EMU AT RISK

7TH ANNUAL REPORT OF THE CEPS MACROECONOMIC POLICY GROUP

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This report presents the findings and recommendations of the CEPS Macroeconomic Policy Group (MPG) for the year 2005. The MPG is a select body of highly respected economists who have undertaken to carry out independent, in-depth research on current developments in the European economy and to publish their findings in an annual report. CEPS gratefully acknowledges financial support from Deutsche Bank, London, and Tudor Investments for the work of the MPG. The views expressed in this report are those of the authors writing in a personal capacity and do not necessarily reflect those of CEPS or any other institution with which the members are associated.

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Preface

This is the seventh annual report issued by the CEPS Macroeconomic Policy Group (MPG) since it was reconstituted at the start of economic and monetary union in 1999. Special reports on the Stability Pact and on enlargement were also published in 2004 and 2002, respectively. (A full list of MPG reports, dating back to 1983, is reproduced at the end of this book.) Unfortunately, our reports have become progressively more pessimistic in their outlook for the European economy. I therefore wish to emphasise here that this pessimism comes from a group whose members have for a long time supported the creation of EMU. However, we have now reluctantly come to the conclusion that a combination of difficult initial conditions, declining economic fortunes and, above all, wrong policy choices have brought the entire enterprise to a critical point.

The rejection of the draft Constitutional Treaty by the French and Dutch people portends a period of stagnation and general uncertainty in European affairs that threatens to last some time. In these difficult times, it pays to be realistic and to look at the difficulties that lie ahead. We remain hopeful that in the end Europe will overcome its difficulties, but the prospect of failure can no longer be ruled out. This is the spirit that has informed our choice of a title for this year's report.

We wish to acknowledge the valuable contribution of Francesco Daveri in the annex on productivity. Dennis Görlich provided excellent research assistance. All remaining errors are ours.

The work of the CEPS Macroeconomic Policy Group would not have been possible without the continuing support of our main sponsor, Deutsche Bank, London, and Tudor Investments. I wish to thank them once more for their material and financial contributions.

Daniel Gros
Director

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EXECUTIVE SUMMARY

Policy Conclusions

The Euroland economy continues to disappoint while policy-makers are unable to rely on the usual macroeconomic instruments to stimulate growth and employment. An ongoing tug-of-war between short-run and longer-term considerations has limited the extent to which both fiscal and monetary policy could be used to stabilise demand. In the end, macroeconomic policy has ended up in the worst of all worlds: long-term discipline has fallen by the wayside, but there has also been no short-term boost to demand. Moreover, serious intra-area divergences are starting to emerge that could put EMU in danger.

Against this background, we have the following policy recommendations:

1) The ECB should downgrade its short-term concern about cyclical economic developments and pursue a monetary policy aimed at preserving the value of the euro in the long-term.

2) The core countries urgently need to return to fiscal discipline. They should do so in their own interest and to set an example that would allow them to exert pressure on potential soft currency countries to do the same.

The common problem behind these recommendations is a tension between short-term objectives and long-term constraints.

In the monetary field, the ECB has ignored the medium-term warning signals stemming from the acceleration in money and credit growth. In fact, it looks as if political pressures are inducing the ECB to focus on short-term growth considerations at the cost of neglecting long-term stability risks.

In the fiscal field, the key disciplinary device, the Stability Pact, has already effectively been emasculated by politicians who, pressured by persistently weak growth, opt for 'short-termism'. This is dangerous because at the same time fiscal policy is coming under intense long-term pressure especially in those countries that have not been able to maintain price and cost discipline.

The political difficulties that the entire EU must now confront after the French and Dutch referenda make it even more important to focus on the long-term goal of preserving price and financial stability in EMU. The neglect of the long term by national governments has clearly not paid off. The ECB needs to take action to preserve its credibility.

Executive Summary

Previous reports of the CEPS Macroeconomic Policy Group have amply documented the structural causes for the lacklustre performance of the Euroland economy: the decline in productivity growth and the ageing of the population. In this report we document how structural weakness has impeded the effective use of the usual macroeconomic policy instruments. The comparison with the US undertaken in chapter 1 reveals a startling picture. In both the fiscal and the monetary fields, the US has been able to react much more strongly to the downturn that started after the stock market bust. For example, the cyclically adjusted deficit has moved between 2000 and 2004 by five times more in the US than in the eurozone. Similarly, the variability (standard deviation) of the so-called monetary conditions index (which measures the joint impact of interest and exchange rates) has been five times higher in the US.

There is a simple explanation for this huge difference in the degree to which macroeconomic policy was used to stabilise the economy: in the eurozone, longer-term constraints, even if often only reluctantly recognised, limited the freedom of movement in the short run.

Fiscal policy was (and still is) torn between short-term cyclical expediency and the realisation that population ageing actually requires a balanced budget over the medium run in order to prevent debt levels from exploding (see chapter 1). Caught between Scylla and Charybdis, fiscal policy was kept just tight enough (at least in the large countries) to offset the impact of the economic cycle.

Similarly, monetary policy was (and also still is) torn between a continued rapid growth of monetary aggregates and economic weakness (plus, until recently, a strengthening currency). In the end monetary policy was loosened just enough to keep monetary conditions from tightening while preventing money growth from accelerating too much. Again, this led to a policy setting that was barely responsive to the economic cycle.

Unfortunately, the dithering extended to other policy fields as well. Structural reforms were undertaken half-heartedly as policy-makers succumbed to the fear of the near-term negative economic and political consequences, thus depriving Euroland of the benefits of higher growth and employment that would come in the long-term – i.e. now, if reforms had been undertaken when they were promised. The latest and perhaps best example of this is the rejection of the services directive, where the short-term political cycle prevailed over the long-term needs of the European economy.

Thus, it is fair to conclude that the *immobilisme* of economic policies in the euro area is the result of ongoing conflicts between contradictory short-term and long-term objectives. It is a dogma of economics that policies can only

achieve one objective at a time. European policy-makers tried to achieve too many things at the same time, and ended up with weak growth, a weak fiscal position and a minimalist reform effort.

Why did the long-term constraints not apply in the US? The answer is simple: the US does not face the same longer-term constraints. In particular, US fiscal and monetary policy could count on a much more dynamic and flexible economy as many structural reforms had already been undertaken during the 1980s. Moreover, the greater dynamism had allowed policy-makers to tighten both fiscal and monetary policy much more in the run-up to the 1999-2000 boom. The key to the transatlantic difference in policy activism thus lies in the transatlantic difference in terms of productivity and potential output.

We also show that that there are large systematic differences within the euro area, with the small countries performing on average much better than the large ones on almost every indicator (higher growth, lower deficits, etc.; see chapter 2 for details). This difference in performance suggests that better policies can make a large difference even if monetary policy is the same for everybody.

Monetary policy has been on hold for over two years now. We show in chapter 3 that this masks to some extent a considerable variance in both the so-called monetary conditions index (which tightened due to the appreciation of the euro during most of the period under consideration) and in the intentions of the ECB, as signalled by its main publication. We show that pronouncements of the ECB tended to become systematically more hawkish whenever survey indicators, such as the Purchasing Manager Index (PMI), strengthened and vice versa. It is disconcerting to see that 'ECB speak' has systematically lagged behind this indicator. A longer-term consequence of focusing monetary policy on the short term has been that since 1999 money and credit have consistently grown by more than nominal GDP, and by much more than foreseen under the reference value of the ECB. So far, this 'monetary overhang' does not seem to have had an impact on inflation and is unlikely to do so for a long time, given the weakness in European labour markets. We argue however that this is no reason for complacency. Loose monetary conditions can also manifest themselves in asset price inflation, notably in the housing market. When these bubbles burst, for example, when housing prices stop rising, this often leads to a prolonged period of economic weakness. The main long-term cost of an excessively loose monetary policy might thus be economic weakness rather than consumer price inflation.

The risks for EMU are increasing not only because longer-term disequilibria become evident in fiscal and monetary policy, but also because serious divergences are now appearing within the euro area that threaten its long-

term cohesiveness (chapter 4). The most manifest example of this threat comes from what promises to be a long-term divergence between Germany and Italy. Since the inception of EMU, Italy has lost considerably on any measure of competitiveness, providing almost an exact mirror to Germany, which has gained in price and cost competitiveness, thereby enabling it to boost its intra-area market share. Until this year, the divergence did not become apparent in overall growth rates because of opposite developments in housing markets. However, once housing prices in Germany recover from the post-unification bust and Italy enters recession, the relative position of Italy is likely to deteriorate seriously. This is likely to lead to strong pressure on Italian government finances – and on government finances in other countries with a similarly deteriorated competitive position. With Italian public finances already now in a precarious state, it is easy to imagine the pressure that will be brought to bear on the ECB to keep interest rates low and to weaken the euro.

The stage might then be set for a 'lira-isation' of the euro, but this is not an unavoidable outcome. The 'euro-isation' of Italy is also possible, and represents by far a more desirable scenario, but it will require painful adjustment efforts in Italy itself and a strong commitment by the ECB and by all the EU institutions in general to preserve the stability of the euro even in the face of seemingly irresistible short-term pressure to loosen up.

Chapter 1
Euroland vs. the US: A Tale of Two Economies & Two Approaches to Macroeconomic Policy

2005 is likely to become the fifth consecutive year of disappointing growth for Euroland. Most current projections for 2005 hover around 1.5%, after only a marginally better result in 2004 and worse ones for the years 2001-2003. This must be contrasted with the performance of the US economy whose growth has consistently remained above 3%, after a short recession 2001. It is sometimes argued that this difference in performance is a result of different policies, with insufficiently expansionary macro policies being adopted in Euroland as compared to the US. This chapter looks briefly at this argument and shows that there is indeed a big transatlantic difference. But the difference does not lie in the average policy settings over the last half decade or so, but rather in their variability. The key difference is thus in policy *activism*. We will argue that different policy objectives and initial conditions can explain the differences in the way macroeconomic policy was conducted.

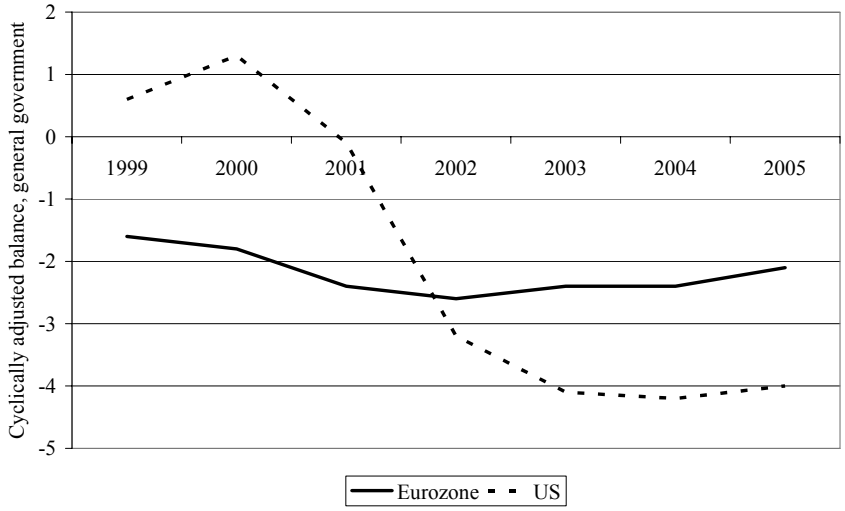
1.1 Where is short-term macroeconomic policy in Euroland?

Is domestic demand in Euroland depressed by overly tight monetary and fiscal policy? Over the last two years, real short-term interest rates have actually hovered around zero and are still slightly negative. Fiscal policy can also be characterised as expansionary if one looks at cyclically adjusted deficits. Economic policies are therefore accommodative. But should they have been even more accommodative? In fact, the most interesting characteristic about demand management in Euroland is its apparent absence. Both fiscal and monetary policies seem to be frozen, as if their stances were unrelated to the economic cycle. A comparison with the US shows a huge transatlantic gap in this respect.

The transatlantic difference in the evolution of fiscal policy is illustrated in Figure 1.1 below. We have selected the cyclically adjusted deficit as the best indicator of fiscal policy as this already takes out the direct 'automatic' impact of the cycle on budgets. At the start of the economic and monetary union (EMU), Euroland governments were already in a weak position with a cyclically adjusted deficit of around 1.5% of GDP, which was then allowed to deteriorate rapidly to a value around 2.5% of GDP in 2002, with very little

change over the last four years.[1] By contrast, the US started the period under consideration with a cyclically adjusted surplus of over 1% of GDP and was thus in a much better position to use fiscal policy actively to manage demand. Due to a combination of spending increases and tax cuts, the US policy on the budget balance swung rapidly into a deficit of now over 4% of GDP on a cyclically adjusted basis. And the overall swing between 1999 and 2004 was equivalent to over 5% of GDP, five times larger than that for Euroland.

Figure 1.1 A comparison of fiscal policy in the eurozone and the US, 1999-2005

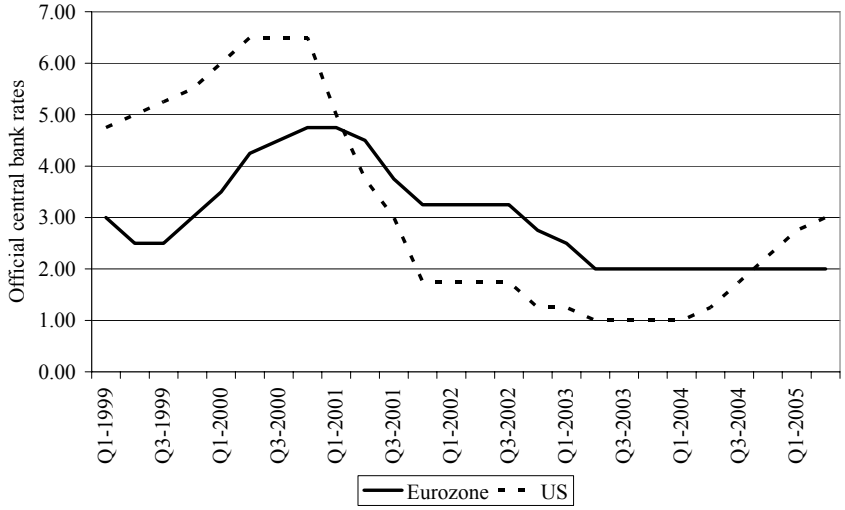


Source: European Commission.

A transatlantic comparison of monetary policy tells a similar story. Figure 1.2 below shows the evolution of official central bank interest rates, again over the period 1999-2005 (1st qtr). Here one can see more movement for Euroland, but it is again apparent that monetary policy has been much more active in the US. The Federal Reserve lowered rates by over 5.5% percentage points between 2000 and 2003, compared to 'only' 2.75% points for the ECB, which has not moved rates for the last two years.

[1] As an aside, we note that this relative stability of cyclically adjusted balances masks a more substantial deterioration of the underlying trend since over the same period Euroland governments could reduce the cost of servicing public debt by almost a full percentage point of GDP as a result of lower interest rates. Given that public investment also fell slightly, this implies that public sector savings must have deteriorated by almost two percentage points of GDP.

Figure 1.2 Comparison of monetary policy in the eurozone and the US, 1999-2005



Sources: ECB and Federal Reserve.

A more analytical way to summarise the degree of activism of the two main macroeconomic policy levers is to compare their variability as measured by their standard deviations. This is done in Table 1.1 below, which also shows the average values for the two main policy instruments considered here.

Table 1.1 Policy settings and policy activism compared (1999-2005)

	Average		Standard deviation	
	US	Eurozone	US	Eurozone
Cyclically adjusted budget balances	-1.96	-2.19	2.45	0.37
Central bank interest rates	3.16	2.97	2.02	0.96

Source: Own calculations based on data from ECB, Federal Reserve, European Commission and OECD.

The last two columns in Table 1.1 confirm the visual impression of a completely different level of policy activism. The standard deviation of cyclically adjusted deficits is six times higher in the US and the standard deviation of central bank interest rates is twice as high.

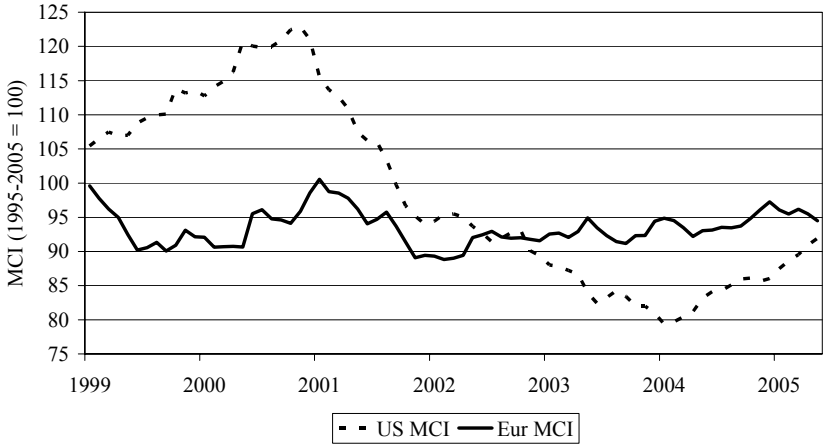
Table 1.1 also documents a fact that is often overlooked: macroeconomic policy has actually been more expansionary in the eurozone if one looks at average policy settings since the start of EMU. Cyclically adjusted deficits have been somewhat below 2% of GDP in the US, compared to around 2.2% in the eurozone. In terms of monetary policy there is very little difference.[2] (Nominal) central bank interest rates have also on average been somewhat higher in the US (at around 3.2%) than in the eurozone (around 3%), again on average over this period. As there was very little difference in inflation (less than 0.2% on average for the GDP deflator and less than 0.5% for the CPI), this implies that real rates have also, on average, not been too different.

