by hedge funds and by banks lending to them would be the appropriate instruments; as regards the second objective, disclosure of market positions would be appropriate (see below).

Better risk management would include

a) at hedge funds: the use of stress testing and value-at-risk valuation. Furthermore, lock-up periods limit the extent to which hedge fund investors can withdraw money in the case of adverse circumstances. This limits the risk that hedge funds must liquidate assets in falling markets to satisfy investor demands; however, it should be noted that this only alleviates pressure from investor, not however, potential selling pressure stemming from margin calls or the necessity to meet loan obligations;
b) at prime brokers, likewise the use of stress-testing; in addition, the use of collateralisation and margining. It must be noted though that while the latter are good as risk mitigation, they may also increase volatility when asset price declines trigger further margin calls which may lead to further asset sales. However, strong competition between prime brokers for hedge fund mandates could weaken, and sometimes already has weakened, margin and collateralisation requirements. In addition, hedge funds use multiple prime brokers to keep their trading strategies secret – hence, every single prime broker will only have a limited view and no certainty about detailed, overall exposure on a real time basis. Thus, individual banks may only see part of a hedge fund's positions and if their exposure is small, may perceive less need to worry about the overall risk exposure of the fund.

5) Principles for hedge fund regulation

Any measures contemplated must satisfy the following principles:

- It must be an international regime, as otherwise hedge funds will be driven into non-supervised jurisdictions or engage in regulatory arbitrage;
- Measures must satisfy a cost-benefit analysis;
- Measures must be competitively neutral, i.e. the principle of "same business, same risk, same rules" must apply. Notable, this principle must apply in both directions: hedge funds having the same risk profile and doing the same business as regulated entities must be subject to the same rules as these entities – but other entities, such as private equity funds, engaging in the same activities such as hedge funds must also be subjected to the same rules as hedge funds.

6) Direct transparency and supervision

Disclosure obligations could be imposed as regards

(1) setting-up business: This would at least provide for an overview of the number of hedge fund and allow for some examination of the suitability of managers (previous convictions etc); this was envisaged by the SEC for US based hedge funds, but subsequently overthrown by the courts),
(2) individual positions,
(3) specific transactions, e.g. short sales,
(4) leverage,
(5) overall investment positions.

Obviously, which of those is chosen depends on what kind of risk (see above) one wants to target. In addition, it would have to be decided whether the disclosure obligation would exist vis-à-vis the general public (as it does with public-listed firms) or vis-à-vis supervisors. Generally, the case for public disclosure is weak: On the one hand, as long as hedge funds are not marketed to the general public there is no justification for a public disclosure; on the other hand, there is little informational value for the general public in complex hedge fund data, while at the same time too detailed disclosure would disclose proprietary information. An argument could also be made that direct disclosure may not be directly useful in controlling hedge funds' risk-taking, but may induce bank creditors to exert pressure on banks to reduce their exposure to hedge funds – however, that would obviously be a very complicated way of achieving an objective that could be achieved more easily (see below).

However, there are some weaknesses with direct transparency obligations, some more important than others:

- Direct disclosure is only useful if it occurs on virtually a real-time basis;
- Hedge funds would need to disclose their positions in all markets, i.e. on a cross-border basis (in practical, there could be a designated supervisor / institution to report to , which could then share the information with other supervisors), as otherwise a comprehensive assessment of the risk position were not possible;
- supervisors may not have the resources (and expertise) to analyse such information;
- other market participants may wrongly conclude that since supervisors receive the data they will safeguard financial stability – which would increase moral hazard.[1]

There are in fact disclosure requirements in place already as regards specific position taking. Market positions already need to be announced in order to prevent market manipulation or market domination: In US, large positions in currency futures markets (USD; EUR, GBP; CAD; JPY and CHF) must be notified to the Fed. US Treasury may require information on positions in to-be-issued and recently issued securities to ensure that large players do not squeeze the market. Short positions need to be notified. CFTC requires daily reporting of all futures position above certain levels.

