Annex 1 - Euro area Outlook and Forecasts

Economic Outlook for 2004 and 2005

In the first half of 2004 and during the summer, world output has been expanding strongly. Constantly high oil prices, however, spread some doubts about the continuation of the upswing.

World growth has been strong this year..

This is true particularly for the US, where output growth slowed in the second quarter and particularly consumption was less buoyant than expected. In addition, the strong stimuli of the US fiscal policy is declining and monetary policy will become less expansive in the second half of 2004, further dampening the fast output expansion.

The second centre of the upswing is East Asia with its two main economies, Japan and China. In Japan, however, like in the US, the economy slowed in the second quarter. While export expansion is still dynamic and consumer confidence is strong, the high investment dynamics from last winter seem to weaken according to data from the national accounts, possibly due to the oil price hike. China is still booming, although administrative measures to prevent the economy from overheating started to dampen growth in demand during the summer.

..with the euro area as the least dynamic of the main regions.

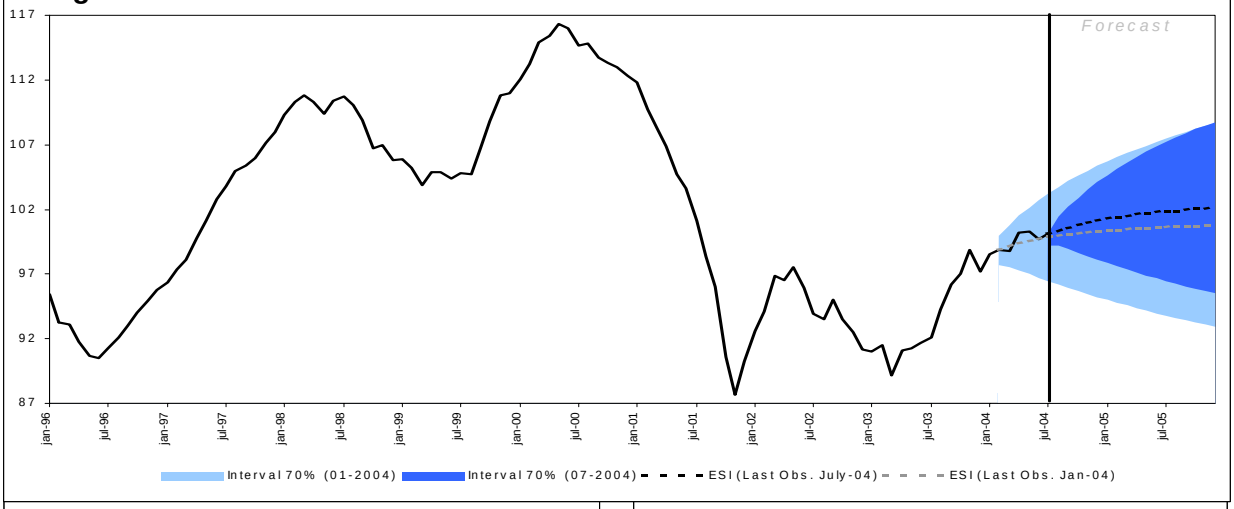
In the midst of a worldwide upswing, the euro area is still the least dynamic of the large economic regions. That said, the economy performed a bit better than generally expected during the first half of the year, helped by strong export growth. The improvement in the expectations can be seen in figure 1.1, which shows the Economic Sentiment Indicator for the Euro area with the interval forecasts with base on January and July 2004. The figure also includes the last forecast for all components of this indicator.

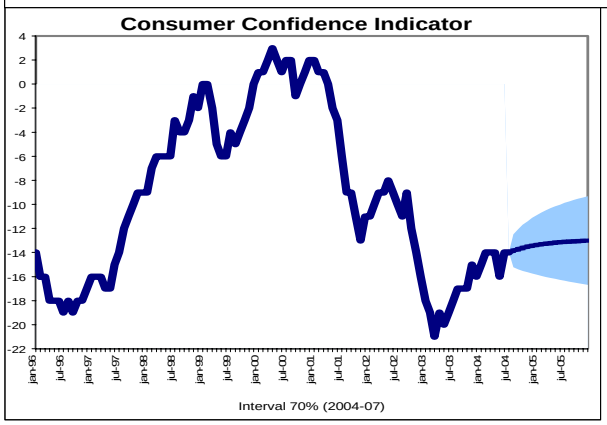
Growth dynamics will be strong enough to overcome some dampening effects.

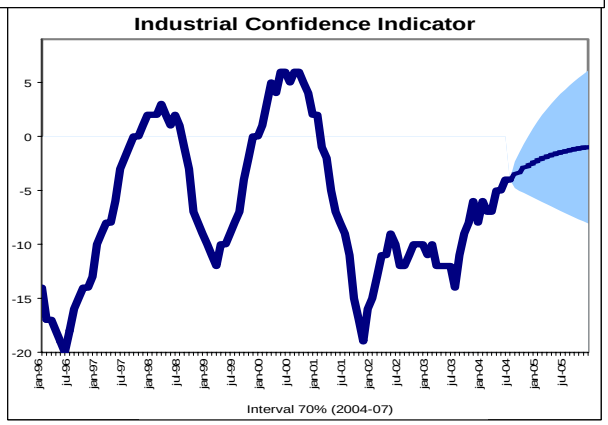
In 2005, the worldwide upswing is expected to lose some momentum. The slowdown will be due to the receding stimuli in the US, the effects of the administrative measures in China, and the dampening effects of the high oil prices. On the other hand, the revival in the euro area will gain some momentum in the following months and the growth dynamics particularly in East Asia appear to be strong enough to ensure a healthy expansion of world output in this year and in 2005. Thus, world trade is expected to expand at 7.8% in 2004. Due to the recovery of the euro area and the implied lag structure, the rate is slightly higher in 2005 (8.2%).