It is possible that the movements in the cyclically adjusted deficit of the US exaggerate the degree to which this policy instrument was used for stabilisation purposes, since part of the increased expenditure was a reaction to an exogenous shock (the September 2001 attacks) and part of the tax cuts were motivated by ideological considerations. However, it is clear that the fact that the outcome in both cases was convenient from the point of view of short-term demand management helped to ease concerns about their impact on the deficit. It is also the case that large revenues from capital gains might have somehow led to an overestimation of the cyclically adjusted surplus in the US. We will come back to this argument later.

The measure of central bank activism used so far might not be appropriate because central banks control only short-term interest rates, but there are other variables that impinge on overall monetary conditions. In particular in recent years, when exchange rates have followed persistent trends, it is possible that a higher variability of interest rates was the result of the central bank trying to offset the impact of shocks to the exchange rate on domestic monetary conditions. However, the analysis of a standard monetary condition index (a weighted average of the interest rate and the exchange rate) shows an even larger difference between the US and the euro area, with monetary conditions in the US moving in the expected cyclical fashion compared with a very stable path for the euro area (see Figure 1.3 below).

[2] We will document below that a similar picture emerges if one looks at another measure of the monetary policy stance, namely the expansion of the money supply.

Figure 1.3. Comparison of monetary conditions in the eurozone and the US



Source: Deutsche Bank.

It is apparent that monetary conditions have been much more variable in the US than in the eurozone. The reason for this is that high US interest rates were accompanied by a strong dollar (and vice versa). The US MCI reached a peak in 2000-01 at over 120 and then fell continuously to around 80 in early 2004. By contrast, the eurozone MCI only fluctuated between 90 and 100 over this entire period, with a slight tightening trend over the last years as an appreciating euro overrode the impact of low and stable interest rates.[3] In terms of standard deviations the difference in the variability of the MCI is very large indeed: the standard deviation of the US MCI since 1999 was 13.6%, six times larger than the 2.7% for the euro area. The difference in variability is thus much larger for the MCI than for the central bank interest rates.

1.2 Why is macroeconomic policy frozen in Europe?

The key to understanding the different patterns in the evolution of policy is the difference in objectives driving the two regions. In the US, fiscal and monetary policies were fully geared towards a pure stabilisation role: in a

[3] It is also interesting to note that over this entire period the euro area MCI was always below its longer-term average. This implies that monetary conditions were much more accommodative during the tenure of the ECB than during the preceding period, which was under the informal leadership of the Bundesbank (the average MCI for the EMU period is 93.4, compared to 110 for the pre-EMU period of 1995-98).

standard textbook fashion. After 2000, economic weakness was met with increases in expenditure and cuts in taxes and interest rates. Part of the swing in fiscal policy might have been due to other causes, but this does not change the fact that the primary objective of macroeconomic policy was to support aggregate demand to offset the negative wealth effect stemming from the burst of the stock market bubble.

By contrast, in the euro area, longer-term considerations played a much more important role and conflicted with cyclical needs. Fiscal policy was torn between short-term cyclical indications and the desire to respect the 3% limit of the Maastricht criteria – and the realisation that population ageing actually required a balanced budget or a small surplus over the medium run in order to prevent debt levels from exploding – a theme emphasised in our previous reports (see Gros et al., 2004b and 2003). Caught between Scylla and Charybdis, fiscal policy was kept just tight enough (at least in the large countries) to offset the impact of the economic cycle. It is no wonder then that the cyclically adjusted balance appears very stable: it was the implicit objective of policy.

A similar mechanism was (and still is) operating on the monetary policy side: economic weakness and a strengthening currency was confronted with a continued rapid growth of monetary aggregates, and thus monetary policy was loosened just enough to keep monetary conditions from tightening while preventing money growth from accelerating too much. Again, this led to a policy setting that was barely responsive to the economic cycle.

In a similar fashion, structural reforms were undertaken half-heartedly as fears of the near-term negative economic and political consequences confronted the benefits of higher growth and employment in the long-term. A clear example of this is the rejection of the services directive, where the short-term political cycle prevailed over the long-term needs of the European economy.

Thus, it is fair to conclude that the *immobilisme* of economic policies in the euro area is the result of ongoing conflicts between contradictory short-term and long-term objectives. It is a dogma of economics that policies can only achieve one objective at the time. European policy-makers tried to achieve too many things at the same time, and ended up with weak growth, a weak fiscal position and a minimalist reform effort. A clearer allocation of objectives to the different policies would have perhaps led to a better outcome.

The basic distribution of assignments between the three main elements of macroeconomic policy was clear as early as 2000: monetary policy could be relatively loose on the understanding that fiscal and structural policy would do their part to create the basis for sustained growth. Our first report already

insisted on this (see Gros et al., 1998). The onset of the downturn in late 2000 only reinforced the rationale for this assignment: monetary policy constituted the most flexible policy instrument whereas structural policy had just given itself an ambitious longer-term objective in the form of the Lisbon agenda. Fiscal policy-makers had also continued to assert their adherence to the long-term goal enshrined in the Stability and Growth Pact and had presented medium-term plans to achieve a balanced budget within a couple of years.

Reality proved to be quite different. Neither structural policy nor fiscal policy delivered, whereas monetary policy remained rather accommodative, providing an environment of low interest rates in which national policy-makers could have done their part, namely to implement structural reforms and bring fiscal policy under control.

We argued last year[4] that Europe needed the carrot, not the stick. With the benefit of hindsight, Figure 1.3 suggests that the carrot was perhaps needed a couple of years before.

1.3 Differences in policy activism and differences in supply side constraints

The fact that longer-terms constraints impeded policy activism in Europe leads to the question why this was apparently not the case in the US. The answer is simple: the US did not face the same longer-term constraints. In particular US fiscal and monetary policy could count on a much more dynamic and flexible economy as many structural reforms had already been undertaken during the 1980s. The key to the transatlantic difference in policy activism thus lies in the transatlantic difference in the evolution of productivity and hence potential output.

In terms of fiscal policy, the difference in constraints can be illustrated quite easily by looking at the steady-state debt/GDP ratio that results from different combinations of deficits and growth rates. Table 1.2 below (see also Gros et al., 2004b) shows that the growth differential between the US and Euroland has huge implications for the sustainability of fiscal policy.

Table 1.2 shows that for a slow-growth economy such as Germany or Italy even a deficit of only 2% of GDP that persisted over the cycle would barely keep the debt-to-GDP ratio close to the 60% limit. Continuing deficits of 4% of GDP by all member countries would bring the EU debt ratio to over 100% of GDP. The contrast between Germany and the US is particularly striking. The latter could indefinitely run deficits almost twice as high (4% of GDP)

[4] See Gros et al. (2004b).

and still end up with a similar debt ratio (70% of GDP). Moreover, one has to keep in mind that the ageing problem is much less pronounced in the US than in European countries. The long-term solvency constraint is thus much less immediate for the US than for a slow-growth Euroland.

Table 1.2 Steady-state debt levels (as % of GDP)

		Cyclically adjusted deficit as % of GDP			
		2%	3%	4%	5%
Trend growth of real GDP in% p.a.	Germany: 1.5%	57	86	114	143
	EU today: 1.75%	53	80	107	133
	Maastricht: 3%	40	**60**	80	100
	US today: 3.75%	35	52	70	88

Source: Own calculations. The calculations assume an inflation rate of 2% so that nominal GDP growth is 2 percentage points higher than the real rates indicated in the first column.

Slower growth thus implies a much tighter long-term constraint on fiscal policy. It is important to keep in mind that the long-term solvency of fiscal policy is determined by overall growth, not growth on a per capita or hourly basis. This is one of the many ways in which the long-term demographic decline of Europe is already exerting its negative effects today.

The difference in the conduct of monetary policy can be explained in a similar manner with structural differences. Confidence in the longer-term dynamism and short-term flexibility of the US economy motivated the Federal Reserve Board to allow the very strong tightening of monetary conditions during the upswing in 1999-2000 that was documented above. The subsequent downturn could thus be met with an unprecedented lowering of policy interest rates, which had a strong impact on the economy, given its flexibility and financial structure. We will show below that that the transatlantic difference in the degree to which demand reacts to lower interest rates also provides the best explanation for the emergence of the unprecedented US current account deficit.

A related factor that contributed to the initial wrong setting of fiscal and structural policy was that the weakness of the Euroland economy was initially not recognised. We showed above that the cyclically adjusted deficits for the euro area were around 2% of GDP in 2000 and 2001.

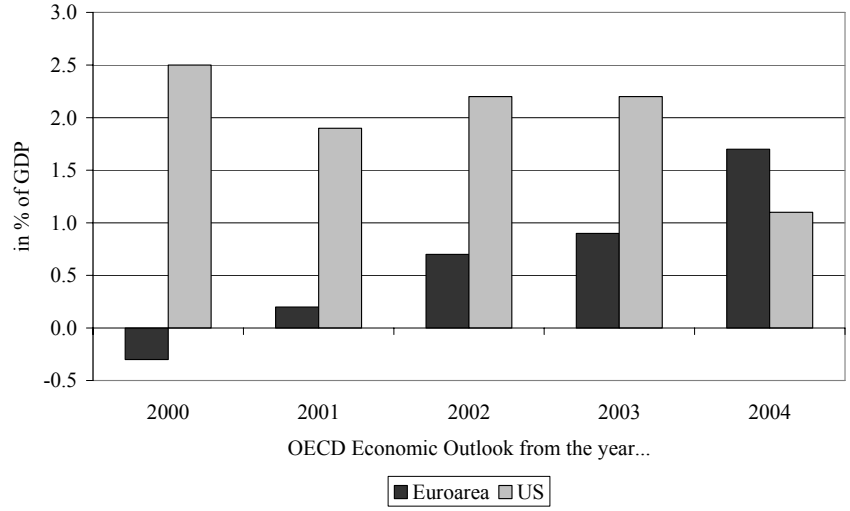
However, this data is based on today's estimate of the output gap during these two years. At the time, i.e. when the European Commission published the spring 2001 forecast, the cyclically adjusted deficit for 2000 and 2001 was estimated at only 0.7% of GDP (and the convergence programmes of that year implied that this should have turned into small surpluses by the year 2004). Fiscal policy, if measured by today's data on cyclically adjusted deficits, has thus been stable, but if one measures policy on the basis of contemporaneous estimates, it has deteriorated considerably.

An important factor in the evolution of fiscal policy was thus the overestimation of potential output growth in Europe. Part of this development had already been visible by 2000-01, because productivity had already started to decline by then. But under the influence of the 'Lisbon bubble', it was generally assumed that potential growth would increase because the structural reforms (guided by the Lisbon process) would simultaneously increase productivity and employment. These growth expectations were only revised as disappointing data kept coming in year after year. All fiscal policy could do at that point was to limit the damage by not letting deficits go completely out of control. However, the limits of the SGP were in fact progressively loosened as country after country found itself politically unable to keep expenditure under control when both demography and economic growth were deteriorating trend-wise.

The key to understanding transatlantic differences in policy-making is that there were no similar downward revisions of growth in the US. Figure 1.4 documents this by showing the estimates of the output gap for the crucial year 2000 for both the US and Euroland. The bars show for each year the output gap for the year 2000 as successively estimated by the OECD.

For example, at the end of 2000 it was estimated that the eurozone's output was below its potential (negative output gap of 0.3). Over time, however, the eurozone's potential was continuously reduced. With today's estimates of potential growth for Euroland much lower, the OECD now estimates that Euroland's output in the year 2000 was actually 1.7% above its potential. The realisation that Euroland's potential had been overestimated did not come suddenly, in one step; rather, each year the estimates of potential output were reduced by a small amount. By contrast, the ex-post estimates of US potential growth have varied much less, and the direction of the revisions was the opposite. In 2000, it was believed that US output had been 2.5% above potential. The newer estimates are based on a higher US potential, and thus result in a smaller output gap.

Figure 1.4 Changing output gap estimates for the year 2000



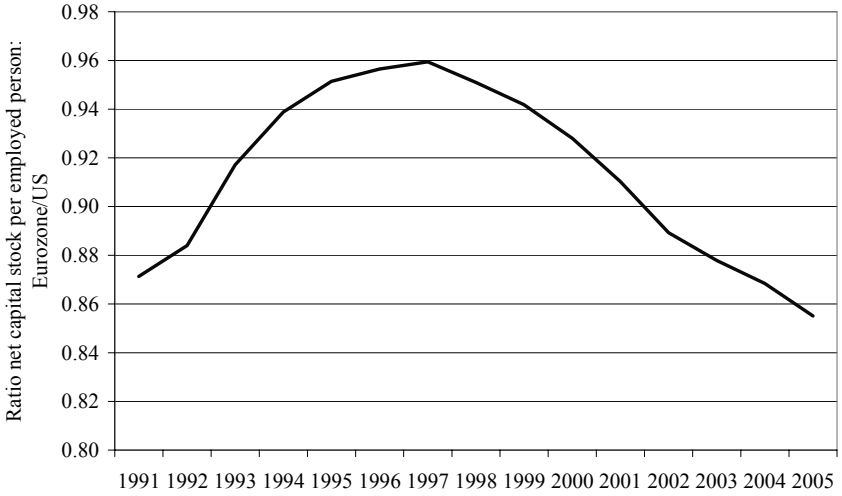
Sources: OECD *Economic Outlook*, Autumn 2000, Autumn 2001, Autumn 2002, Autumn 2003 and Autumn 2004.

1.4 Longer-term causes of the transatlantic difference in potential growth

We have argued so far that a key cause of the lack of an effective policy response to the downturn after 1999-2000 was the slowdown in potential growth in Europe and its possible causes and cures (see Gros et al., 2003 and 2004b). There is by now broad agreement that this slowdown has at least two causes: insufficient capital accumulation and a slowdown of the 'unexplained' part of productivity.

The first reason for the under-performance of the European economy relative to that of the US can be documented most clearly by looking at the net capital stock per employed person. Figure 1.5 shows the ratio of the eurozone values to those for the US. It is apparent that until around 1996-97, the eurozone was catching up to the US with the eurozone's capital stock approaching that of the US, but after this period the eurozone started falling behind the US at an increasing pace.

Figure 1.5 Insufficient investment as a cause of the productivity slowdown in the euro area



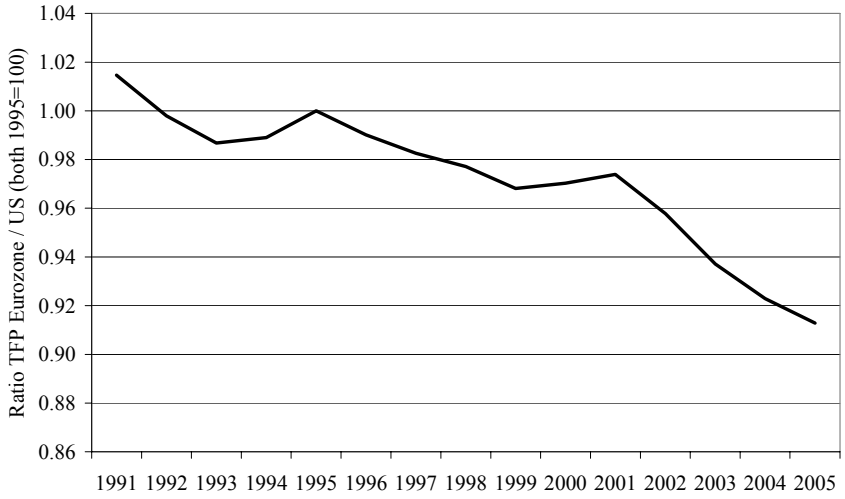
Source: Own calculations based on AMECO data.

In terms of the part of productivity that does not depend on the accumulation of capital, the relative performance of Euroland has been even worse. As Figure 1.6 below shows, the level of total factor productivity has constantly declined relative to that of the US.

Since productivity is a slow-moving variable, the drop in recent years implies that the prospects for a quick turnaround must be dim. But what about the horizon beyond the next few years? It is sufficient to look at the expectations for growth over the next 10 years as published by Consensus Forecasts to see that growth is likely to remain low for some time. Between the peak of the bubble in 2000 and today, long-term growth expectations have fallen by close to three-quarters of a percentage point for the euro area (from 2.66% to 1.93% p.a.), whereas they have remained roughly constant for the US. Moreover, the trend for the euro area is still downwards. See Figure 1.7.

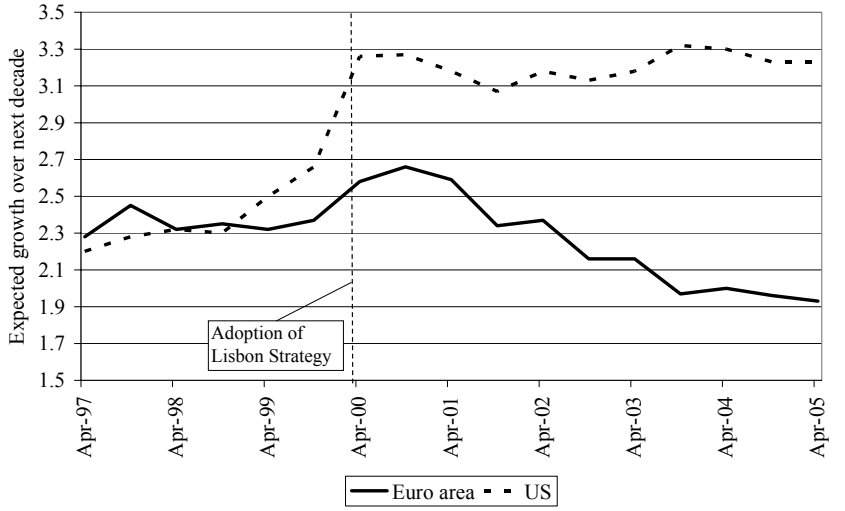
In the next chapter, we investigate whether there is any reason to hope for a turnaround in productivity growth in Euroland.