A point can certainly be made to extend coverage of market position reporting and for countries without such systems to adopt them. It should be noted, though, that the reporting requirements apply – rightly so – to all market participants, not just to hedge funds. Hence, this kind of disclosure requirements helps to identify possible market manipulation and possibly help to identify the building up of positions that might be material for systemic stability, but does not provide a comprehensive picture for an assessment of systemic stability and the role of hedge funds therein.

[1] The latter two arguments are being expressed by the FSF (para 97), but are obviously weak.

Looking beyond mere market position reporting, the key question as regards the usefulness of a more comprehensive direct disclosure is: what is the likely reaction of hedge funds? In other words: How likely is it that hedge fund would re-locate to non-regulated locations or change strategies to evade obligations? Based on the experience with SEC notification requirement, the answer is: Very likely. As the SEC registration requirement was only applicable to hedge funds with lock-up periods of max 12 months and hedge funds with more than 15 clients and assets of USD 25m or more, hedge fund reacted in the predictable way, i.e. by lengthening lock up periods, and by opening parallel funds, thus limiting the number of investors and asset volume.
Put differently: If even the relatively weak notification requirement – which did not in any way affect the trading activities of hedge fund – triggered evasion, how much more likely would evasion be in the case of stricter requirements?

7) Indirect transparency and supervision

It is often recommended to establish an indirect supervision of hedge funds by means of monitoring the banks that lend to hedge funds. The reasoning for this recommendation is twofold:

- On the one hand the recommendation accepts that a direct supervision of hedge funds is not possible; if greater transparency over hedge fund activities is desired by supervisors nonetheless, then an indirect way of doing so, must be sought;
- On the other hand, indirect regulation reflects the notion that what makes hedge funds systemically dangerous is their leveraging their positions by means of bank credit, not their position-taking as such. In turn, this notion is based on two assumptions:
    - One, that hedge fund positions on their own are not sufficient to endanger systemic stability (which, incidentally, is at least debatable given the size of assets – estimated at some USD 1.2tr – and their relevance for certain market segments).
    - Two, that banks exposure to these entities are such that a failure of these entities would endanger the systemic stability of banks.

It is clear from these motivations that transparency obligations for banks doing business with hedge funds would reasonably be directed at disclosing lending volumes. (That is to say that there is no rationale to establish, say, a special notification regime for prime brokers requiring these to disclose the mere fact that they do business with hedge fund XYZ.) Undoubtedly, leverage increases the likelihood that hedge funds may pose a threat to systemic stability. However, there are a number of points to keep in mind when talking about leverage:

- Leverage is enhanced not only by means of using loans, but also by means of using derivatives. Actual leverage is therefore significantly higher than would appear to be the case on the basis of leverage as measured by loan exposure. For instance, hedge funds often buy the least liquid, most risky part of credit transactions, and therefore have a role that outstrips their nominal investment. (As an example: in ABS transactions, low rated tranches (BBB and lower) account for ca 7% of total issuing volume. The deployment of 10m of hedge fund assets, leveraged at a factor of 5 (i.e. total investment of 60m) would give hedge fund effectively first loss exposure to an underlying credit volume of more than 850m.)
- The ability of hedge funds to assume leverage is limited by two factors: the risk-return preferences of investors and the extent and terms to which lenders are willing to provide funds. The willingness and ability of the latter is determined by the regulatory and capital framework for them and the discipline exerted on them in the market.

In addition, there is another deficiency: market discipline can only be exerted on banks when there is knowledge and certainty about the risks contained in their portfolio. But as regards their exposure vis-à-vis hedge funds this is difficult to assess for banks' creditors, given the

complexity of products hedge funds invest in, unclear valuation standards for these products, the rapidity with which positions can change, and the lack of long time series of historical relationships. However, this data is low-frequency (monthly or even quarterly), which may be insufficient considering the fact that hedge funds position can change rapidly.

In other words, disclosure requirements for banks would in all likelihood only provide insights to supervisors, but would not enhance market discipline. Hence, rather than establishing new public disclosure requirements, it is fully sufficient to include exposures to hedge funds in normal supervisory reporting by banks. Indeed, this is already largely the case: In Germany, e.g., both investments as well as loans are classified as loans and are therefore subject to the lending limits. More importantly, they are subject to reporting on large exposures, which flows into a credit register.