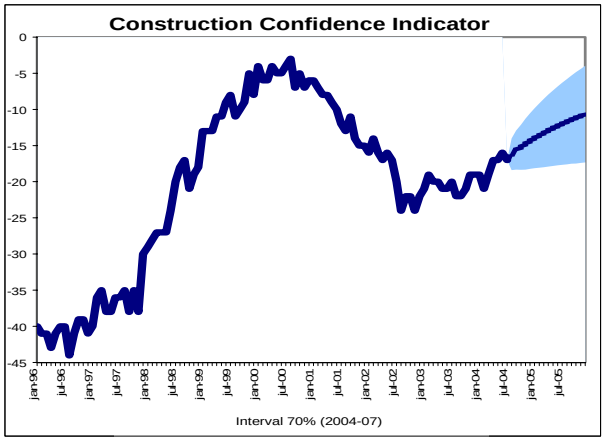
While world production fulfilled the expectations of an upswing in the first half of the year, stock market indices in the US and in Europe have declined during the summer to their levels of late 2003. This means that the markets price in a considerable amount of risk. Above all, the recent oil price hike has clouded the prospects. This happens at a time when the

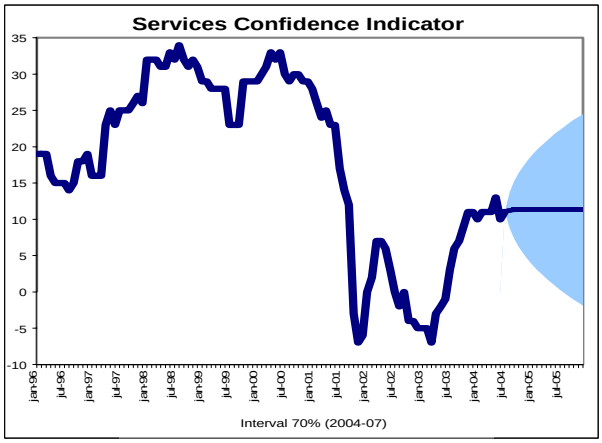
Figure 1.1 Economic Sentiment Indicator

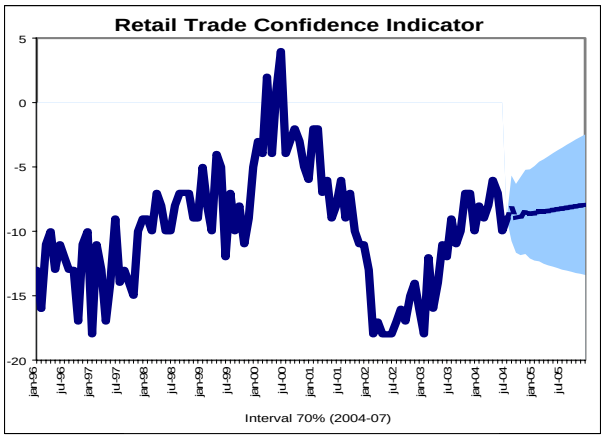


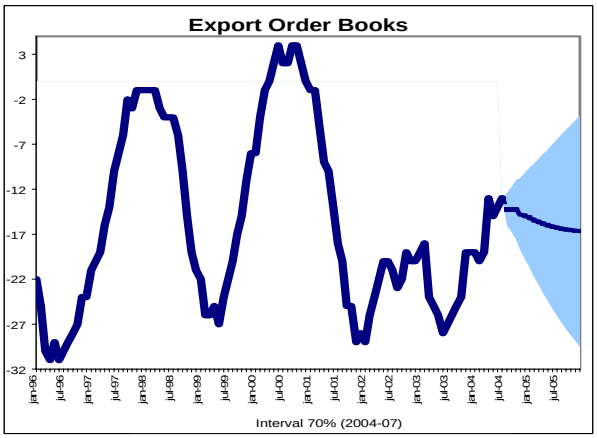












booms in the US and in China already appear to have peaked.

Risks for the present upswing:

- the oil price hike

The strained markets for crude oil are partly the result of instability in many oil producing countries. At the same time, they are part of the broader picture of high commodity prices, due to strong growth of demand from the US and from China. Since summer, the general upward trend for commodity prices appears to have ceased, but with around 41 US-Dollars per barrel (Brent) in September the price for crude oil is about 13 Dollars higher than the average in 2003. In this forecast we assume that the oil price will only slightly decrease and with an average of 37 Dollars both in the year 2004 and 2005. Under this assumption, the oil price hike will dampen the world wide upswing, but it will not put an end to it (see Box 1.2).

- the US current account deficit,

which, to a large extent,

is financed by East Asian governments.

A constant risk to the stability of the world economy is the large US-current account deficit, which, relative to GDP, exceeded the 5% threshold in the first half of this year. The US economy depends on remaining an attractive place for foreign financial investment. Recently, however, the most important investors were East Asian central banks, mainly those of Japan and China. Thus, the stability of the US-Dollar depends to some degree on the stability of the monetary strategy of these countries. Japan in particular helps financing the US-current account deficit partly because it aims at an expansion of the Yen monetary aggregates: an unsterilized purchase of Dollar assets raises the Japanese monetary base. But this expansive monetary policy makes only sense as long as the Bank of Japan has to fight deflation. With the Japanese economy in an upswing, a moderately positive inflation rate might be achieved some time in the year of 2005. At this point, the Japanese central bank might cease to be an important investor of US assets. Therefore, the risk of turbulences at the currency markets appear to be higher at the end of our forecasting horizon than they are now.

The revival in the euro area is mainly export driven.

The euro area still lags behind the world wide expansion. While economic activity picked up markedly during the first half of 2004, a strong upswing has not been realized, because investment growth was still very slow. The revival was mainly driven by strong exports which benefited from a booming world economy and, to a lesser extent, by an expansion of private consumption.

Exports will spill over to domestic demand.

To some degree, strong export growth during the last decade is just a consequence of the rising international integration of production processes. It has been argued recently that a large share exports nowadays is in fact simply re-exportation of intermediate goods produced in and imported from more competitive emerging market economies. Moreover, a growth rate of imports lower than that of exports could be explained by a decreasing domestic demand for imports. If these points were correct, the recent strong expansion of exports would generate little domestic income. Econometric analysis of the dependence of German imports on exports and domestic demand, however, does not support this view: a one percentage rise in exports nowadays seems to cause only slightly more imports than twenty years ago. Thus, the recent export boom in all likelihood generates considerable domestic income and improves the chances for the European economy to come out of stagnation.

Saving rates tend to increase slightly.