Figure 1.6 Faltering TFP as a cause of the productivity slowdown



Source: Own calculations based on AMECO data.

Figure 1.7 Long-term growth prospects: Euro area vs. the US



Note: The euro area refers to the weighted average of its three largest members (Germany, France and Italy).

Source: Deutsche Bank London.

Chapter 2
Euroland in the Slow-Growth Trap: Causes & Consequences of Slow Growth

Euro area growth has been disappointing and not only over the last few years. Over the decades since 1994, real GDP growth averaged only 2.0%, a little above Japanese growth of 1.2% but considerably below the US and the UK track record of around 3%. Clearly, a decade of economic underperformance cannot be ascribed to cyclical factors or macroeconomic policy mistakes. It points to more deeply-rooted, structural problems.

The performance of the Euroland economy was even more disappointing in the wake of the 2001-02 stock market downturn, with GDP growth averaging only 1.2%, compared to 1.0% in Japan and around 2.5% in the US and UK. It is possible that on this shorter horizon cyclical policies might have made a difference. But as we have argued, Euroland did not really have a macroeconomic response to the downturn, mostly because monetary and fiscal policy got 'stuck in the middle' between long-term constraints and short-term expediency. We will argue here that one factor restraining growth in Euroland might have been that its structure got 'stuck in the middle' between low-cost supplies from abroad and the emerging information technology sector already occupied by the US. However, a look at the performance of the smaller euro area countries shows that stagnation is not inevitable. Apparently better policies can make a difference.

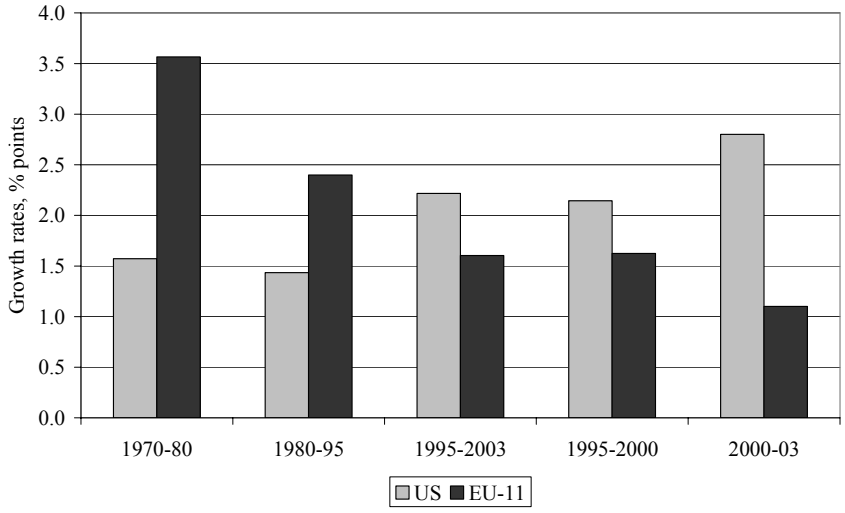
We will then turn to the consequences of low growth – one of which is that it affects the quality of economic policy-making. If low growth worsens economic policy, a vicious circle might emerge in which bad policies impinge negatively on growth. We will illustrate this with reference to two emblematic cases: the fate of the Stability Pact and the Services Directive.

2.1 Continuing productivity weakness in Euroland?

In past reports, we have provided detailed analyses showing that productivity levels and growth rates in the euro area have lagged behind those in other regions, notably the US. Against this, some economists have pointed out that GDP per hour worked is no lower in the euro area than in the US. However, we consider such a comparison fallacious. Since the marginal productivity of an additional working hour most likely declines, data have to be adjusted for total hours worked. Adjusted data published by the ECB and OECD confirm our earlier analysis that productivity levels and growth rates are lower in Euroland than in the US (see Papademos, 2004; Nicoletti, 2004). An update

of our earlier analyses gives a similar picture (see Figure 2.1 below and the annex).

*Figure 2.1 GDP per hour worked, US vs. EU11**



* EU11 = EU15 - Austria, Greece, Luxembourg and Portugal.

Source: See Annex.

The only ray of sunshine in the otherwise dark picture that one obtains when looking at the evolution of productivity in Euroland is the data point for the last year. Preliminary data from 2004 suggest that the trend decline in productivity growth has been broken. Output per employed person rose by about 1.2% (real GDP growth was 2.0% versus an increase of 0.6% in employment). This implies that productivity per worker increased by around 1.4%. This figure has to be adjusted for changes in working hours and other factors, but the as shown in more detail in the Annex the result is still that hourly productivity has for the first time shown a small increase, probably the increase was around 1.4% during 2004, versus around 1.0%, on average during the preceding three years. Part of this increase might have been due to the better overall growth registered during 2004, but rough estimates suggest that only a small part of this improvement was due to a cyclical effect (again see the Annex).

The most recent data does not cover the entire euro area. But the figures referred to so far cover over three-quarters of it. As an aside, we note that the data by member country shows that in Germany the longer term decline in hours worked continued unabated. This suggests that the highly publicised agreements in some large enterprises to work longer hours (for the same pay)

did not represent an economy wide phenomenon. It appears that these agreements were limited to the sectors most exposed to international competition where the pressure to contain unit labour costs was most pronounced.

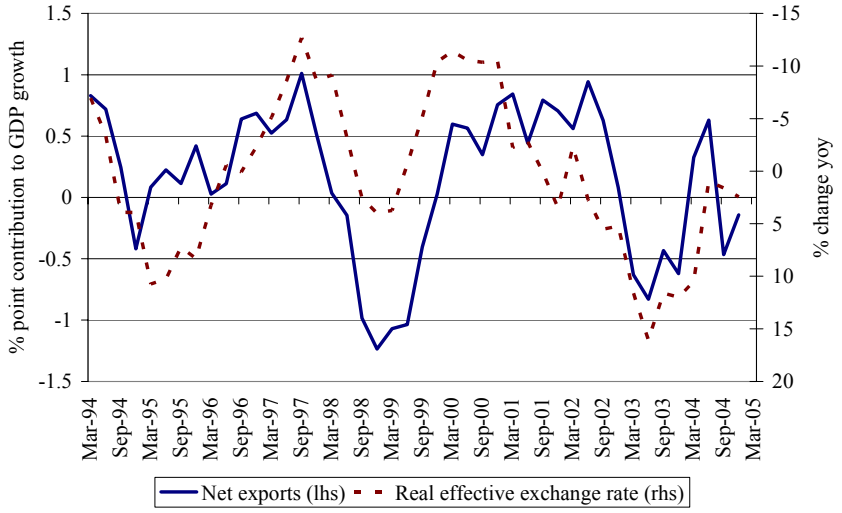
2.1.1 Euroland 'stuck in the middle'?

The previous chapter already provided some elements that explain the disappointing growth performance of the eurozone relative to the US. Here we would like to suggest an additional consideration which is based on the observation that the euro area is facing increasing competition from low-cost countries. The opening up of China and India to the global economy coupled with the enlargement of the European Union have sharply increased competitive pressure on industries using lower-skilled labour. With wages rigid on the downside, low-cost competition from abroad has led to the crowding out of domestic low-cost suppliers and heavy losses of jobs in the tradable goods-producing sectors of the economy. As a result, Euroland companies trying to establish themselves as cost leaders in their field have had no other choice but to 'outsource' the labour-intensive parts of their production to low-cost countries outside the euro area.

The macroeconomic consequences of Euroland's lack of international competitiveness have become more visible since the euro has begun to strengthen. Thus, over the last 10 years (from the first quarter of 1995 to the fourth quarter of 2004), during which time the real effective exchange rate of the euro was unchanged on average, real net exports contributed 0.1 percentage points to the 2.0% annual average GDP growth of the euro area (see Figure 2.2). Since 2002 (first quarter of 2003 to fourth quarter of 2004), however, when the euro appreciated by an annual average rate of 8.4% in real effective terms, real net exports shaved 0.3 percentage points off the 1.2% annual average GDP growth.

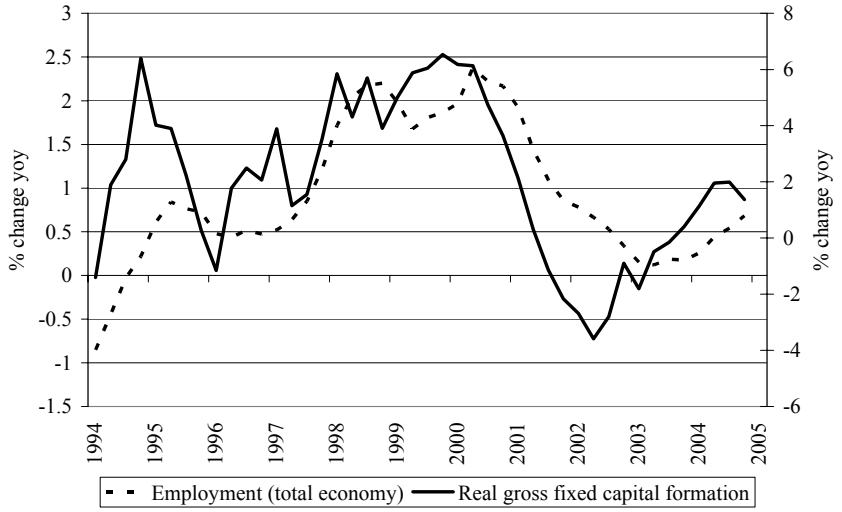
A decline in the contribution from real net exports to GDP growth should not necessarily be seen as conclusive evidence for a lack of international competitiveness of the euro area. It could also reflect strong domestic demand growth that is attracting domestic and foreign suppliers, weakening exports and boosting imports. However, the performance of key domestic demand components does not support such a favourable interpretation. As can be seen from Figure 2.3 below, capital formation has been very weak since its collapse in the wake of the 2001-02 stock market crash, pointing to an unfavourable economic environment.

Figure 2.2 Contribution of net exports to GDP growth



Sources: Eurostat and European Central Bank.

Figure 2.3 Weak investment growth and weak employment growth



Sources: ECB and Eurostat/Haver.

The weakness of investment has also depressed employment growth (see Figure 2.3), which in turn has weakened consumption growth (see Figure 2.4). Thus, over the last few years, the euro area has suffered from a vicious circle of falling external competitiveness and weakening internal demand.

Figure 2.4 Weak employment growth and weak consumption growth

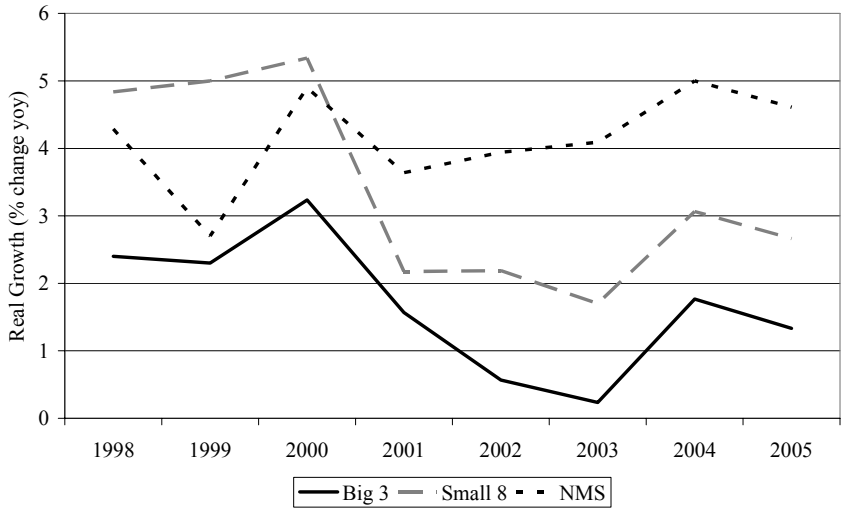
Sources: Eurostat and ECB/Haver.

2.1.2 Big and small: Lessons for a more flexible Europe?

The growth performance of the eurozone has been disappointing – at least if one looks at the average. But this average also hides considerable variability across countries. Can one discern any systematic pattern in cross-country variability across Europe? The answer seems to be yes if one compares the performance of the large and the small EMU states. Since the start of EMU, the three largest euro area member states (France, but particularly Germany and Italy) have consistently underperformed on almost any account. As they together represent three-quarters of the GDP of the eurozone, their sluggishness is behind the underperformance of the eurozone (and of the EU) if compared not only to the present US, but also the past performance of the EU itself.

Since 1999, the growth rates of the three 'euro-dinosaurs' have been 1.6 percentage points lower on average than those of the 8 small euro area member countries (see Figure 2.5). This implies a total underperformance of 10% over this six-year period. The new member states (NMS) have tended to perform even better, but this is natural given that they are still in a catch-up process.

Figure 2.5 Growth performance of big vs. small (plus new member) states



Source: Eurostat, European Commission.

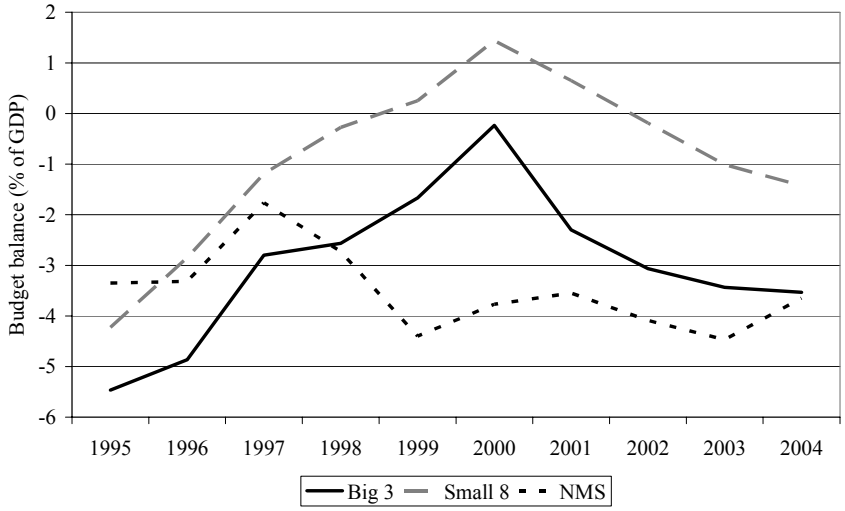
The large and persistent differences in performance across countries within the eurozone contain an important message: since monetary policy has been the same for all members, it is thus unlikely that an overly tight monetary policy was responsible for the poor growth performance of the eurozone.

It is interesting to note that the much-better growth performance of the smaller countries has been accompanied by much healthier public finances. Figure 2.6 below shows that the eight smaller euro area member countries have on average run a budget 'close to balance', as required by the Stability and Growth Pact (SGP). Did their better growth performance come in spite of or because of this fiscal strictness? The facts suggest that the latter might be closer to reality since over the last years the smaller countries have maintained their lead in terms of growth, and at the same time, the difference in fiscal policy has increased. Maybe the leaders of the big three should reflect more on the long-term benefits of a strong fiscal policy, rather than band together to bend the rules against excessive deficits according to their short-term political preferences.

The much-tighter fiscal policy pursued by the smaller euro area countries does not seem to have reduced their growth, but it did have a strong impact on their debt levels. A decade ago the smaller euro area countries had a slightly higher debt ratio than the Big 3. This situation changed radically over the last 10 years. The smaller countries have now a debt ratio that is about 20 percentage points of GDP lower than that of the Big 3, whose ratio

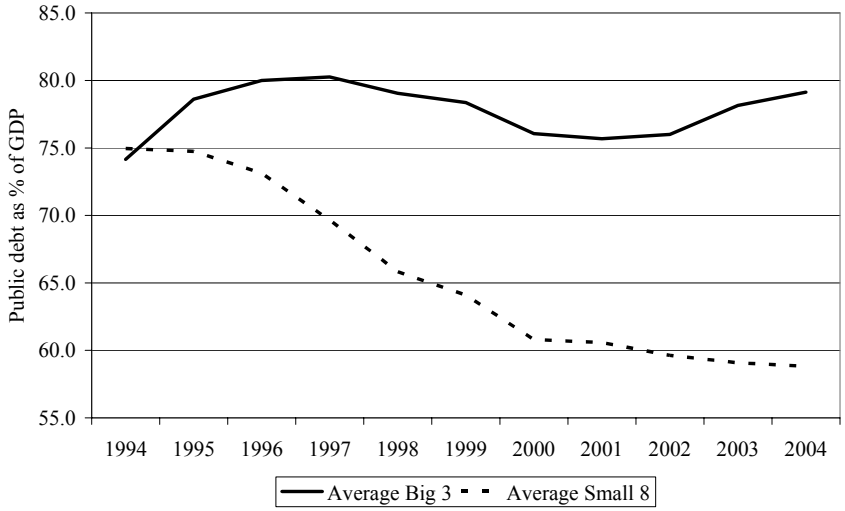
actually increased over the last decade, and has stagnated at a high level since the start of EMU (see Figure 2.7). The smaller countries are thus much better prepared to tackle the fiscal implications of population ageing and they will also be much less affected by any future increase in interest rates.

Figure 2.6 Budget balances in big vs. small (plus new) member states



Source: AMECO.

Figure 2.7 Public debt ratios in Big 3 vs. Small 8



Source: AMECO.

2.2 A vicious circle?

We have documented so far the weakening of the supply potential of the eurozone (on average) and the considerable discrepancy between large and small member countries. The former might not be totally exogenous because the latter suggests that better policies can mitigate the impact of unfavourable circumstances in terms of demography and perhaps even productivity. But there is also a potential for vicious circles which amplify the impact of an initial negative supply shock. We discuss two potential mechanisms.