However, there remains one deficit: This kind of data only delivers insights to national supervisors about the exposure of their respective banks: If the German supervisor knows about lending volume extended to a particular hedge fund by German banks and US supervisor knows about lending volume by US banks, both of these sets of information is incomplete, as it does not provide a consolidated picture about the leverage individual hedge funds have. Thus, indirect reporting is only helpful if brought to the international level. For this to be achieved we would need an international credit register. This would need to encompass the major financial centres and largest lenders and include on- and off-balance exposures. Even starting just with traditional lending would be meaningful. (Incidentally, while the need for an international credit register may be largest in the case of hedge funds, logically the question must be asked why such a register should be limited to HLI, as the same problem obviously exists with regard to other large creditors, too – though arguably, there is another way to control these large creditors, as they have to disclose their balance sheets publicly, if they are large listed companies.)

Summing up, enhancing transparency via indirect disclosure requirements (i.e. via a monitoring of banks' lending to hedge funds) seems a realistic way of achieving one important objective. However, the question must be raised whether it is compatible with principles of good and fair regulation to impose the regulatory burden on banks, rather than directly on hedge funds, just because it happens to be the more convenient or the only possible way of doing so. If authorities are of the opinion that hedge funds constitute systemic risk, then hedge funds must be supervised – and be supervised directly. In addition, indirect supervision imposes an additional burden on banks, which after all are not only lenders to hedge funds, but also competitors.

8) Ratings for hedge funds

It has been proposed that rating agencies should assign ratings to hedge funds and hence create transparency over their risk situation. Several rating agencies (incl. S&P, Moody's and Morningstar) are working on methodologies for such ratings. While a few hedge funds have voluntarily sought ratings lately, this is unlikely to be a viable option.

The reason is that it is unlikely that rating agencies would be able to assess hedge funds risk position: Unlike for other debtors, for which rating agencies traditionally work, the risk position of hedge funds changes literally daily as their asset allocation changes constantly due to the fact that hedge funds are active traders. For instance, S&P wants to assess the quality of (risk) management and of the portfolio as well as leverage. However: leverage changes quickly in times of crisis: If the asset value declines, and losses mount, leverage goes up. Hence, for assessing the likelihood of default (i.e. a hedge fund being unable to repay its debt or pay back its investors) a rating is useless – and will therefore also be useless for potential investors. The only thing rating agencies could reasonably assess is the quality of a hedge fund's risk management and methodology, not their risk position, nor an assessment of potential losses, let alone their potential systemic implications.

In fact, in a broader sense, irrespective of whether hedge funds as private sector entities may find it useful to seek ratings, the proposal is odd if proposed as a means to detect potential threats to financial sector stability. As pointed out in the context of indirect supervision already, if authorities thought that hedge funds pose a danger, then obviously they should subject hedge funds to regular financial supervision. The idea to entrust the task to rating agencies is all the more odd as in the course of designing the Basel process, regulators were sceptical about rating agencies' ability to assess credit risk correctly (which is why the IRB approach, relying on internal ratings was devised).

Hedge fund strategies

Directional	Long/short equity hedge	Equity-oriented investing on both the long and short side of the market; not necessarily market neutral.
	Dedicated short-bias	Net short position in mostly equities and derivatives.
	Global macro	Broad range of asset classes, both short and long positions, in response to assessment of major trends in global economy.
	Managed futures	Portfolio concentrated on financial and commodity futures.
Event-driven	Risk (merger) arbitrage	Investment in the companies involved in a merger.
	Distressed / high-yield securities	Investment in assets issued by companies that fall intot financial distress.
Market neutral	Fixed income arbitrage	Aims to profit from price anomalies between related fixed income securities.
	Convertible arbitrage	Typically long in a company's convertible bond and short its stock.
	Equity market neutral	Designed to exploit equity market inefficiencies.
FOF	Fund of funds	Invests in several hedge funds.

Source: ECB (2005)