In the beginning of 2004, consumer spending grew stronger than in any quarter since the downswing started in 2001. Also, consumer confidence indicators are a bit higher than last year. Thus, the widespread opinion that a low propensity of households to consume blocks the recovery of the economy is not supported by the recent data. In general, it is difficult to argue that savings are too high in the euro area. Saving decisions appear to be rational given the higher awareness of sustainability problems of the pay-as-you-go pension systems. In addition, the bursting of the asset price bubble has reduced the wealth of private households, and the oil price hike puts a downward pressure on real incomes. But clearly, further progress on structural reforms of the social security systems would strengthen the confidence of households.

A rebound of investment activity is still missing..

What is really missing is a rebound of fixed capital investment. It has been stagnant for 3 ½ years by now. Thus, some need to modernize the capital stock should have accumulated, all the more so as nowadays a considerable share of the capital stock is fast depreciating ICT capital. Moreover, industrial production has been expanding since February (except for June), and short term indicators like business confidence or order books point to a continuation of the moderate upward trend for the second half of the year. Low real interest rates favour investment decisions. Also, quarterly results of firms turned out to be largely favourable during recent months, suggesting that internal terms of financing are improving. However, capacity utilization in the manufacturing sector is, with about 81% in the third quarter of 2004 according to business survey data of the European Commission, still rather low. Real unit labour costs had been rising during the last three years, and are falling only since the last quarter of 2003. They will slowly continue to do so this year and the next. This means that the profitability of production will gradually improve. All in all, investment will not be the driving force of economic activity before the turn of the year. While this impedes the upswing in the short run, the relatively weak investment activity over the past decade is a cause for concern for the long run competitiveness of European firms.

..but conditions for a revival have improved.

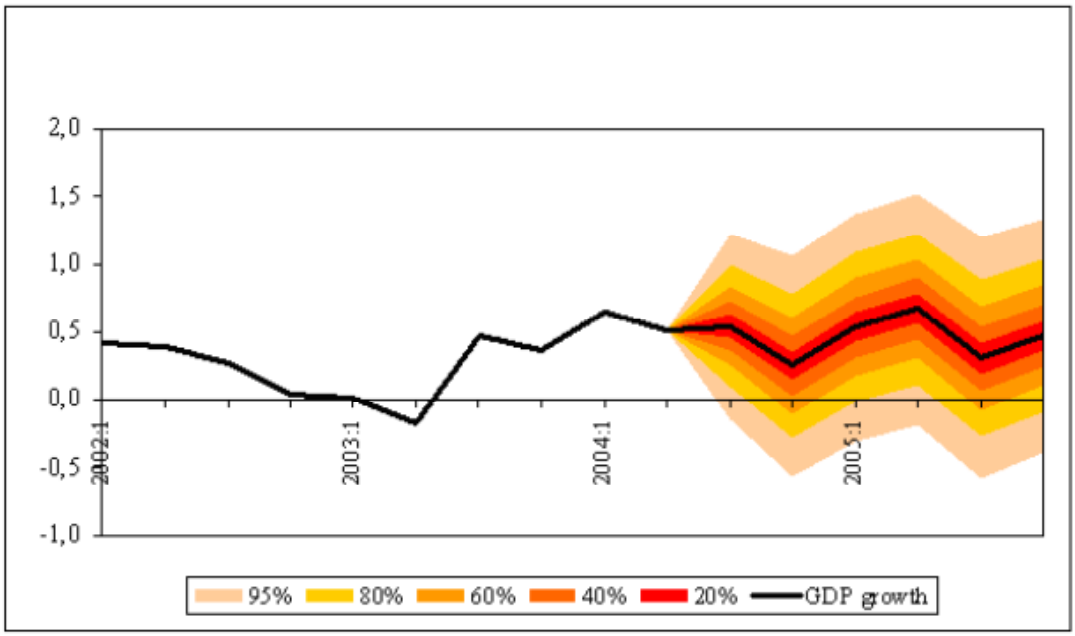
Production in the euro area will expand by 1.8% in 2004 and by 1.91% in 2005, see figure 1.2. Hence, this year the output gap continues to widen, see figure 1.3. It will be shrinking in 2005 but will still amount to about 1.2% of GDP at the end of that year. In 2003, GDP growth relied exclusively in the services sector and a moderate but overall improvement, see table 1.1, is expected for 2004. Thus the construction sector, which has been falling slightly since 2001, will again start to register a small positive contribution to GDP growth in 2004. The industrial sector will go from zero contribution in 2003 to five tenths of a percentage point in 2004, and the services sector will only be responsible for the 72% of GDP growth in 2004 and 2005.

In 2004 all production sectors will contribute to GDP growth.