2.2.1 Weak supply leads to weak demand?

Standard economic theory suggests one way for a self-reinforcing circle to emerge, in which weak supply leads to weak demand, which in turn has a further negative impact on output.

One of the key drivers behind the weakness of demand in Euroland has been slow growth in both elements of domestic demand: investment and consumption. Since Euroland's households are not really over-indebted (at least if compared to their US counterparts), this weakness of consumption is not easy to explain *a priori*. However, this weakness of consumption becomes straightforward to understand if one considers the radical revision of growth expectations that has taken place since the bursting of the 'Lisbon bubble'. When the so-called Lisbon Strategy[5] was invented, productivity growth seemed satisfactory so that growth rates in excess of 2.5% seemed within reach. However, the actual results were bitterly disappointing. As documented above, productivity growth and expectations have plummeted. In Gros et al. (2003), we showed that a revision of growth prospects can have a strong impact on demand because of the simple fact that a lower expected growth rate implies a lower permanent income which tends to depress consumption.

A similar mechanism operates of course for investment. When growth expectations decline, entrepreneurs will also revise downwards their estimates of the amount of capital the economy will need in the future. Hence investment will be sharply curtailed.

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[5] At the special European Council of Lisbon in early 2000, the Heads of State and Government of the EU solemnly promised to make the EU the "most competitive economy" by 2010, setting inter alia precise numerical targets for employment rates. These targets were reaffirmed when the entire strategy was revised in early 2005, although most of them have now become unattainable.

2.2.2 Weak supply leads to weak policies?

Another way in which weak supply, such as the observed slowdown in productivity, can lead to negative second-round effects is by the stress it puts on macroeconomic policy. We discuss here two policy fields in which this has clearly been happening recently, namely fiscal and structural policies. Monetary policy, which is also under immense pressure, is discussed separately in chapter 3.

The crumbling of fiscal policy discipline

To safeguard against a relapse into past fiscal policy profligacy once the Maastricht hurdle into EMU has been passed, EU governments in 1997 concluded the Stability and Growth Pact. The purpose of the Pact was to provide a framework for the operation of the excessive deficit procedure, enshrined in the Maastricht Treaty, within EMU. In our previous reports, we have discussed in some depth the rationale of the Pact and the various criticisms voiced against it. Our conclusions then were that fiscal discipline was of the essence to ensure government solvency in the longer run against the background of an ageing population, and that the SGP, albeit far from perfect, was the best available instrument for trying to enforce discipline.

Unfortunately, during the first few years of EMU, when growth was strong, poor implementation of the Pact allowed countries to run structural deficits (partially because the ongoing slowdown in potential growth was ignored). This set the stage for trouble during the more recent phase of economic weakness. As economic growth dropped close to stagnation in 2001-03, pressure on budget deficits rose, forcing governments to choose between tough (and possibly pro-cyclical) spending cuts to meet the requirements of the Stability and Growth Pact and a weakening of the budget constraints. With both Germany and France, the heavyweights in the EU and EMU, having difficulties adhering to fiscal policy discipline, it is no surprise that the Council of Ministers opted for softening the budget constraint.

In a 'reform' of the Pact agreed in March 2005, the Council decided to make the exceptions in case of a violation of the 3% deficit limit more generous; to allow a number of 'extenuating circumstances' in case of deficits above 3% of GDP; and to lengthen the periods within which excessive deficits have to be slashed (see Table 2.1). As a result, the threat of sanctions for running an 'excessive deficit' has faded into the background and fiscal discipline is eroding. Thus, in their recent fiscal projections from April 2005, the European Commission expected no further reduction in budget deficits at the Euroland level and forecasted France, Italy, Portugal and Greece to run deficits in excess of 3% of GDP by 2006. The ratio of government debt to GDP, which fell from 76.1% for the euro area as a whole in 1996 to 69.4% in

2001-02, has already increased again in 2003-04. The risk is now high that it will continue to increase also in the medium-term future. With the inevitable rise in age-related public spending coming in the next decade, a serious crisis of government finances in many Euroland countries within the next 10-15 years is now a distinct possibility.

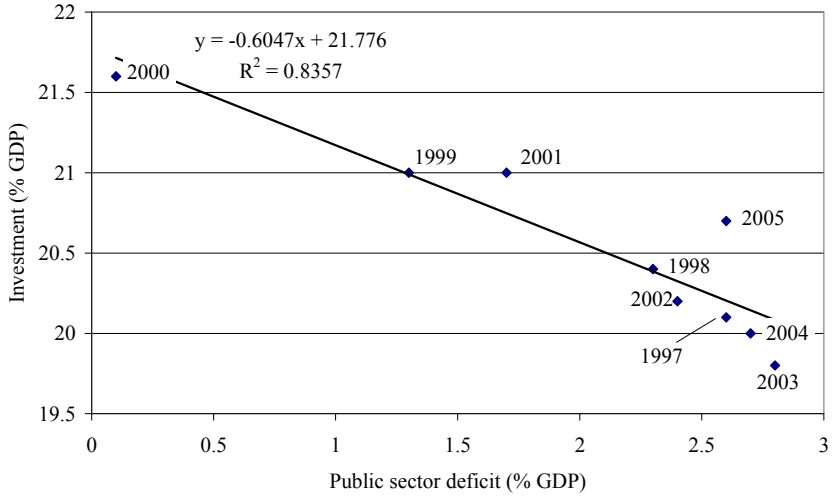
Table 2.1 Key points of the Stability and Growth Pact – Old and new

	Old	New
Small overshoot of deficit permitted if:	• Exceptional event (natural disaster) • Recession with GDP falling by more than 2%	In addition if there are structural reforms or spending on: • R&D • European political goals • International solidarity • Investment • Pension reform • EU contributions
Excessive deficit possible if:	• Drop of GDP by more than 2% • Drop of GDP by more than 0.75% if downturn sudden, output gap positive, exceptional circumstances	In addition if economy is stagnating or growing very slowly
Time to correct excessive deficits:	One year after establishment	Additional time when growth is slow
Implementation of fiscal adjustment programmes	Within 4 months	Within 6 months
Medium-term fiscal policy goals	Balanced budget or surplus	1% deficit if low debt or high potential growth, balanced budget or surplus otherwise
Fiscal policy in good times		• 0.5% per year deficit reduction • Exceptional revenue earmarked for debt reduction • Early warning

The standard defence of this weakening of the SGP has been that countries should not be forced into an overly hasty fiscal adjustment. However, there is a clear long-term cost associated with allowing countries to run larger fiscal deficits: public dis-savings tend to crowd out private investment. There is a large literature on the extent of this phenomenon and one could argue that in an area that has access to the world capital market it does not really matter how much the government (dis-)saves since private investment can still be financed by capital imports, if needed.

We do not wish to review this complex set of arguments in detail here. We simply point out that larger deficits in reality have been associated with lower investment in recent years. Figure 2.8 shows the tight relationship that one can observe over the last years. If this relationship were to prove stable, one could conclude that an elimination of the structural deficits, which now are over 2% of GDP, should increase investment by about 1 percentage point of GDP. As we showed above that a declining capital-labour ratio is one of the causes of the productivity slowdown, it is apparent that a price will have to be paid for the abandonment of fiscal discipline in term of lower growth in future.

Figure 2.8 Investment and governments savings, 1997-2005



Source: European Commission.

The unravelling of structural reform

The Lisbon Agenda was Europe's answer to the competitive challenges coming from low-cost and high-quality suppliers abroad. A key part of this

agenda was completion of the internal market, especially for services, which was expected to inject new dynamism into the European economy through greater competition in a sector accounting for about 70% of employment and GDP (see Box 2.1). The Lisbon Agenda was to be complemented by structural reform on the national level, especially in the areas of tax, labour market and regulatory policy.

Five years on, the achievements have been truly disappointing. At the EU level, a major and perhaps fatal blow was delivered to the Lisbon Agenda in March 2005, when the services directive was sent back by the European Council to the Commission for a comprehensive overhaul. Most importantly, the critics of the Commission's draft have questioned the country-of-origin principle in the mutual recognition of regulations, which is at the heart of the single market. According to the critics, this principle, which allows providers to offer their services within the EU under home regulations, leads to unfair competition and 'social dumping'. As suppliers based in high-cost, densely regulated countries would be pushed out of the market, there would be a 'race to the bottom' in regulations and social protection. To safeguard against this, the critics want to reduce the country-of-origin principle to the exception and make the country-of-destination principle, where service providers have to observe the rules in the consuming country, the rule for the supply of services. The result would be a higher level of protection of high-cost service suppliers and the continuing fragmentation of the European services market.

At the same time, national governments' efforts at structural reform have also run out of steam. Politicians have taken a cautious approach to reform as they have feared the ire of their electorates. Hence, in the last few years, euro area governments have eased tax burdens somewhat, reduced regulations to some extent and eased restrictions in certain segments of the labour market. All this were steps in the right direction, but the measures were not sufficiently comprehensive to engineer a clear turnaround in the labour market and push GDP growth higher. With the results of reform disappointing, electorates have become dissatisfied with structural reform and are increasingly leaning towards backward-looking protectionist policies. Eager to deflect from their own failings and to raise their standing with a disgruntled public, politicians are catering to these sentiments by questioning the rationale for an open, market-oriented economy. The risk is growing that the political backlash over the unsuccessful implementation of reform will lead to protectionist policies in Euroland, raising economic inefficiencies and dampening economic growth even more.

Box 2.1 The Services Directive

It is often overlooked that, until its presentation in early 2005, the Services Directive had been presented as one of the cornerstones of the Lisbon strategy.

The Commission justifies the proposal (Brussels, 5.3.2004 COM(2004) 2 final/3) as follows:

This proposal for a directive is part of the process of economic reform launched by the Lisbon European Council with a view to making the EU the most competitive and dynamic knowledge-based economy in the world by 2010. Achieving this goal means that the establishment of a genuine internal market in services is indispensable. It has not hitherto been possible to exploit the considerable potential for economic growth and job creation afforded by the services sector because of the many obstacles hampering the development of service activities in the internal market. This proposal forms part of the strategy adopted by the Commission to eliminate these obstacles and follows on from the Report on the State of the Internal Market for Services,[b] which revealed their extent and significance.

NECESSITY AND OBJECTIVE

"Services are omnipresent in today's economy, generating almost 70% of GNP and jobs and offering considerable potential for growth and job creation. Realising this potential is at the heart of the process of economic reform launched by the Lisbon European Council and aimed at making the EU the most competitive and dynamic knowledge-based economy in the world by 2010. It has not so far been possible to exploit fully the growth potential of services because of the many obstacles hampering the development of services activities between the Member States."

This proposal for a Directive forms part of a political process launched in 2000 by the European Council:

In March 2000, the Lisbon European Council adopted a programme of economic reform aimed at making the EU the most competitive and dynamic knowledge-based economy in the world by 2010. In this context, the EU Heads of State and Government invited the Commission and the Member States to devise a strategy aimed at eliminating the obstacles to the free movement of services.[c]

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[a] "An Internal Market Strategy for Services", Communication from the Commission to the Council and the European Parliament, COM(2000) 888 final, 29.12.2000.

[b] Report from the Commission to the Council and the European Parliament on "The State of the Internal Market for Services", COM(2002) 441 final, 30.7.2002.

[c] Presidency Conclusions, Lisbon European Council, 24.3.2000, paragraph 17. The need to take action in these fields was also highlighted at the Stockholm and Barcelona summits in 2001 and 2002.

Towards the end of the 1990s, some observers were wondering whether the first ten years of the new millennium would not turn into the decade of Europe. To some extent, these hopes for a European revival were reflected in the ambitious goal set in the Lisbon agenda launched in 2000 to create 'the most dynamic knowledge-based economy of the world by the end of this decade'. In view of the experience of recent years and with only five more years to go to meet the goal, we may now conclude that this is very unlikely to be Europe's decade. In fact, future economic historians may well conclude that this was the decade when the secular decline of Europe was reaffirmed. The fall of the Berlin Wall at the end of the 1980s appeared to open a new future for Europe, and at the beginning of the decade, Europe set itself high political and economic goals. But the next decade witnessed the consolidation of US political and economic weight in the world.

With the rejection of the draft Constitution by voters in France and the Netherlands Europe is likely to miss both its political and economic goals. We will return to the longer-term outlook for Europe in chapter 4.

Chapter 3
Monetary Policy for a Slow Growth Economy

We argued in the preceding chapters that the ECB had been much less activist in its policy than had the Federal Reserve. Could it have done more? We start by showing that cutting interest rates to 1% in 2003 would have offset the tightening of conditions induced by the appreciation of the euro, but it would not have qualitatively changed the assessment of relative inaction with respect to the United States. We then turn to an analysis of the ECB's public communications over this same period and to what extent did they fit its policy (sitting tight is also a policy).

After these more short-run considerations, this chapter analyses in more detail a longer-term aspect of monetary policy that has gained in importance since the start of EMU, namely the consequences of allowing a liquidity overhang to build up. Some economists may perhaps argue that 'liquidity overhang', or 'excessive credit growth', is a meaningless concept. Money and credit growth simply reflect real economic and price growth without exerting any influence on these variables. We do not want to enter here into the debate about the causality of money and prices. We only note that money and credit growth that cannot be explained as responding to the needs of an economy growing at potential and a desired rate of inflation should alert us to potential future risks to price and/or financial stability and make us question the appropriateness of the stance of monetary policy. Thus, we subscribe to the conventional wisdom that, in the long-run, inflation is a monetary phenomenon, and that central banks should always keep an eye on the long-run.

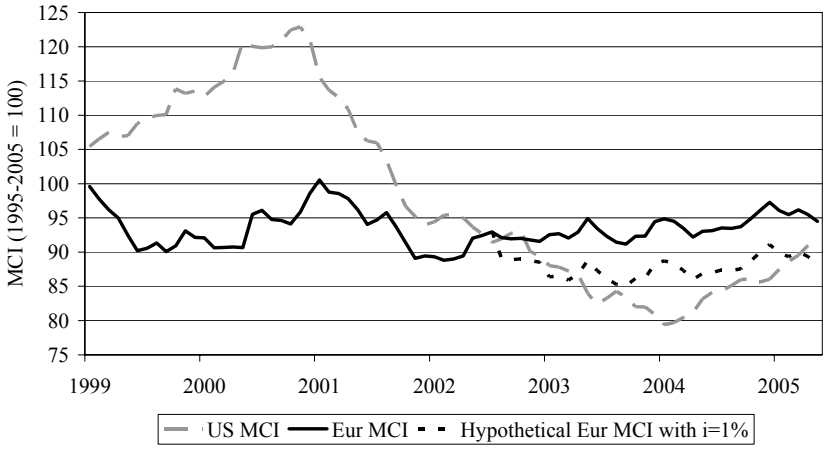
The temptation to look at the short run becomes especially strong when price stability seems assured 'as far as the eye can see', i.e. for the next few years. This explains the strength of the pressure on the ECB to 'get the economy moving'. However, we show in the last section that a monetary policy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

3.1 Not enough loosening?

The ECB has now held rates at an historically low level for over two years. However, this does not seem to have been enough to get the Euroland economy going. One explanation of this apparent failure might be that the appreciation of the euro led to a tightening of monetary conditions despite the constant low level of interest rates. This leads to the question: Could the ECB have done more to support the eurozone economy?

It is true that monetary policy could have been even more accommodative, as it failed to offset the impact of the strengthening currency. But how much could the EB have achieved? Figure 3.1 below shows a counterfactual exercise, where the ECB cuts interest rates to 1% in 2003 and keeps them stable until now. That move would have offset the appreciation of the euro during the period and prevented monetary conditions from tightening, providing a final level of monetary conditions similar to that of the US; Nevertheless, the ECB would still have been a less activist central bank than the Federal Reserve over the period.

Figure 3.1 Comparison of the monetary conditions index: US vs. the eurozone



Source: Deutsche Bank, Global Markets Research.

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

by a loosening of policy in Euroland. It might actually have worsened it if one believes the major macroeconomic models.

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

3.2 Between two pillars

Even if to a lesser extent than the Federal Reserve, the ECB maintained an expansionary monetary policy stance during the past year, stimulating the real economy (and thus giving policy-makers ample room to implement economic reforms and consolidate government finances). Against the background of its long-standing opposition against a monetary policy aimed at supporting growth and against ex-ante coordination with fiscal and structural policy, the ECB's accommodating monetary policy stance (which we advocated last year) is noteworthy. Unfortunately, the policy had none of the desired effects: growth remained lacklustre and governments neither exerted fiscal discipline nor progressed much with structural reform.

Despite this shortage of progress in reform and accelerating liquidity growth, the ECB (at the time of going to publication) still shies away from fading out the strong monetary stimulus. The simple reason for this is that growth remains weak and inflation low.

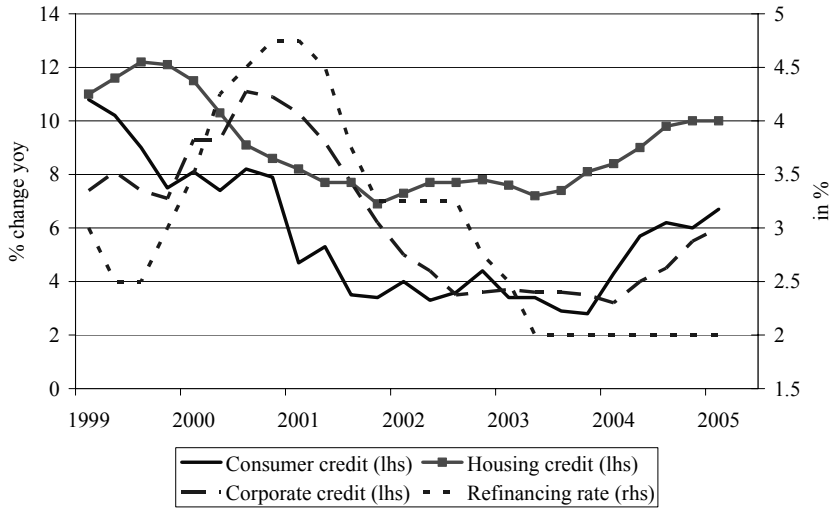
The ECB is thus caught between a rock and a hard place. The rock consists of continuing sluggish real growth and subdued goods and wage inflation. The economic analysis within the ECB's monetary policy strategy thus argues for unchanged or lower interest rates. The hard place consists of dynamic money and credit growth (which has raised housing prices). The monetary analysis is arguing for higher rates. With the two pillars of the strategy sending different signals, the ECB apparently has been in a dither about rate cuts or hikes for the last 15 months. This is beginning to raise questions about the credibility of its monetary policy strategy.

3.2.1 Money and credit in the short run

We will argue in more detail below that the longer-run evolution of monetary aggregates provides an important indicator of future problems for monetary policy. However, even a less 'monetarist' reading of the available data shows that the message from the 'monetary pillar' is at present rather encouraging. Figure 3.2 below shows the main components of credit expansion over the last years. It is apparent that those indicators that might signal the strength of general economic activity, growth consumer credit and loans to non-financial

enterprises, did indeed remain at rather low rates (only 3% p.a.) between mid-2002 and early 2004. Since then, however, these two indictors have accelerated considerably and are now expanding at an annual rate of around 6%, which should be compatible with a considerable pick-up in both consumption and investment – although their sluggishness suggests that they may be also facing very strong headwinds. It appears that the cycle in housing-related loans was much less strong. This type of credit kept growing at 8% and is now expanding at an annual rate of close to 10%. We shall return to this issue below.

Figure 3.2 Where is all the money going?



Sources: European Central Bank and Deutsche Bank, Global Markets Research.

3.2.2 Speaking with two tongues?

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

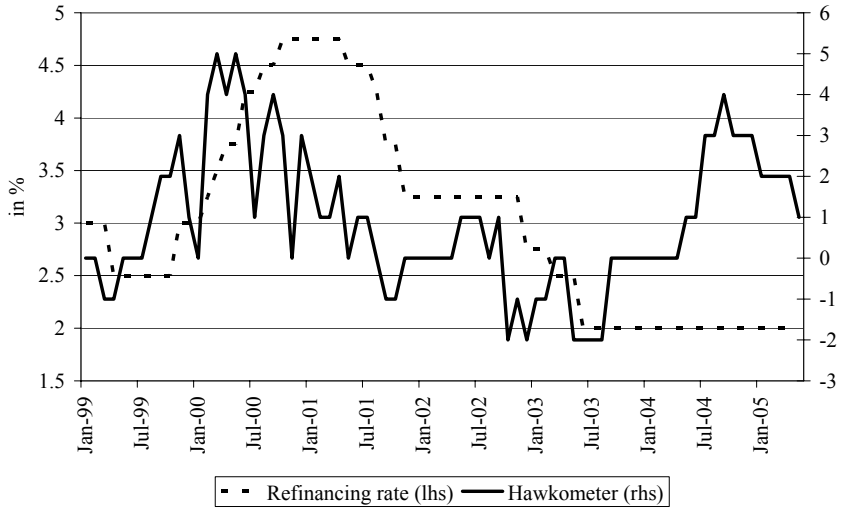
Thus, during the first quarter of 2004, a weakening of monthly indicators brought the Council close to a cut. But uncertainty about the degree of economic weakness and the continuing liquidity overhang appears to have prevented a move. By the summer of 2004, the economy seemed in better shape, and money and credit growth picked up. The Council geared up for a rate hike in autumn (which short-term futures rates duly priced in), but was

stopped again by renewed doubts about economic growth towards the end of 2004. The events of this year have followed the by now familiar pattern: Renewed optimism about the economy in the first quarter again created momentum for a rate hike (again anticipated by the markets), but renewed doubts about the economy at the beginning of the second quarter seem to have weakened the resolve for a move. Unable to take a decision, it seems that the Council retreated to the position of 'a rate cut is not an option' as the smallest common denominator. However, the ECB's continued dithering between the two pillars of the strategy is beginning to cast doubt on the credibility of its approach to monetary policy.

The extent of this dithering can actually be documented by measuring the frequency with which the editorial in each monthly bulletin refers to upside or downside risks to price stability (see Box 3.1 for details). A more frequent reference to 'upside risks' to price stability is associated with a more hawkish stance, hence the name 'hawkometer'.

Figure 3.3 shows a measure of 'hawkishness' (see Deutsche Bank, 2004) of the Council together with the refinancing rate since the inception of EMU. As can be seen from the figure, changes in the tone of ECB communications tended to predict rather well policy rate changes – at least until mid-2003. Since then the ECB has left its policy rate unchanged, but the tone of its communications has been very volatile.

Figure 3.3 The hawkometer and the refinancing rate



Source: Deutsche Bank, Global Markets Research.

Box 3.1 The hawkometer: An analysis of 'ECB speak'

Any evaluation of 'ECB speak' in publications or policy-makers' comments must remain highly subjective. What may appear 'hawkish' to one analyst may seem quite 'neutral' to another. In order to reduce the subjective element in this analysis, one can rely on a more objective measure of the 'hawkishness' of the dominating view within the Council.

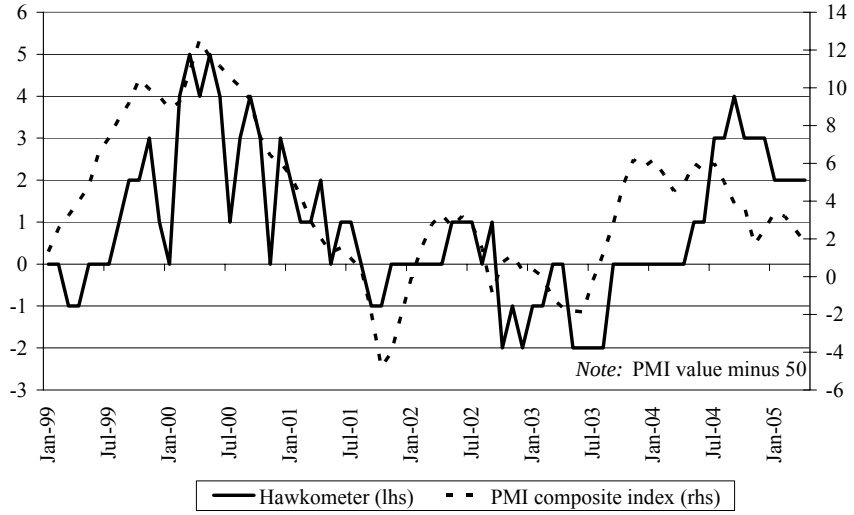
The measure used here was developed by Deutsche Bank (see DB, 2004). It is based on the editorial text of the Monthly Bulletins starting from January 1999 and ending in April 2005. To rank 'ECB speak' from dovish to hawkish on a numerical scale, we first had to identify relevant signals in the texts. Based on a few selected texts from the entire sample, it was concluded that recognition of 'upside risks to price stability' (or very close substitutes to this expression) represented a 'hawkish' statement, and that the detection of 'downside risks to activity' (and close substitutes to this) represented 'dovish' statements. We then counted the number of independent appearances of these statements in the editorial texts. For instance, if the economic and monetary analysis detected upside risks to price stability, we assigned the text a value of +2. If the 'upside risks' to price stability were not only summarised but re-emphasised in the summary section, we assigned the text a value of +3, etc. The same rating – with negative sign – was applied when the text stated that there were "downside risks to economic activity" (or close substitutes to this).

Applying this method to the editorials of the Monthly Bulletin after November 2001 gives a snapshot of views within the Council on a monthly basis. Before November 2001, however, the Council discussed interest rates and communicated its findings on a bi-weekly basis. During this period, the editorials of the Bulletin tended to reflect discussions during the previous two meetings. Hence, it is possible that our method suggests more gradual changes in view during the earlier period. This should not be a major problem for the results, however, given the generally rather crude nature of our exercise.

What caused the ECB to change its tune so much over time? As discussed formally above, the main reason was that the short-term economic outlook kept changing. In principle a monetary policy that is geared towards the medium run should not be much affected by short-term sentiment indicators, such as the PMI (Purchasing Managers Index) which simply shows the evaluation of current business conditions. But as Figure 3.4 shows, the ECB has recently been adjusting the tone of its communications in response to changes in the PMI indicator. This figure shows simply the Hawkometer and the PMI minus 50 (this value is usually taken as the dividing line between expansion and contraction). It is difficult to understand why the ECB seems to have followed the PMI with a lag of several months. Until mid-2003, the ECB seemed to have been closely aligned with the PMI, but as its discomfort

about monetary growth rose it appeared to become more hawkish, perhaps in the expectation that generous money growth would quickly turn the economy around. When this did not happen, the ECB softened its tone, only to be caught off guard again when the PMI did turn around.

Figure 3.4 The hawkometer and the PMI



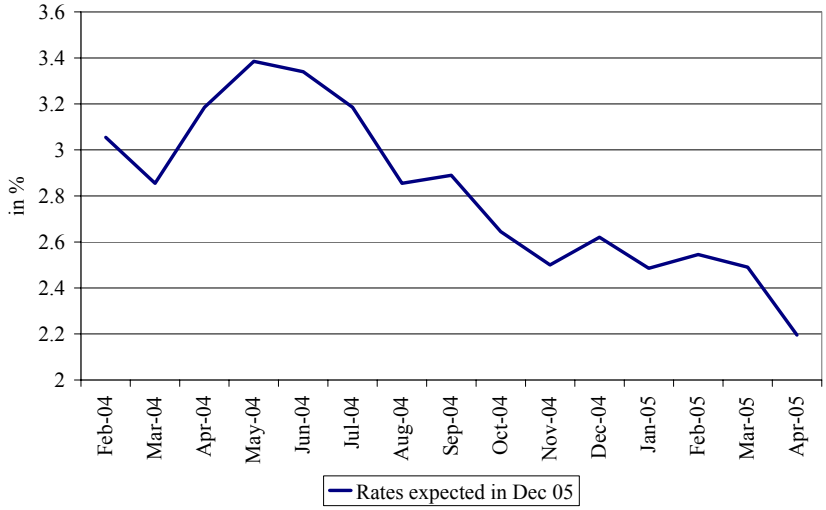
Source: Deutsche Bank, Global Markets Research.

The markets seem to have discounted the hawkish tone of the ECB for some time as can be seen from the Euribor futures. Figure 3.5 shows that the short term rate expected to prevail in December 2005 has almost continuously been on a downward trend, despite the gyrations in the PMI. The hawkish pronouncements of the ECB have thus lost credibility for some time.

Clearly, the Council has been hoping that the signals from the economic and monetary analysis will coincide eventually, setting the stage for an uncontroversial move. With money and credit growth showing no signs of abatement and consensus forecasts supporting the scenario of a 'moderate recovery', such a constellation may still materialise later this year. But even if the outlook for growth remains uncertain, the Council should acknowledge the increasing need to raise rates as long as money and credit growth exceed appropriate levels. Continued procrastination under these circumstances would lead to doubts about the Council's ability to take decisions; a cut to stimulate growth would damage the credibility of the recently reaffirmed two-pillar monetary policy strategy. Hence, the ECB will eventually have to reduce its accommodating monetary policy, albeit at a very measured pace. A rate cut, as demanded by several politicians and academics, would only

become an option if economic weakness were accompanied by weakening money and credit growth.

Figure 3.5 Euribor futures prices



Source: Deutsche Bank, Global Markets Research.

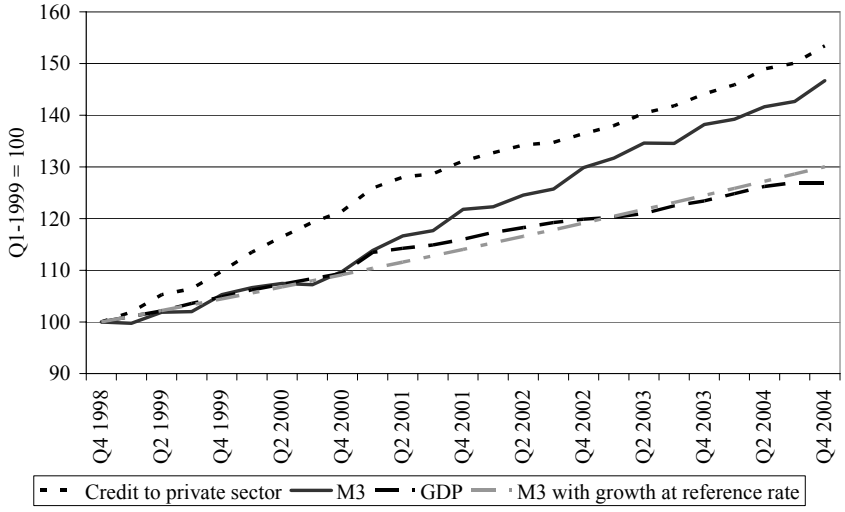
In the course of the last few years, the ECB has considerably refined its monetary analysis (Issing, 2005). The Bank has also fortified its economic analysis by providing economic forecasts on a quarterly basis. However, it has remained strangely silent on how it 'cross-checks' between the two pillars of its analysis. Clearly, 'cross-checking' is not a problem if both analyses point in the same direction. It also is fairly easy if signals from one of the pillars can be dismissed as distorted (as was the case for the monetary pillar in 2001-03). However, what does 'cross-checking' imply for monetary policy when the two pillars give persistently conflicting signals, as has been the case since 2003? What is the weight given to short-term considerations coming from the economic analysis and to long-term issues raised by the monetary analysis? When does the short-term turn into the long-term?

In the following, we shall argue that, when in doubt, the ECB has given too much weight to short-term signals at the expense of long-term indicators. The costs and benefits of its short-term bias have not become visible yet, but as EMU matures, this will change. Clearly, to defend its track record, the ECB must shed more light on the way the Council 'cross-checks' the economic and monetary analyses and draws its policy conclusions from that process.

3.3 What happened to the monetary pillar?

When the ECB started to be responsible for monetary policy, it emphasised that the first pillar for its decisions on monetary policy had to be an analysis of monetary policy conditions and accordingly set a 'reference' value for the rate of growth of the main monetary aggregate on which it chose to concentrate, i.e. M3. Everything else being equal, growth rates of M3 above this reference value (4.5%) were meant to signal a need for tightening policy. Since the start of EMU, however, actual growth of both money and credit has consistently been above the reference rates as shown in Figure 3.6 below.

Figure 3.6 Money and credit in the eurozone



Source: International Monetary Fund.

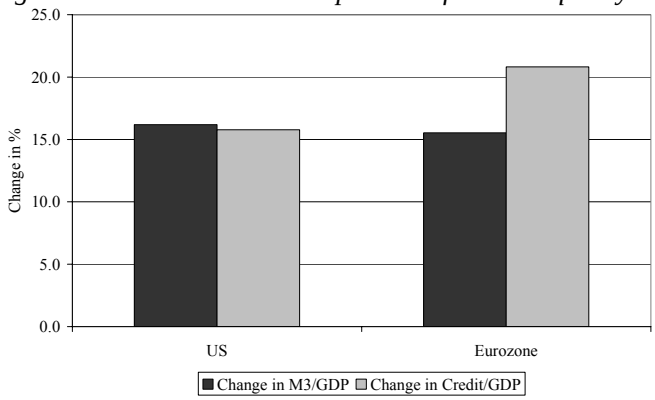
Nominal GDP grew over this six-year period close to 30%, which is very close to the compound growth M3 would have had if the reference rate had been observed over this period. In reality, however, the stock of money is now almost 20 percentage points above this level.

One might argue that less emphasis should be placed on monetary and credit aggregates in a time of rapid evolution of the financial markets, but upon closer inspection, this argument is much less convincing. It was widely expected that the introduction of the euro would trigger a process of disintermediation whereby economies of scale in securitised markets would allow firms to finance themselves without recourse to bank credit. Moreover, households would then have a much wider range of investments available, which would induce them to hold a smaller share of their assets in bank accounts. Both arguments suggest that the structural changes coming with

the euro would actually reduce the ratio of credit and money relative to GDP. The expectation was that the eurozone would move closer to the US model in which banks play a much smaller role in the financing of corporate investment and in the US the ratio of both credit and money to GDP is much lower than in the eurozone. As Figure 3.6 shows, however, both money and credit actually increased trend-wise relative to GDP with the result that the ratio of both money and credit to GDP increased by about 15%.

A transatlantic comparison is again instructive. Figure 3.7 shows the evolution of the ratio of money and credit to GDP also for the US. It is apparent that on this metric there is little difference. The popular image of the Federal Reserve flooding the US economy with liquidity compared to a much stingier ECB that at least constantly talks about the need to keep money growth in check is thus wrong. Monetary policy on (bank) credit expansion could even be seen as having been slightly more expansionary in the euro area than in the US.

Figure 3.7 A transatlantic comparison of excess liquidity



Source: International Monetary Fund.