Table 1.1: CONTRIBUTIONS OF PRODUCTION SECTORS

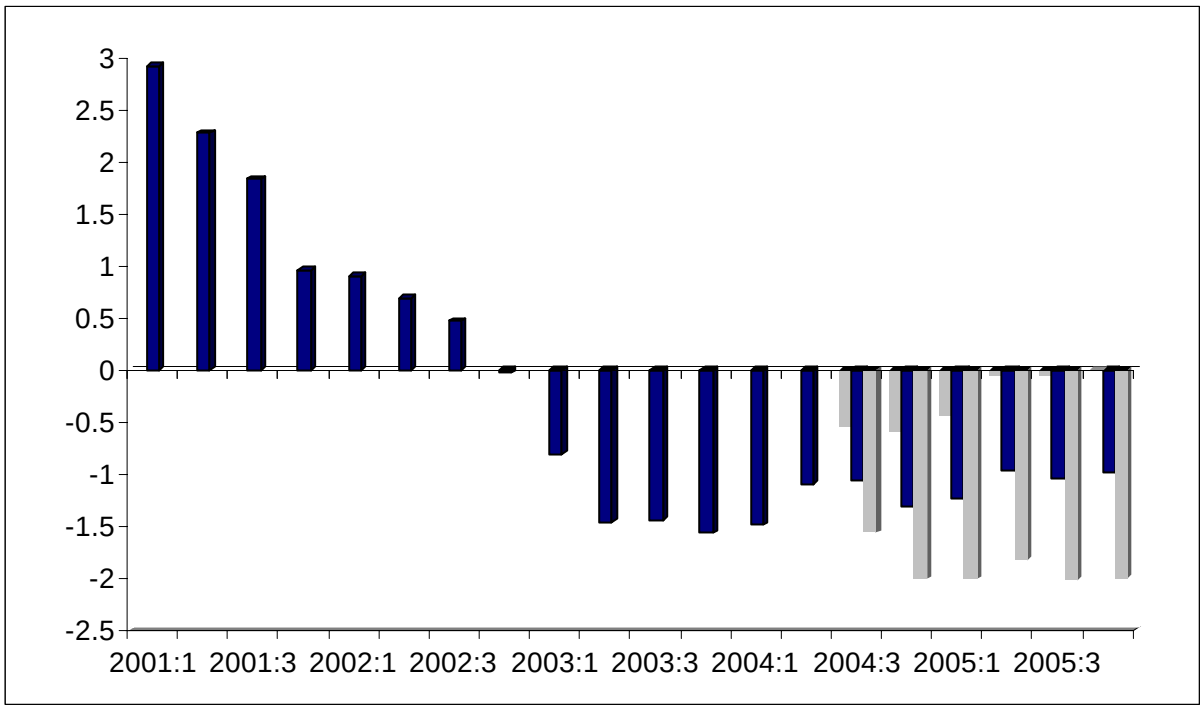
Year	GDP growth	Agriculture	Industrial	Construction	Services	Net taxes
1999	2.8%	0.1%	0.2%	0.1%	2.1%	0.3%
2000	3.5%	0.0%	0.9%	0.1%	2.6%	-0.1%
2001	1.6%	0.0%	0.1%	0.0%	1.7%	-0.2%
2002	0.9%	0.0%	0.1%	-0.1%	0.9%	-0.1%
2003	0.5%	-0.1%	0.0%	0.0%	0.6%	-0.1%
2004	**1.8%**	**0.0%**	**0.5%**	**0.0%**	**1.3%**	**0.0%**
2005	**1.9%**	**0.0%**	**0.5%**	**0.0%**	**1.4%**	**0.0%**

Figure 1.2 Quarterly GDP growth rates and confidence bands



Percentage change over the previous quarter

Figure 1.3 Output gap



In percent of potential GDP, 80% confidence bands

The rise in the unemployment rate has been relatively moderate due to labour market reforms in the 1990s

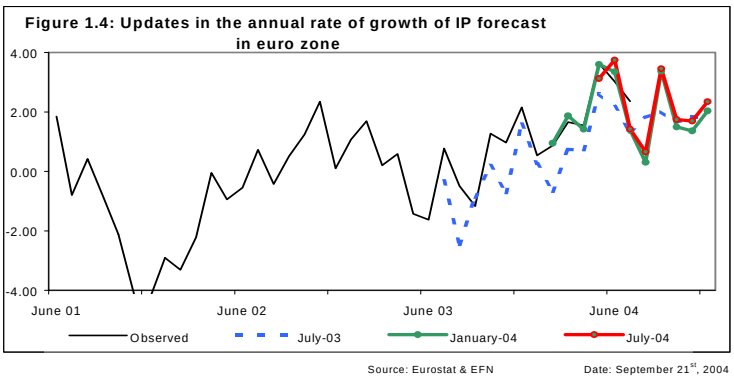
The rise in the unemployment rate has been quite moderate in comparison to previous cycles. Although the recent downturn started in 2001, the NAIRU in the euro area is still almost 2 percentage points lower than in the mid90s. The greater resilience of the labour market seems to be caused by structural reforms in the second half of the 1990s like higher availability of temporary contracts. This has increased the job content of growth. But even a more flexible labour market reacts to the business cycle with some lag. Indicators for business expectations about the evolution of employment point only to a slow improvement in the coming months, and the unemployment rate will decrease only in 2005, while the participation rate will not resume the rising trend it had at the time before the economic downturn. Surely, there is still potential for increasing the job content of economic growth by further reforming the European labour markets. Further reforms should comprise less complicated opening clauses for collectively bargained wages and working times, and a weaker employment protection legislation.

A wage price spiral triggered by the oil price would threaten the upswing.

The forecast of a slowly improving labour market needs some caveat: if unions tried to achieve compensation of the oil price rise for workers, employment would suffer from two adverse effects: first, labour would become more expensive relative to capital, and second, the ECB would step in by raising interest rates, because it will not be willing to accommodate a wage-price spiral. Otherwise, the chances are good that ECB interest rates will stay low with only a moderate increase of half a percentage point in 2005.

The recovery of the industrial production continues with more momentum than in January.

The new monthly observations of the index of industrial production for July has confirmed the expected recovery, which has been better than the forecast, with annual rates above what was expected in our last report in January (2.3% and 2.4% in 2004 and 2005 respectively instead of 1.8% as forecasted previously). Figure 1.4 shows the change in expectations in the last EFN reports.



Sectors producing non-durable consumer goods will register lower rates of growth.

The average annual rates of growth for the different industrial sectors classified according to the destination of goods are shown in table 1.2. It can be seen that recovery continues in 2004 in all components except energy, which was growing at 2.9% in 2003. In 2004 and 2005, the non-energy sectors with lower rates of growth will be the sector producing non- durable consumer goods.

Industrial recovery in the Euro area be weaker than in US.

Table 1.2 ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN EURO AREA (***)

	1998	1999	2000	2001	2002	2003	**2004**	**2005**
Capital	6.7	2.4	8.2	1.6	-1.6	-0.1	3.6	3.8
Durable	4.2	1.3	6.1	-2.1	-5.6	-4.3	2.5	1.9
Intermediate	3.7	1.9	6.2	-0.6	0.2	0.4	2.2	2.9
Non Durable	2.1	1.2	0.9	0.8	0.6	0.1	0.6	1.1
Energy	1.6	0.8	1.9	1.3	1.1	2.9	2.0	0.6
Total EMU	3.8	1.8	5.2	0.4	-0.5	0.3	2.3	2.4

(***)Bold figures are forecasts. Working day adjusted data.
Source: Eurostat and UC3M.
Date: September, 21st 2004

In 2003, industrial production in the Euro area registered a rate of growth similar to the one registered in the US, but in 2004 and 2005 industrial growth will be significantly higher in the US than in the Euro area, with annual mean rates of growth in 2004 of 4.6% in US and 2.3% in Europe (table 1.2 and 1.3)

Table 1.3: ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN US[1]

	1998	1999	2000	2001	2002	2003	**2004**	**2005**
Durable Consumer goods	7.2	6.9	3.9	-5.8	4.7	2.3	**4.4**	**3.9**
Non Durable Consumer Goods	2.3	-0.1	1.7	0.4	-0.6	-1.7	**1.8**	**0.9**
Equipment and Supplies	8.1	4.8	5.9	-4.1	-0.6	0.4	**5.0**	**4.3**
Materials	5.2	5.7	5.3	-4.5	0.4	0.5	**5.1**	**4.6**
TOTAL US	5.6	4.3	4.7	-3.5	-0.6	0.2	**4.6**	**4.1**

Due to higher prices in crude oil the inflation in the Euro area for 2004 has been updated to 2.1%.

Core will be relatively stable around 2.0% during the rest of 2004 and 2005.

Deviations of core over 2% are going to have larger persistent implications than deviations with similar relative importance in other prices.

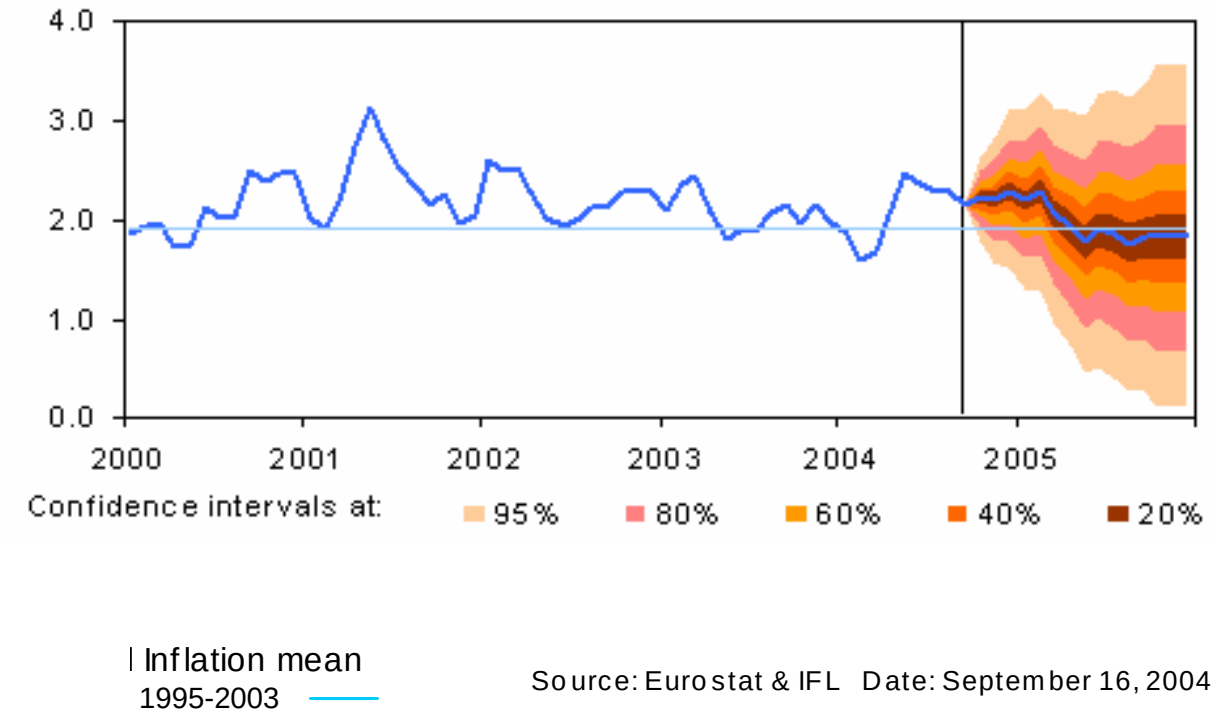
The data for six new months, corresponding to the March-August period, has been published since our last report. The main upward innovations come from international crude oil prices in euros and from a greater impact than was initially estimated of tobacco tax changes in some member countries. On the other hand, in the core index, which excludes unprocessed-food and energy prices, all its main components but tobacco have experienced mild downward innovations. With all this, the expectations for the 2004 average annual total inflation rate have been updated from the 1.8% advanced in the last report to 2.1% and the corresponding core inflation rate continues at 2.1%.

For 2005, future crude oil markets are not indicating further price increases and the year-on-year total inflation rate will systematically decrease along 2005 from 2.3% in January to 1.8% in the last quarter of this year, with an annual average of 1.9%. Core inflation will be relatively stable around 2.0. The effects of international crude oil prices on domestic inflation in the euro zone have a direct impact in our econometric models for domestic energy prices; however, they do not have a significant impact on other domestic consumer prices of other products, at least when, as it is now the case, these international prices are not high in relative terms.

The monthly forecasts for 2004 and 2005 and the uncertainty surrounding them are shown in figure 1.5 by means of a fan chart. It shows that the probability of an inflation rate systematically higher than 2% throughout 2004 is high, but will fall considerably by mid 2005.