3.4 The costs of ignoring the monetary pillar

At first glance, money and credit growth above earlier-desired levels does not seem to have exacted any costs from the economy. Between January 1999 and April 2005, the harmonised yearly consumer price inflation rate averaged 2%. This appears to be close enough to qualify as meeting the ECB's goal of keeping inflation below, but close to 2% over the medium-term. Still, without turning an entirely blind eye to money and credit developments, no economist can feel entirely relaxed about this performance. We have learned from past experience that the lag between monetary policy and its effects on inflation can be long and variable. Money growth above the rate absorbed by money demand will at some point raise prices, be they for

goods, services or assets. Hence, even if consumer price inflation has remained well-behaved so far and there are no signs of an imminent rise, it is too early to dismiss upside risks to price stability resulting from liquidity growth.

More visible have been the effects of strong credit growth on housing prices. While it is true that price increases for real estate (at 7.2% in 2004) have not been alarming in the euro area average, prices have increased substantially for an extended period of time in a number of countries (with housing price increases in Spain and France of 17% and 12%, respectively). Indeed, the average increase for the euro area was held down primarily by the lacklustre real estate market in Germany. Prices rose, occasionally at high rates, in almost every other country.

ECB President Jean-Claude Trichet has drawn some comfort from the contained level of price inflation for housing in the euro area average. As long as that average did not rise to worrisome levels, he seemed to imply, there was no reason for the ECB to become concerned. We do not find this view convincing.

Real estate market developments have always been heavily influenced by regional supply and demand conditions, and price bubbles have tended to be concentrated in certain regions. At the same time, however, the deflation of regional price bubbles, given a critical size of the affected region, has tended to have supra-regional effects. Two examples may suffice to illustrate the point.

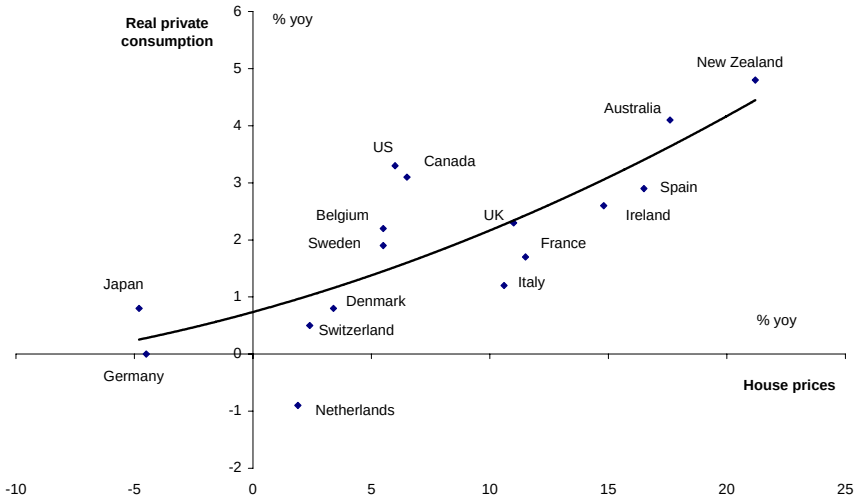
First, in the late 1980s, there was a property price boom in many parts of the US; but particularly in states like Texas and California, fuelled by strong lending growth by savings and loan banks. While the property price booms were localised, the entire US savings and loans industry was severely shaken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

Second, in the early 1990s, following the fall of the Berlin Wall and German unification, property prices rose strongly in eastern Germany. Construction investment and mortgage lending boomed, until overbuilding caused prices to collapse in the mid-1990s. The implosion of property prices weakened German consumption, investment and GDP growth. Although prices have now stabilised, the collapse of the building industry caused severe economic problems given the limited flexibility of the German labour market. Moreover, the stagnation of house prices certainly contributed to the ongoing weakness of consumption in Germany. Given the weight of the German economy in the eurozone, the collapse of its housing market was a major

reason why the ECB had to keep interest rates at relatively low levels for a long time. These and other examples from economic history suggest that regional property-price cycles can have supra-regional effects. Recently, property prices have risen especially quickly in France and Spain. These countries are certainly large enough to cause euro area-wide problems should a housing price bubble suddenly deflate.

Figure 3.8 illustrates the close link that exists between housing prices and consumption (the correlation coefficient is about 0.80). A property price crash in these (or other) countries would almost certainly weaken private consumption through wealth effects and increase uncertainty about the economic outlook. It would, of course, also lead to an abrupt fall of new construction investment.

Figure 3.8 Housing prices and consumption



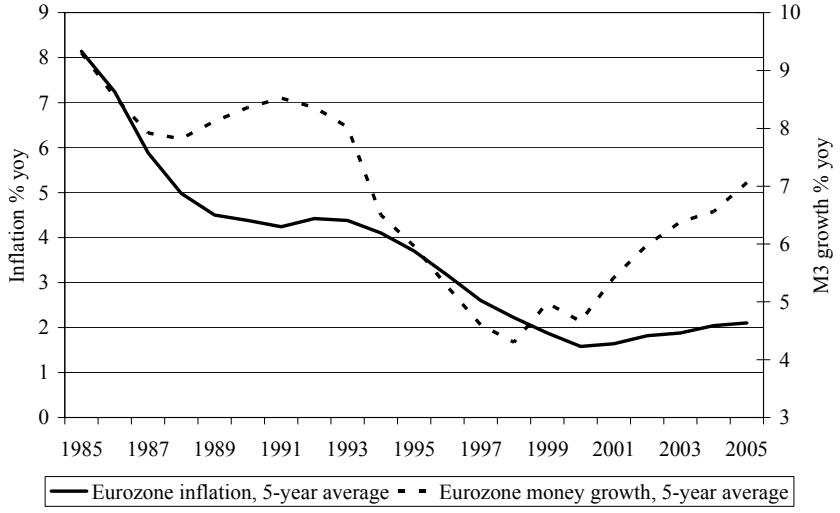
Sources: OECD and *The Economist.*

Moreover, a fall in housing prices may impair a part of the outstanding loans of the banking sector and force banks to raise reserves. This could reduce their willingness to extend credit to businesses and consumers. A slump in demand in the countries suffering from housing price deflation could spill over to other euro area countries and, in the worst case, pull the entire euro area into recession or even deflation. Thus, excessive money and credit growth increases the risks to price stability from two sides: it could stoke consumer price inflation in the longer run, or cause consumer price deflation by creating a negative asset price bubble.

The fact that an asset price bubble does not lead to consumer price inflation while it is building up and might even lead to deflation once it bursts explains why even longer-term inflation expectations might not be a good guide to policy. The cost of letting these bubbles emerge does not come in the form of higher inflation, but a misallocation of resources (empty houses) and prolonged economic weakness. It is the latter that is the most relevant danger for Euroland given its low degree of flexibility.

A longer-term perspective is again useful to measure the scale of the monetary overhang at present. Figure 3.9 shows that the scale of the present divergence between money growth and inflation had only one precedent, namely the early 1990s when a scissor opened between accelerating money growth and inflation which was a downwards trend. The scissors closed in the middle of the decade, with only a slight acceleration of inflation. The main event that led to the two series to convergence was the strong deceleration of money growth which preceded the recession of 1995 (and a subsequent period of slow growth). The deceleration in money growth was in turn due first to a tightening by the Deutsche Bundesbank, which saw German inflation rising and then a considerable increase in interest rates as the central banks of those countries under speculative attack tried to maintain price stability in the face of large devaluations.

Figure 3.9 Inflation: A monetary phenomenon



Sources: European Commission and Deutsche Bundesbank.

There is another parallel between the current situation and that of the early 1990s: at the time, exchange rates were kept fixed within the ERM although some countries were continuously losing competitiveness vis-à-vis the core of the ERM, Germany. That this situation was unsustainable became clear only in the currency crisis that started in late 1992, precipitated by the combination of a tightening by the Deutsche Bundesbank and the uncertainty surrounding a French referendum. The next chapter will analyse in more detail the dangers inherent in the present situation.

3.5 The costs of relying on the economic pillar alone

Many advocates of inflation-targeting dismiss the monetary pillar as superfluous and propose to rely on inflation forecasts as a guidepost for monetary policy. To produce inflation forecasts, they generally recommend a Phillips curve model. However, this requires output gap estimates and forecasts, which are subject to considerable measurement error.

In Figure 1.4 above, we traced OECD estimates of output gaps for the year 2000 over time. While these estimates remained fairly stable for the US, they changed dramatically for Euroland. Assuming that the most recent estimate (showing an output gap for that year of more than 1.5%) is the more reliable one, we may conclude that economic policies based on the first estimate (showing an output gap of almost -0.5%) would certainly have been misguided. Based on today's data, monetary policy should have been considerably tighter during 2000 to cool down an overheating economy, whereas the estimates from that year suggested that an easy policy was appropriate because there was still slack in the economy.

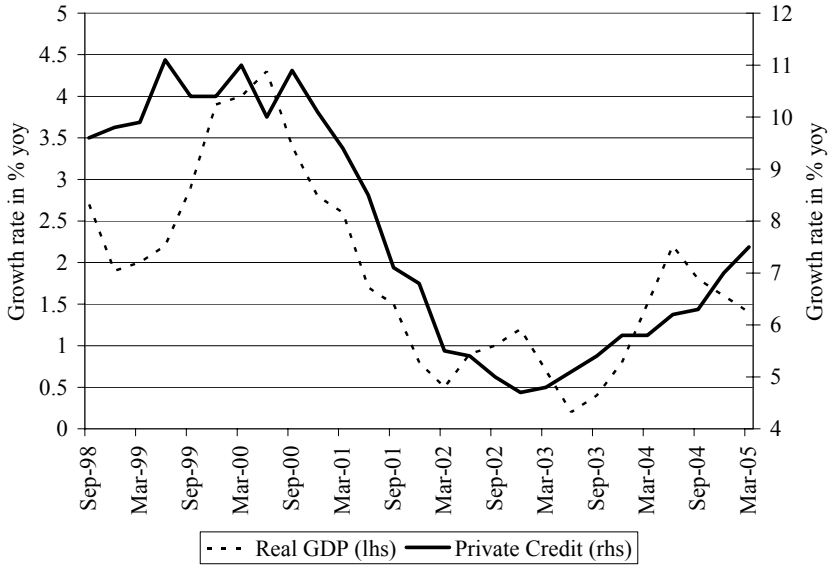
This is exactly what also happened to fiscal policy, which was too expansionary in 2000. Because of the policy error then, budget deficits grew beyond the limits set in the Maastricht Treaty during the following downturn, setting the stage for the breakdown of fiscal policy discipline that we are now witnessing. These developments support the scepticism against an activist fiscal policy that emerged in the early 1980s. Based on the bad experience of the 1970s, when an activist fiscal policy often had procyclical effects and led to an explosion of government deficits and debt, supply-side-oriented economists advocated a medium-term orientation of fiscal policy aimed at maintaining government solvency. For a while, the medium-term orientation of fiscal policy led to a decline in budget deficits and debt ratios in many countries. More recently, however, more activist fiscal policies have come into fashion again.

The fiscal policy experience of the last decades holds interesting lessons for monetary policy. Many economists advocate the minimisation of the output gap as the main intermediate target of monetary policy. Through this, they expect monetary policy to achieve its final objective of keeping inflation at a

certain level. These economists have criticised the ECB's two-pillar monetary policy strategy as inappropriate and confusing. According to them, the monetary pillar is redundant and should be scrapped and the economic pillar should be used as a framework for inflation targeting. However, given the measurement and forecasting errors for the output gap in recent years, a monetary policy focusing exclusively on the output gap would surely have made errors as severe as those of fiscal policy. In addition to a deteriorating outlook for government finances, the euro area could now be confronted with severe risks to price stability.

Against this background, the monetary analysis contained in the monetary pillar of the ECB's strategy can help to avoid policy errors and support a medium-term orientation of monetary policy necessary to preserve price stability. In our view, monetary and credit developments provide at least as much, if not more, reliable information for monetary policy-makers (see Figure 3.10) than, for example, the PMI. Credit growth has usually been closely correlated with GDP growth. This implies that the fact that credit growth continues unabated, and that its level is consistent with growth at the eurozone's (admittedly meagre) potential, should be a strong signal that monetary policy does not need to be loosened. Hence, we feel that the ECB has paid too little – and not too much – attention to monetary developments in recent years.

Figure 3.10 Information from the monetary pillar



Chapter 4
EMU's Coming Stress Test

We have documented in this report the inability of the usual macroeconomic levers to get the Euroland economy on a sustainable growth path, as longer-term considerations limited the extent to which both fiscal and monetary policy could perform a stabilisation role. Pressured by persistently weak growth, a choice was made in favour of 'short-termism': in the fiscal field, the key disciplinary device, the Stability Pact, has already effectively been emasculated by politicians. In the monetary field, the ECB has ignored the medium-term warning signals stemming from the acceleration in money and credit growth. In fact, it looks as if fears of political pressures are inducing the ECB to focus on short-term growth considerations at the cost of neglecting long-term stability risks.

In the end, neither short-term demand has been boosted nor long-term discipline maintained. The result of this failed attempt to stimulate demand (in the face of very sluggish supply) is that Euroland is now faced with rising public debt/GDP ratios and a large monetary overhang. The latter has not led to incipient inflationary pressures so far, and the current state of labour markets suggests that inflation is likely to remain under control in the near-term. But growing fiscal deficits combined with a rising monetary overhang in the face of considerable cost and price rigidities constitute a threat to price and financial stability in the euro area.

In addition, the emergence of widening intra-area divergences could severely test the resolve of the Euroland authorities to support the value of the euro, which could degenerate in a process of gradual 'lira-isation' of the euro.

4.1 EMU's potential breaking points resurface

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

ensure price stability in the long-run. In other words, governments could pursue their narrow interests at the expense of the public good of price stability.

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

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

4.2 A new element: Intra-area divergences

Growth differentials among EMU member countries have so far been rather limited and at a stable level. The weighted standard deviation of the growth rates of the euro area members has barely moved between 1999 and 2004 as the large three euro area members tended to move broadly together. As documented above, the two main laggards in the eurozone were Germany and Italy, with France falling somewhat in between them and the more dynamic smaller countries. However, any apparent similarity between developments in Italy and Germany has been superficial. It is now becoming clear that a chasm has opened up between them under the surface.

Germany entered EMU with an overvalued exchange rate, but it has regained competitiveness through a process that used to be called ‘competitive deflation’. By contrast, Italy has continuously lost competitiveness and hence market shares. These large relative movements in competitive positions did not translate earlier into different growth rates because of the offsetting tendencies in the housing markets. As documented above, the low interest rate environment fostered by the ECB’s policy and the global developments (this will be documented in a forthcoming special report) led to a housing boom in a number of countries, including Italy. This has so far sustained consumption in Italy, while overbuilding especially in the eastern part of the country during the early 1990s lead to persistent weakness in the real estate market and consumption in Germany. However, the cumulated loss in Italian

competitiveness has become so severe that its negative effects can no longer be offset by the housing boom.

4.3 Italy on the brink

Italy is likely to provide the first major stress test of EMU. Its economy has slipped back into recession in 2004Q4-2005Q1.[6] However, in contrast to developments in 2003, the most recent downturn has been more pronounced and there are presently no sign of a bottoming out of the contraction in the near future. As a consequence, Italian real GDP could now drop in 2005 in a recession almost as deep as that of 1993, when real GDP contracted by 0.9%.

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

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

This time, Italy cannot regain competitiveness – and stimulate economic growth – through nominal exchange rate depreciation. What is needed is real exchange rate depreciation through cost and price cuts. This is how Germany improved its external competitiveness and raised economic growth in recent years (while many economists and market participants misinterpreted these developments as deflation). Thus, German unit labour costs increased by only 0.4% in the annual average of 1999-2004, with a substantial drop by 0.7% yoy occurring in 2004. Helped by increased competitiveness, net exports rose and the German economy recovered from stagnation in 2003.

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[6] This follows a brief recovery in the first three quarters of 2004 from technical recession in the first half of 2003.

However, in contrast to their German counterparts, which learned to live with a hard currency and fierce competition in the past, Italian companies and trade unions have little experience in rigorous cost and price controls in a highly competitive economic environment. They operate in an environment characterised by significant restrictions to competition and a soft currency. Moreover, while they tend to concentrate more on the production of medium-quality, price sensitive goods and services, they have made less progress than their German counterparts in outsourcing production to low-cost locations. All this suggests that it will take Italian companies much longer than their German counterparts to improve their competitive position. As a result, the medium-term outlook for the Italian economy is rather bleak.

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

Table 4.1 All competitiveness indicators point in the same direction

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

* Average of annual percent changes. The changes in REERs refer to the whole period, as the change in the share of exports.

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

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

4.4 The stress test in action

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

Given the aversion documented above (chapter 2) of especially the large member countries against painful structural reform and in view of the likely persistence of the economic difficulties, the political systems in the weaker countries, in the first instance probably Italy, are likely to abandon fiscal policy discipline. The European Commission hopes that the Council of Finance Ministers (ECOFIN) will demonstrate that the Stability and Growth Pact still exerts a disciplinary influence on EMU members after its recent revision. We doubt this. With France and Germany also experiencing severe strains in government finances, and Portugal and Greece among its 'compagni di sventura', Italy can count on powerful and numerous allies in its likely course towards higher fiscal deficits.

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

Without European political union, the ECB lacks a public constituency supporting its monetary policy stance in the face of political pressure. Public support was a cornerstone for the Deutsche Bundesbank's ability to pursue a low-inflation, hard currency policy. It remains to be seen whether the ECB can do the same without strong backing from the general public. Should the ECB yield to the inevitable political pressures, the switches would be set for a higher-inflation, softer-currency EMU. Monetary union is thus likely to

undergo a major stress test, which should not come as a surprise. Many economists had predicted severe stress before the start of EMU and warned that this could result in softening of the common currency or even an eventual demise of EMU. What is perhaps surprising is how unprepared economic policy-makers, including those at the ECB, presently appear to deal with the stress.