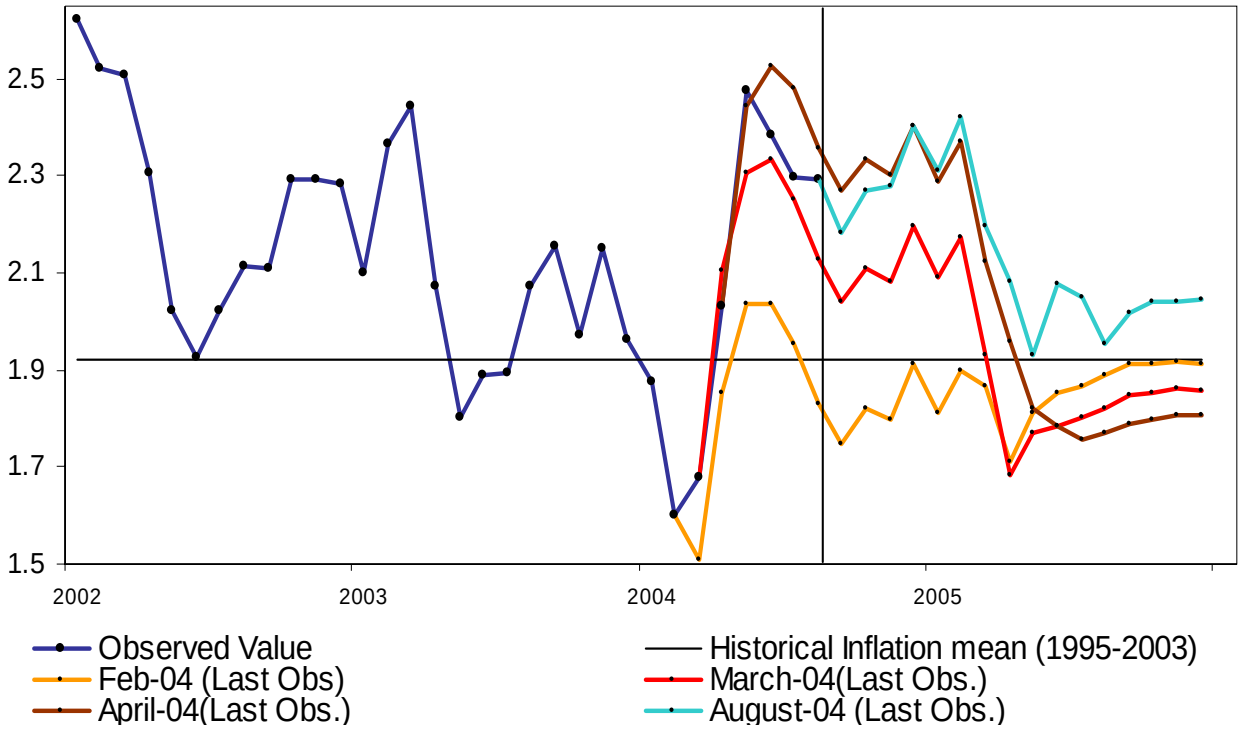
Total inflation has been higher than 2% since mid-2000. Initially, see figure 1.7 and 1.8, this was due to unprocessed food and energy prices, because core inflation was considerably lower than that figure. However, in 2001 and 2002, core prices have been the main obstacle to a total inflation rate of 2%, and the expectations for 2004 and 2005 are that core will show minor oscillations around 2%. In 2004 this problem is aggravated by the evolution of energy prices. Shocks in core prices have greater persistent effects than shocks in other prices, meaning that deviations of core over 2% are going to have larger persistent implications than deviations with similar relative importance in other prices.

Figure 1.5 Year-on-year inflation rates and confidence bands



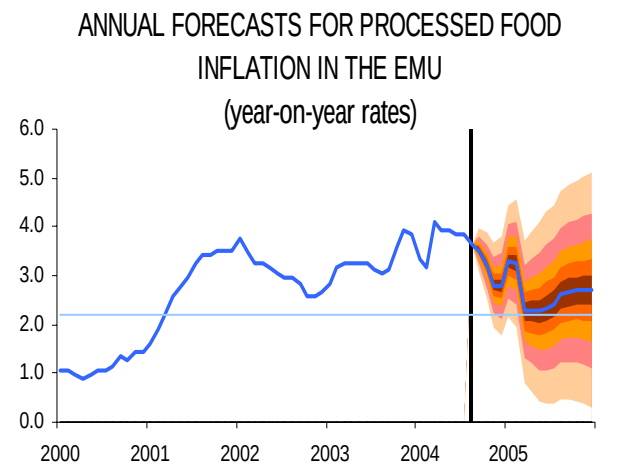
Source: Eurostat & IFL Date: September 16, 2004

Figure 1.6: Annual forecast for the euro zone inflation (year-on-year rates)



Source: Eurostat UC3M & IFL Date: September 16, 2004

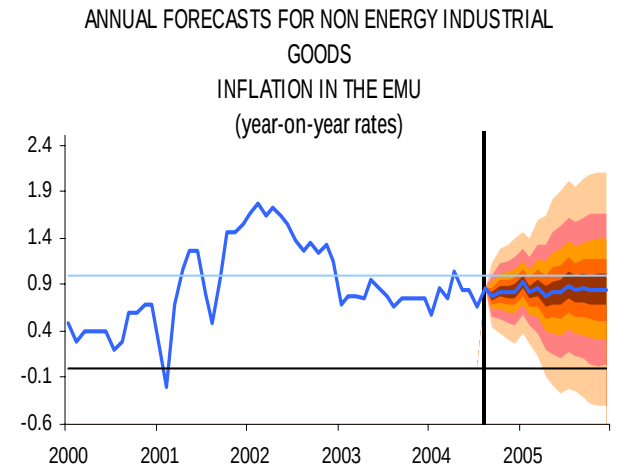
Figure 1.7: Annual forecast of main components of inflation in euro zone



Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1995-2003)

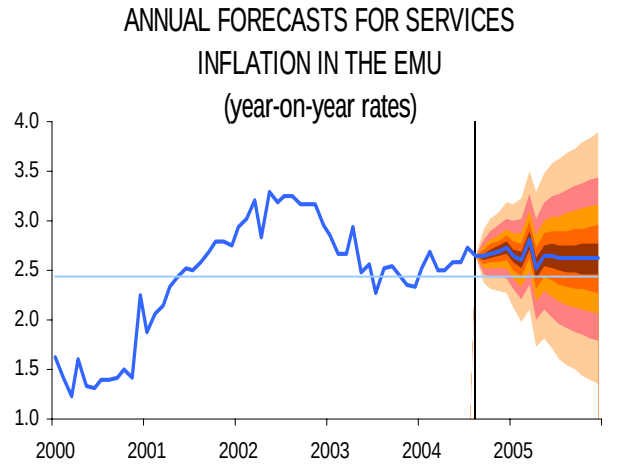
Source: Eurostat & IFL Date: September 16, 2004



Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1995-2003)

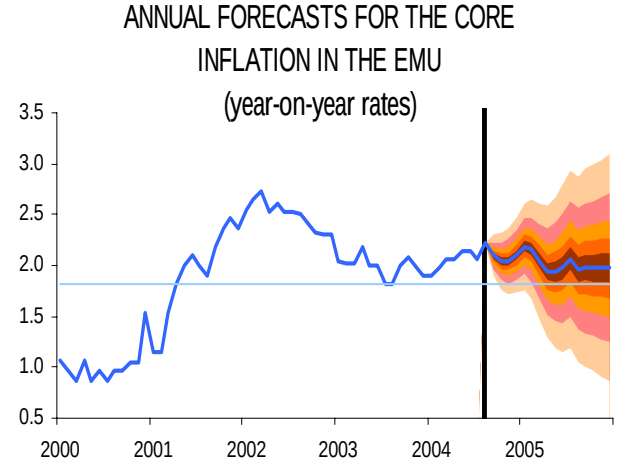
Source: Eurostat & IFL Date: September 16, 2004



Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1995-2003)

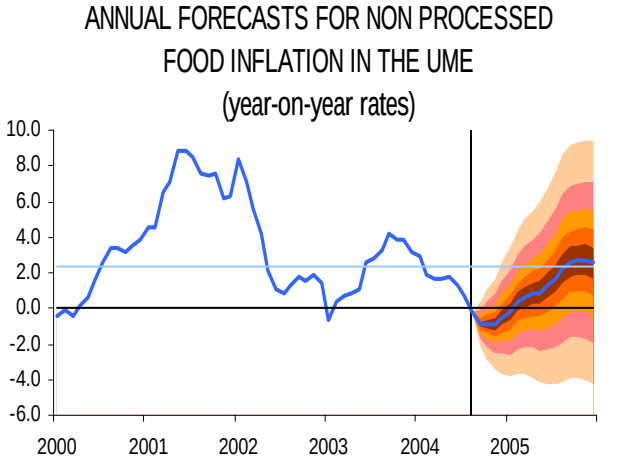
Source: Eurostat & IFL Date: September 16, 2004



Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1995-2003)

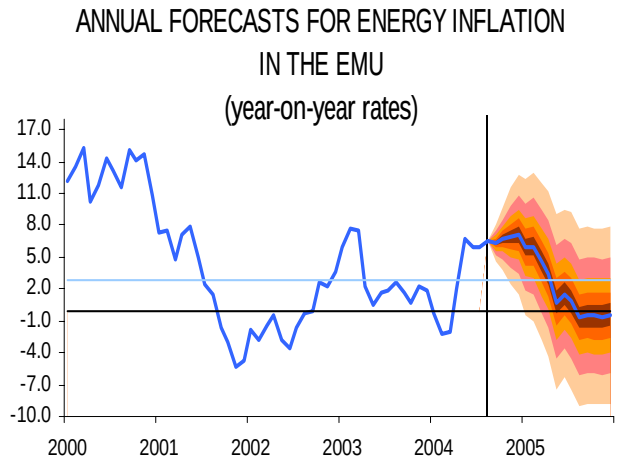
Source: Eurostat & IFL Date: September 16, 2004



Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1995-2003)

Source: Eurostat & IFL Date: September 16, 2004

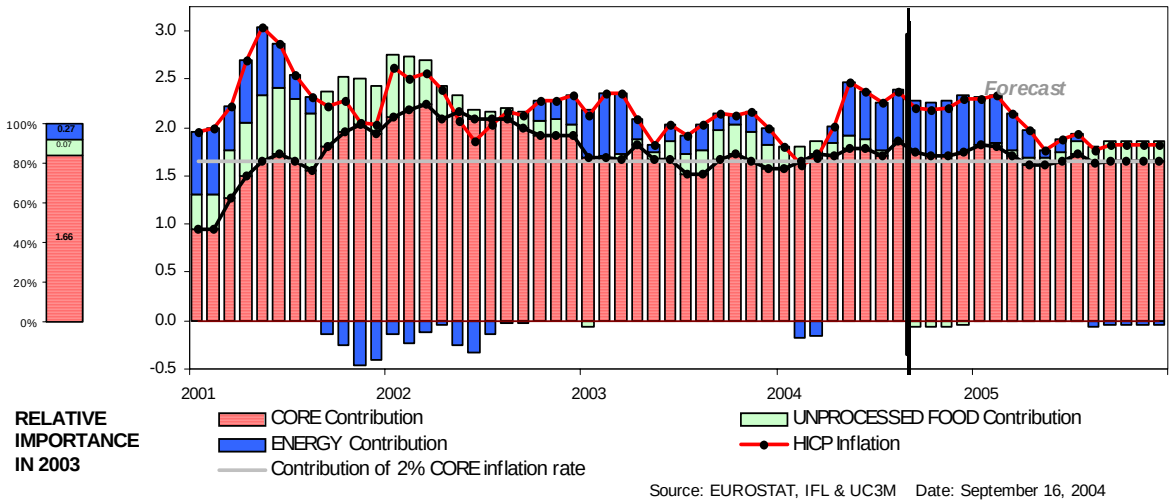


Confidence intervals at: 95% 80% 60% 40% 20%

Historical Inflation mean (1995-2003)