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

4.5 Policy conclusions

We have demonstrated in the earlier chapters of this report how tensions between short-term and long-term policy objectives have delivered the worst of all possible outcomes: lack of cyclical support and weakening of long-term discipline. With economic growth continuing to disappoint, the short-term objective of stimulating growth in the near-term has gained importance, inducing structural policy to shelve important reforms, fiscal policy to remove constraints to deficit increases, and monetary policy to turn a blind eye to accelerating money and credit growth. If policy makers continue to go down this route, we are likely to witness the 'lira-isation' of the euro. But what can be done?

The key question is whether these stark divergences in performance are the result of divergent policies or of diverging economic fortunes. The answer is probably both: inside a monetary union, diverging economic fortunes will lead to diverging economic paths, especially if policy responses diverge. Our analysis has suggested that countries that have learned to live with a hard

currency in the past are able to adjust within EMU. This applies primarily to some of the smaller countries, but also to some extent to Germany, which has regained competitiveness through rigorous price and cost control.

In countries with a tradition of price stability, it was generally the central bank that educated economic players in these countries, based on a broader public consensus, to operate in a hard currency environment. See Box 4.1 for the few examples one can cite from recent economic history in Europe.

Box 4.1 A lesson from the history of European integration

The first attempt to form a monetary union in Europe started in the early 1970s. (the so-called 'Werner Plan' to reach EMU by 1980). It ended in total failure because of intra-area differences which show, *mutatis mutandis*, very similar elements to today's situation.

At the time, the main reason for divergence was a difference in the reaction to the oil shock of 1973. Germany chose the hard-currency approach, whereas most other countries tried to inflate their way out. Needless to say, the attempt to inflate away a terms-of-trade loss was not successful. The hard currency model thus led over time to much better economic performance. Monetary union became possible only once this lesson had been learnt and, at least on the surface, there was broad agreement on the hard-currency approach.

The list of countries that has absolved successfully a national stress test of the hard-currency approach is not long:

- Germany after 1967, following the rise of the DM against the dollar and again in 1973;
- The Netherlands following break-up of the Bretton-Woods system in 1974, in the 'snake' with the DM;
- Austria in the early 1980s, after adoption of the hard-shilling policy; and
- France in the early 1990s, following adoption of the *franc fort* policy in the late 1980s.

By contrast, none of the Southern European countries has maintained a hard-currency policy over an entire business cycle.

Today the main threat no longer comes from trade unions that demand double-digit wage increases. Rather, the main danger lies in the swelling ranks of retirees who demand 'only' their acquired rights in the face of shrinking resources. As we have documented several times, the resources available for distribution have shrunk due to lower productivity growth and ongoing demographic decline. Today, as 30 years ago, policy-makers at first are trying to ignore the long-term constraint.

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

In EMU, it is the ECB's task to perform this job for those countries that have not had this education. This means that the ECB will have to downgrade its short-term concern about cyclical economic developments and pursue a monetary policy with a view to hardening the euro in the long-term. It also means that the hard currency countries will have to return to fiscal discipline, setting an example and exerting pressure on the previous soft currency countries to do the same. The importance of this point cannot be exaggerated: if the hard currency countries – Germany and France – want to preserve a strong currency, they need to lead by example and credibly adjust their fiscal stances as soon as it is feasible, in order to have a comfortable position by the beginning of the next downturn. Only if France and Germany can correct their, at present only moderately 'excessive', deficits will they have the necessary moral and political authority to prevent much more serious excesses in Italy and other countries under stress.

The ECB will not be able to keep the euro hard if it lacks political support. But it has no natural political constituency it can appeal to over the heads of politicians for a stability-oriented monetary policy. Hence, EMU can only survive as a hard-currency union if:

1) ECB policy-makers muster the courage to pursue a monetary policy that may become very unpopular in the short-run, and

2) the governments of previous hard-currency countries support the ECB in this endeavour.

If these conditions are not fulfilled, we fear that the euro will descend into a soft currency.

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

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Annex

Growth in Labour Productivity in Europe: Recent Developments

by

Francesco Daveri

1. Recent developments in labour productivity and hours worked in Europe and the US

Since the inception of the Internet age (dating roughly around 1995), [1] the slowdown in productivity growth in Europe has become an issue of serious concern for European policy-makers.

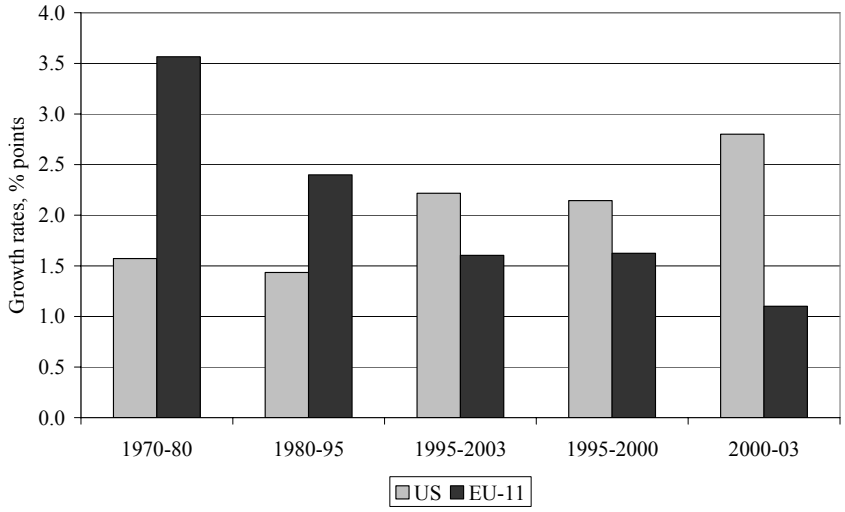
As shown in Figure A1, irrespective of whether the euro area or a different EU aggregate is considered,[2] the growth rate of GDP per hour worked in Europe has *declined* from about 3.5% in the 1970s to 2.4% in the 1980s through 1995 and to 1.4% in 1995-2003, in turn bottoming out at less than 1% in 2000-03. The question is whether this heralds an even bleaker scenario of zero productivity growth around 2010 – quite far apart from the policy goals asserted in Lisbon in 2000.

One might go further and state that the gap between the asserted goals for productivity (a sub-heading of the 'Lisbon strategy') and the actual achievements of the European Union along the Lisbon route becomes more apparent as time goes by.

[1] Although the Internet protocol was signed at the end of 1991, the productivity counterpart of its gradual diffusion in the economy can hardly be envisaged as instantaneous. For sure, starting in 1995, labour productivity growth took off in the US and has never fallen since. Given the prominent lead firmly held by the US in the introduction of IT, this implicitly sets an initial date for best-practice countries. For slow-adopting economies, such as the Mediterranean countries in the EU, it is perhaps more appropriate to think of the end of the 1990s as the initial date to search for an impact of IT adoption on productivity.

[2] The EU aggregate used in Figure A1 refers to the 11 EU countries for which the 'total hours worked' series is computed by the OECD and provided in the OECD Productivity Database.

Figure A1. GDP per hour worked, US vs. EU11
(EU11=EU15 - Aut, Gre, Lux, Por)



Such a continued productivity slowdown might be interpreted as the smooth and somehow unavoidable continuation of the convergence process initiated after the end of World War II. The sharing of advanced US technologies produced high growth for a few years (and possibly decades) in the comparatively poorer, but opportunity-rich European countries. This process took place in parallel with extensive resource reallocation away from low-productivity agriculture into high-productivity manufacturing industries. As productivity and income converged towards US levels, however, the scope for further exploitation of this channel of 'imported growth' narrowed. This – somehow fatalistic – view has been modelled in Acemoglu, Aghion & Zilibotti (2002) and is well documented in Blanchard (2004).

Taking a look at the data from the US may suggest a slightly different perspective. Productivity trends in the US in fact show a *smooth acceleration* throughout recent years, irrespective of whether the economy was in a recession or in a favourable cyclical contingency. During the so-called 'productivity slowdown' years, labour productivity in the US economy disappointingly grew by 1.6% in the 1970s, 1.4% in the 1980s and 1.2% in 1990-95. But then something happened around 1995. Since then, throughout the 1995-2003 years, productivity per hour worked has steadily grown by 2.2% per year, trending up to a whopping 2.8% in 2000-03. It is particularly noteworthy that labour productivity unconventionally grew by 1.9% even in 2001 – the year of the terrorist attacks and the bursting of the bubble and also a time when US GDP growth was nil.

Has this picture changed in 2004? Data for productivity per man hour for 2004 from the OECD Productivity Database are not yet available, but the OECD Economic Outlook data set provides preliminary 2004 figures as to the value added per employed person in the business sector and the average hours worked by employees. In 2004, the value added per employed person in the business sector has grown by 1.2% in the euro area, while the average number of hours worked kept declining for most EU countries, but at a somewhat slower pace than in the early 2000s (-0.2% in 2004, as opposed to -0.4% in 1995-2003).

Table A1. Labour productivity growth over time and across European countries, the US, the G-7 (growth rates, % points)

	1980-95 [1] GDP per employed person (business sector)	1995-2004 [2] GDP per employed person (business sector)	1995-2003 [3] GDP per hour worked (whole economy)	2001-04 [4] GDP per employed person (business sector)
Euro area	1.8	0.9	1.5	0.6
Germany	1.7	0.9	1.6	0.7
France	2.2	1.3	2.0	1.0
Italy	2.1	0.5	0.5	-0.2
Spain	2.1	0.8	0.7	0.7
Austria	2.4	2.0	1.6	1.1
Belgium	1.9	1.4	1.2	1.1
Finland	3.4	2.3	2.3	1.9
Greece	0.1	3.5	3.1	3.8
Ireland	3.8	4.0	5.0	3.4
Luxembourg	1.3	1.5	1.8	-0.5
Netherlands	1.2	0.9	0.5	0.4
Portugal	2.0	1.3	2.1	0.0
UK	2.3	1.8	2.2	1.8
Denmark	1.6	2.1	1.3	1.9
Sweden	2.6	2.4	2.3	2.1
Czech Rep	NA	2.6	3.1	2.8
Hungary	-2.4	3.6	2.8	3.2
Poland	NA	5.8	NA	4.9
Slovakia	-2.7	3.9	5.2	3.3
US	1.4	2.6	2.2	2.9
G-7	1.7	1.9		2.1

Sources: OECD Productivity Database (column [3]) and OECD *Economic Outlook*, December 2004 (other columns).

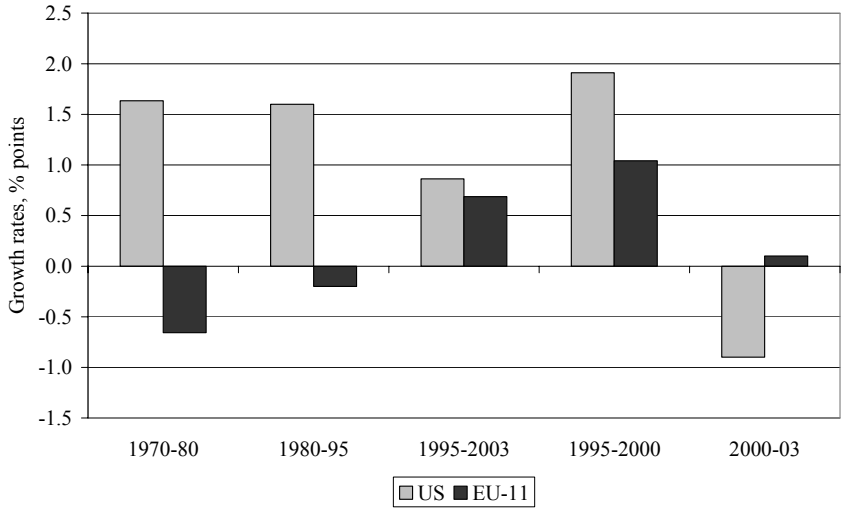
As implied by the numbers in Table A1, a 1.2% growth rate of GDP per employed person is higher than in 2001-03 (when it was close to a bare annual 0.4%) and higher than in 2003. All in all, in 2004, the growth rate of value added per man hour in the euro area appears to have reached some +1.3% in the economy as a whole (and possibly a handful of decimals more in the business sector only). This does not make Europe a big Ireland or a South Korea (especially if one considers that this increase also reflects the usual pro-cyclicality of labour productivity),[3] but it is clearly a more respectable growth rate of labour productivity than experienced in the recent past. It is too soon, however, to infer whether the past downward trend is being reversed.

Finally, Figure A2 completes the picture by providing information about the growth rates of the labour input, the number of total hours worked, whose correlation with labour productivity at the country level will be more extensively discussed in the next sections. Figure A2 manifestly shows that Europe's problem in the past was the insufficient creation of jobs. The number of total hours worked in the EU economies declined by some 0.7% per year in the 1970s and by a more modest 0.2% in 1980-95. Compounding implies that, having set the number of total hours worked in Europe to 100 in 1970, this was down to about 91 as of 1995 – a sheer cumulative labour input loss of about 9%. In turn, this is particularly striking in the light of the parallel cumulative rise of about 19% in working-age population over the same period of time. As is also apparent from Figure A2, job creation was astonishingly high in the US economy during the same period. The fast and continued increase in employment creation made the total number of hours worked increase by more than 1.5% per year for 25 years – a cumulative

[3] How to compute the extent of pro-cyclicality of labour productivity is contentious. A simple time series regression of the growth rate of value added per employed person over its once-lagged value and the growth rate of nominal GDP (a measure of cyclical fluctuations), plus a constant term over 1971-2003 gives an estimated coefficient for nominal GDP growth of about 0.16 (with an estimated standard error of 0.04). Hence, if one considers that the 2004 acceleration of nominal GDP growth in the euro area has reached 1.1 percentage points (up to 3.7% in 2004, from 2.6% in 2003), this gives a cyclical correction of as much as 0.15-0.25 percentage points (including standard errors). This much may be subtracted from the actual growth rate of business labour productivity in 2004 (1.2 percentage points). Moreover, if we consider that 2003 was a particularly bad year for GDP growth, this leads to a slightly upward revision of the measured growth rate of labour productivity in 2003. In a nutshell, netting out the business cycle would leave the euro area with definitely lower 'true' productivity acceleration in 2004.

increase in the labour input of about 45%, just large enough to keep up with the (fast) pace of US demographics.

Figure A2. Total hours worked, US vs. EU11
(EU11=EU15 - Aut, Gre, Lux, Por)



Yet, once again, something then changed. After 1995, the growth rates of total hours in the EU and the US became much closer (almost equalling each other at about three-quarters of a percentage point per year). It is likely that this clear turnaround compared to previous decades is the result of the ongoing process of labour market reform in Europe, which – although half-hearted and piecemeal – has indeed succeeded in raising European employment rates closer to the ambitious goal of 70%, as stated in Lisbon.

2. Productivity and hour growth across European countries

2.1 TFP vs. capital deepening

Having summarised the broad picture for the EU as a whole, it is also instructive to contrast productivity growth rates across the EU countries in 1995-2003, based on the data from the OECD Productivity Database. The country-specific productivity data, shown in Table A1 (columns [2] and [3]),

exhibit quite a bit of variability within the enlarged EU[4] and within the group of the big EU countries as well.

At the country level, data are available for both labour productivity and total (or multi-) factor productivity (TFP). It is useful to keep track of both. Labour productivity is tightly linked to living standards and real wages, but it is an imperfect measure of efficiency. TFP changes, computed as a residual after netting out the contribution of the accumulation of capital per hour worked to labour productivity growth, are instead meant to capture changes in the efficient use of all the factors of production taken as a whole, brought about by reorganization and other major changes in the modes of production.[5] Both pieces of information are used here.

As to labour productivity, although the big picture is still one of a declining productivity performance of Europe over time, the data also indicate that not all of the EU countries are equally plagued by low productivity growth. To name two big ones, the growth rate of value added per hour in the UK and France was not too far behind that of the US in 1995-2003, hovering around 2% per year. The same applies to Finland and Sweden. The Nordic countries have witnessed a slight decline in their productivity performance compared to previous years, but, overall, productivity growth in these countries remains remarkably high and steady over time. By contrast, Italy, Spain and the Netherlands are countries where the productivity of labour grew the least, with compounded average growth rates of about one-half of a percentage point per year or so over the last few years.[6]

Germany is in between, with an average growth rate of about 1.6% per year in 1995-2003, declining below 1% in the early 2000s. As reported in columns (2) and (3), the discrepancy between the growth rate of GDP per worker and per hour worked is particularly pronounced for this country. This is the counterpart of the particularly fast decline in the number of average

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[4] The OECD Productivity Database provides data for 18 EU countries, including the Czech Republic, Slovakia and Hungary, over 1995-2003.

[5] In a nutshell, 'productivity' should thus be measured by TFP. The computation of TFP requires, however, the untested assumptions of perfect competition in the factor and product markets and constant returns to scale, both of which greatly reduce its informational content and appeal.

[6] Cette (2004) appropriately points out that an artificial reduction in labour productivity may obtain if a country is changing its recording procedure of previously unrecorded jobs on the output side but not on the employment side. This may have been the case of Spain and the Netherlands – which have both been subject to rapid labour market reform over the late 1990s. This is likely to be a level, rather than a growth effect, however.

hours worked that plagues the German economy even more so than the rest of the EU economies (see Blanchard, 2004). Some of the recent union agreements to work longer hours have apparently not ended this trend.

Much higher productivity growth (in excess of three percentage points per year) is seen instead in the poorer European countries, first of all Ireland (the brightest European success story of the 1990s), the small Mediterranean ones (Greece and Portugal) and the Eastern European countries, such as the Czech Republic, Slovakia and Hungary. In these countries, productivity growth is also prominently fed by the substantial reallocation from agriculture and old manufacturing industries into new manufacturing industries (although the scope of such reallocation may be rather constrained, as emphasised by Caselli & Tenreyro, 2005).

One might also argue that small countries tend to fare better than large countries. It remains still unclear, however, whether this positive 'small country' effect would actually survive once the convergence effect brought about by the presence of many low per-capita GDP countries in the group of small countries is controlled for.

Finally, as is apparent in comparing when the data in column (4) of Table A1 with the data in column (2), productivity growth has usually declined over time in all countries except Greece in 2001-04, with a low in 2001-03 and an upward rebound in 2004.

Table A2 (column [1]-[3]) and Figure A3 enrich the picture by presenting data for a slightly shorter time period (1995-2002 or 1995-2001, when 2002 data are unavailable) for the growth of value added per man hour (one more time), this time decomposed into its TFP and capital deepening component. As indicated there, TFP growth is tightly correlated with labour productivity growth. A simple cross-sectional regression of labour productivity growth on a constant and TFP growth (using the available 14 observations) gives a very close fit with the highly significant coefficient for TFP close to 0.90 (standard errors in parentheses):

$$\text{Growth}_{\text{GDP per hour worked}} = \underset{(.20)}{.94} + \underset{(.12)}{.89}\ \text{Growth}_{\text{TFP}} \qquad \text{Adj. R-squared} = .80$$

This is like saying that the poor labour productivity performance of Italy and Spain finds a close counterpart in very low (even negative, in the case of Spain) growth rates of TFP. If it were not for capital deepening, Italy and Spain would have experienced zero or negative growth of labour

productivity.[7] By the same token, the outstanding labour productivity increase in Ireland is largely accounted for by TFP growth. TFP also makes more than 50% of the growth rate of labour productivity in Belgium, France, Greece and Portugal and reaches 100% of the labour productivity increase in Finland.

Table A2. Decomposing labour productivity growth into TFP and capital deepening components in European countries and the US (growth rates, % points)

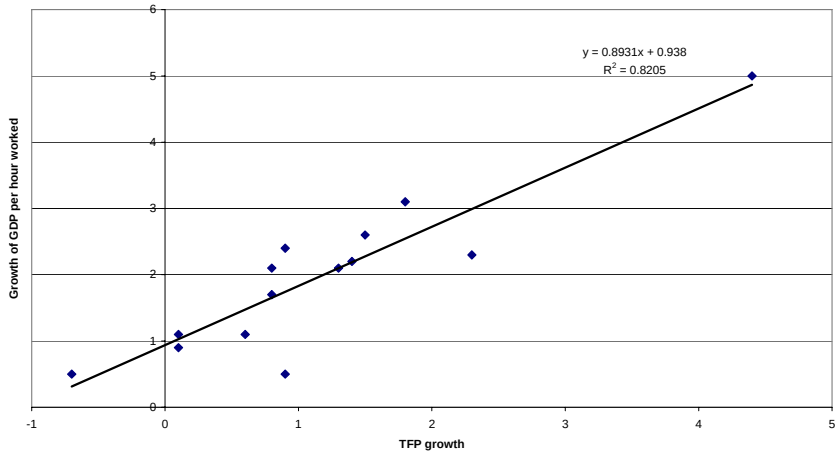
	1995-2002			1985-95		
	[1] GDP per hour worked	[2] Capital deepening	[3] TFP	[4] GDP per hour worked	[5] Capital deepening	[6] TFP
Germany	1.7	0.9	0.8	NA	NA	NA
France	2.2	0.8	1.4	2.3	1.0	1.3
Italy*	0.9	0.8	0.1	2.1	0.6	1.5
Spain*	0.5	1.2	-0.7	1.6	1.0	0.6
Austria	1.6	NA	NA	NA	NA	NA
Belgium*	1.1	0.5	0.6	2.3	1.4	0.9
Finland*	2.3	0.0	2.3	3.1	1.4	1.7
Greece*	3.1	1.3	1.8	0.8	0.7	0.1
Ireland*	5.0	0.6	4.4	3.6	0.3	3.3
Luxembourg	1.8	NA	NA	2.9	NA	NA
Netherlands	0.5	-0.4	0.9	1.5	0.8	0.7
Portugal*	2.6	1.1	1.5	NA	NA	NA
UK*	2.4	1.5	0.9	2.0	1.1	0.9
Denmark*	1.1	1.0	0.1	1.6	1.1	0.5
Sweden*	2.1	1.3	0.8	1.6	1.2	0.4
US	2.1	0.8	1.3	1.2	0.4	0.8

* Data refer to 1995-2001.

Source: OECD Productivity Database, February 2005.

[7] The TFP growth collapse in these two countries is a novel feature: the 1985-95 decomposition also reported in Table A2 (columns 4-6) in fact presents a more balanced splitting between the two components of labour productivity growth.

Figure A3. TFP and labour productivity growth



The regression does a particularly good job correctly predicting the actual values of labour productivity growth for France and the US, the two countries often taken to represent outright different modes of production (see e.g. Caselli & Tenreyro, 2005). This is not surprising, given that the underlying productivity data for these two countries are essentially the same: same growth rates of labour productivity and TFP and the same contributions of capital to growth. (The differences in labour market outcomes will be described in the next section.)

Regression residuals clearly exist on both sides. The UK and Swedish labour productivity performances are consistently better than their values predicted by the regression (respectively, 2.4 and 2.1 percentage points instead of 1.7 and 1.6). The Netherlands seems to 'waste' (so to speak) its rather high TFP growth through a recorded negative contribution of capital (per hour worked) to labour productivity growth. This may be seen as the other side of the coin of exceptionally good labour market outcomes, which have likely brought about a decline in the capital-labour ratio adopted by Dutch companies. Finland is another data point below the regression line. Capital deepening has been very low in Finland as well, although for a different reason: the return to fast productivity growth in the Finnish economy in the 1990s has taken place through an extensive process of 'old capital' shedding.[8]

[8] The role of capital shedding in Finland has been investigated, among others, by Jalava & Pohjola (2005) with aggregate data, by Daveri & Silva (2004) with industry data and by Maliranta (2001) and Maliranta & Rouvinen (2004) with micro data.

Oversimplified as it is (and possibly plagued by variable omission and other specification problems), the cross-sectional regression results lead to an old-fashioned, but also stringent implication: particularly high or particularly low labour productivity growth often has a TFP growth counterpart.[9] This is also the result of the diminished contribution of capital deepening observed throughout many EU countries over the 1990s (not captured by the cross-sectional regression in the main text, but shown in Table A2) and clearly associated with the declining investment shares of GDP observed in many European countries. Given that capital deepening has become a less important source of growth in the second half of the 1990s, however, this has contributed to raise the relative importance of TFP growth as a source of labour productivity growth.

2.2 Growth of productivity vs. growth of hours

The OECD data on productivity and hours show another stark fact: as depicted in Figure A4, there is a negative correlation between the growth of labour productivity and the growth of total hours worked. If Ireland is left out, the correlation coefficient between the growth rates of labour productivity and the number of total hours worked is negative 0.55.

The fast-growing Eastern European countries are seemingly paying a heavy toll in terms of diminished employment creation. The same applies to Greece and Portugal, where high growth rates of productivity are coupled with low or negative growth of hours. At the other end of the spectrum, Spain, the Netherlands and, to a lesser extent, Italy exhibit low productivity growth and fast growth of total hours worked.

Altogether, this may be taken to imply that, except for Ireland where both high productivity and growth in hours worked are observed, labour demand does *not* seemingly shift enough to the right in the rest of Europe. In other words, the rise in employment rates experienced in European countries in the last few years has probably been mostly labour-supply driven. This is consistent with a microeconomics textbook view that locates most EU countries along a given labour demand curve depending on their labour supply conditions.

According to this – simplified but possibly useful – partial equilibrium view of the labour market, it is no wonder that Germany presents both lower growth of labour productivity and lower growth of hours than the US. This is because of its lower TFP growth (+0.8% per year against +1.3% in the US).

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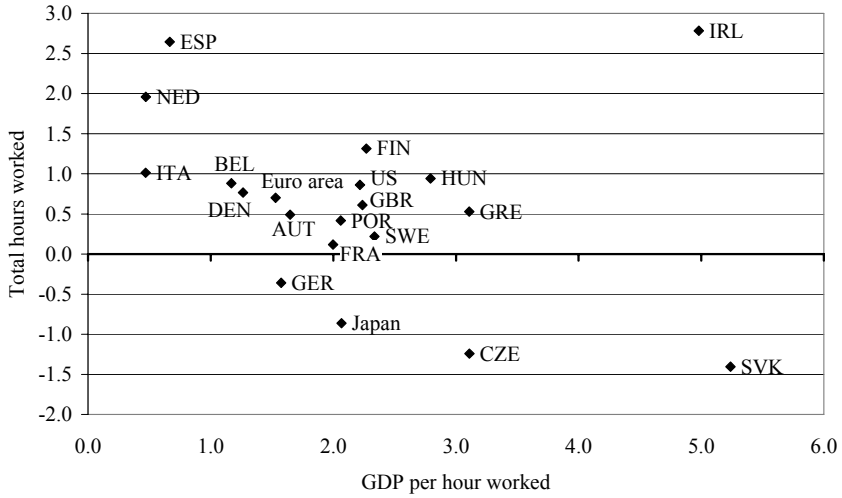
[9] An extensive discussion of the role of capital deepening in the EU productivity slowdown of the 1990s can be found in Daveri (2004).

By the same token, if one compares pairs of countries with similar TFP growth rates, one would expect to observe a negative relationship between growth of labour productivity and hours. This is the case for Greece and Finland, for example. They share roughly similar TFP growth rates (close to 2% per year) and indeed Greece exhibits higher growth of labour productivity and lower growth of hours worked than Finland.

Figure A4. Growth in productivity and hours worked, 1995-2003



2.3 Summing up on labour productivity and hours growth

Going beyond the aggregate picture of the euro area, it is helpful to highlight that speaking of a 'euro area productivity performance' may miss some important details to be captured by looking at the country-specific productivity and hour growth performances. This is important to point out, especially in the light of the recent 2004 productivity acceleration. The variability of productivity performances in 1995-2003 gives another reason to be cautious before turning the improved 2004 figures into an optimistic scenario of high productivity growth for the euro area in the future.

3. Is there a positive contribution of industry reallocation to labour productivity growth?

As more extensively detailed, e.g. in OECD (2001) and Daveri (2003), the aggregate changes in productivity levels can be decomposed in the contributions of their industry components. Each industry is in turn the sum of within- and between-components.

Any given industry may, in fact, contribute to aggregate productivity growth in two ways.[10] Suppose first that the level of labour productivity in industry *j* is the same as the economy-wide average. Then aggregate labour productivity growth is simply the weighted average of each industry's productivity growth, with the industry's fixed weights equal to the nominal value added shares in some base (usually initial) year. In this economy, the higher the growth rate of productivity in each individual industry, the higher the growth rate of productivity in the aggregate. Moreover, resource reallocation across industries would not affect the growth rate of labour productivity.

If, as is very likely, productivity differs across industries, then resource reallocation *across industries* (but *not* across firms within industries) also has an impact on aggregate productivity, holding other things constant. This reallocation (or between) effect may positively contribute to aggregate growth if industry *j* is expanding (respectively, contracting) employment and its level (or growth) of labour productivity is higher (respectively, lower) than the economy-wide average. Hence, if labour moves to industries that are less productive (or growing at a slower pace) than the average, the reallocation effect may well be negative.

The contribution of industry *j* to aggregate productivity growth is approximated as the sum of these two effects. This is done in Table A3 for non-durable and durable manufacturing as well as for private services, starting from a 30-industry decomposition obtained from STAN.[11] The results of this decomposition for the US, Germany, France, the UK and Italy (hence, the big EU-4) in 1995-2000 are reported in Table A3.

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[10] As detailed in Nordhaus (2002), a fully-fledged decomposition would also include the so-called 'Baumol effect'. The Baumol effect originates from changing value added shares in industries growing at different rates.

[11] The disaggregation of manufacturing industries in non-durable and durable producers is standard. Non-durable producing industries are those industries producing either consumer or intermediate goods, while durable producers produce machinery and equipment and means of transportation. As recommended by the OECD, 'private services' is computed excluding 'Real estate activities' (ISIC 70) and 'Community, personal and social services' (ISIC 75-99) from 'Total services' (ISIC 50-99).

Table A3. Decomposing aggregate labour productivity growth in pure and reallocation industry effects, US and the big EU-4 (1995-2000)

	US	UK	France	Germany	Italy
Non-agriculture business sector					
Productivity growth (1)	3.63	2.02	1.55	1.86	0.86
Pure productivity (2)	3.54	1.59	1.61	1.37	0.71
Reallocation (3)	-0.09	0.25	-0.02	0.48	0.21
Non-durable manufacturing					
Pure productivity (4)	0.10	0.07	0.42	0.38	0.10
Reallocation (5)	0.01	0.05	0.01	0.03	-0.01
Durable manufacturing					
Pure productivity (6)	1.00	0.26	0.66	0.19	0.17
Reallocation (7)	-0.01	-0.02	0.00	0.01	-0.01
Private services					
Pure productivity (8)	2.44	1.26	0.53	0.80	0.44
Reallocation (9)	-0.09	0.22	-0.03	0.44	0.23

Source: Primary data from OECD STAN.

Notes: Labour productivity growth is the growth rate of GDP per employed person. Totals in column (1) may not add up due to the residual component (see footnote 7 in the main text). For brevity, other industries (mining, construction, public utilities) are left out of the table.

There are two main observations to be drawn from Table A3. First, the pure productivity effect – also known as the 'within effect' – accounts for the bulk of labour productivity increases in all countries.

The near totality of the 3.5% growth of labour productivity in the US economy is accounted for by within effects. About two-thirds of this effect originate from market services – known to be 'IT-using' industries from Stiroh (2002) – and the remaining one-third from durable manufacturing, whose contribution to the US productivity revival has been documented by Gordon (2000, 2003). The within effect also accounts for more than 100% of the labour productivity increase in France as well (yet another similarity between the US and France!). In France, at odds with the US, however, not much of an accelerating productivity has been observed in market services: the contribution of market services to productivity growth was about half a percentage point (2.5 percentage points in the US). This parallels the results (and deeper analysis) in van Ark, Inklaar & McGuckin (2003) and O'Mahony & van Ark (2003) for the EU15.

The second observation from Table A3 is that resource reallocation across industries (the 'between effect') has been sizable in a few European countries (Germany first of all, but also the UK and Italy). This was particularly

apparent in the market services industries and has actually positively contributed to the growth of labour productivity for about one-half of a percentage point per year in Germany and one-quarter of a percentage point in the UK and Italy. This is the result of the fact that a large fraction of the new jobs created in these countries has been created in business services (over and above the many jobs created in real estate). Because such industries are more productive than the average industry in the German, British and Italian economies, this has boosted labour productivity growth in these countries.

These results require two qualifications, however. First, a high pure productivity effect does not mean that resource reallocation has been unimportant in the US, but simply that such reallocation has mostly taken place *across firms within the same industry*. This is not visible in the industry data presented here. The very high within-industry productivity effect is indeed there and has been documented by a substantial body of literature, including Davis, Haltiwanger & Schuh (1996) and OECD (2003a, 2003b). These studies, however, have shown that a high degree of within-industry heterogeneity is present in the US economy as well as an easier scope for market experimentation. Altogether, this has implied that the bulk of the productivity gains in the US economy has come from the birth of new, more productive firms (to which workers have been relentlessly reallocated) rather than from the productivity gains achieved by the incumbents.[12]

Second, the positive reallocation effect for Germany and Italy may have weakened in the early 2000s, as the two economies witnessed a worsening of their productivity slowdown. This is not captured by the decomposition in Table A3 which stops in the year 2000.

4. Conclusions

Europe has a productivity problem. The unabated productivity performance experienced by the US economy in the last few years poses a challenge to European policy-makers, entrepreneurs and workers. This challenge can be briefly summarised in four words: “It can be done”.

The question is how. The available evidence indicates that a speeding up of productivity growth in Europe will likely be achieved through an acceleration of TFP growth rather than through capital deepening. The continuation of labour market reform will in fact intensify the process of substitution of labour for capital, thereby contributing to the decline in the

[12] For a systematic discussion of the relation between regulation and productivity growth, see Nicoletti & Scarpetta (2003)

capital deepening component of labour productivity growth. As to TFP growth, for sure, the European productivity problem will not be cured by subsidising lagging industries, but rather by enhancing the within and between productivity effects discussed in the previous sections, thereby easing reallocation within industries as well as easing reallocation across industries. This requires further deregulation and true completion of the Internal Market. This also requires, as emphasised in the Sapir Report (Sapir et al., 2003), that investment in knowledge is boosted by creating an independent European Agency for Science and Research, encouraging private sector R&D via tax credits and re-focusing the structure of the – slim – EU budget away from agriculture into three separate growth, restructuring and cohesion funds. The growth fund would be the appropriate pool from which to fund supranational R&D, training and educational projects.

Fortunately, also thanks to the Sapir Report, the importance of raising TFP growth is now better understood as a crucial issue for enhancing productivity in Europe than it was a few years ago. Yet, it is still insufficiently appreciated that is quite difficult to engineer higher TFP growth, for it requires, to name just a few things, higher and more efficient R&D spending as well as courageous reform of university and scientific incentive systems across the board. All of these things are intended to be done, but, as emphasised by Baily & Kirkegard (2004), they are slow to be approved by national Parliaments and to be fully implemented. Hence, unlike in the past, the biggest obstacle to the adoption of productivity-enhancing policies in Europe today lies more in the impatience and disillusionment of European citizens than in a lack of goodwill on the part of policy-makers.

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