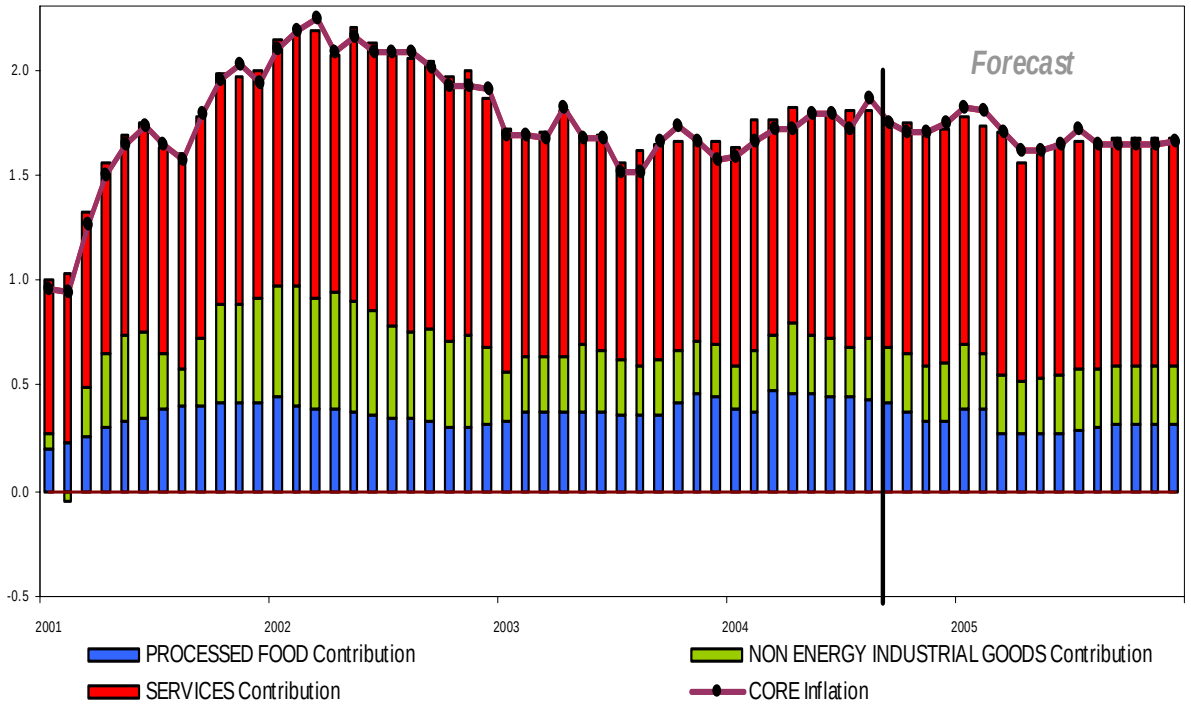
Source: Eurostat & IFL Date: September 16, 2004

Figure 1.8: **Year-on-Year rate of euro zone inflation and contributions of main components**



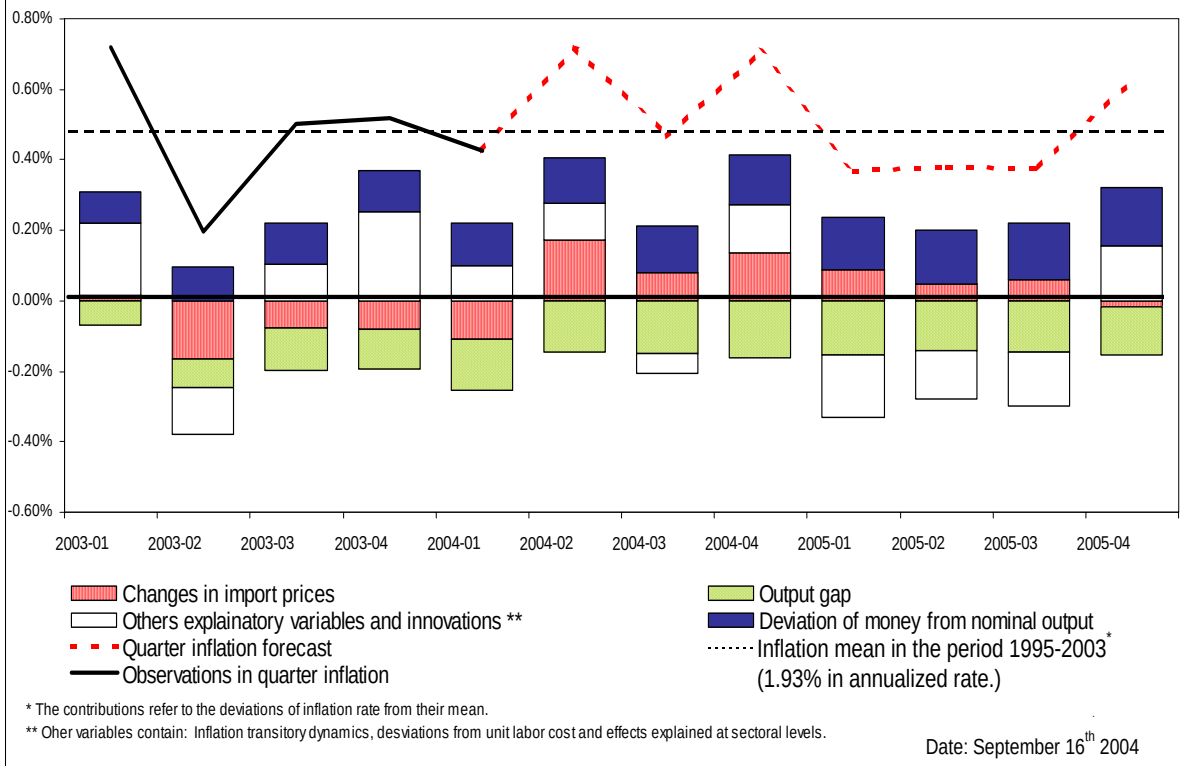
Source: EUROSTAT, IFL & UC3M Date: September 16, 2004

Figure 1.9: Year-on-Year rate of core inflation and contribucions of main components



Source: EUROSTAT, IFL & UC3M Date: September 16 , 2004

Figure 1.10: Contributions to the seasonally ajusted-to-quarter rate in the euro zone.



* The contributions refer to the deviations of inflation rate from their mean.

** Oher variables contain: Inflation transitory dynamics, desviations from unit labor cost and effects explained at sectoral levels.

Date: September 16th 2004

Table 1.4: INFLATION FORECASTS AND EVOLUTION IN THE EMU AND USA (1997-2005)

								Forecasts	
	1997	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
TOTAL INFLATION									
Euro-zone (100%).	1.6	1.1	1.1	2.1	2.3	2.3	2.1	**2.1**	**1.9**
USA (81.5%). (1)	2.2	1.1	2.1	3.5	2.6	1.0	2.2	**2.7**	**1.9**
A HOMOGENEOUS MEASURE OF CORE INFLATION (3)									
Services and Non-energy industrial goods excluding food and tobacco.									
Euro-zone (72.34%).	1.5	1.4	1.1	1.0	1.8	2.4	1.8	**1.8**	**1.9**
USA (55.6%).(1)	2.1	1.8	1.4	2.1	2.1	1.5	1.1	**1.5**	**1.8**
DIFFERENT COMPONENTS OF THE HOMOGENEOUS MEASURE OF CORE INFLATION									
(1) Services.									
Euro-zone (41.33%).	2.4	1.9	1.5	1.5	2.5	3.1	2.6	**2.6**	**2.6**
USA (27.4%).(1)	3.2	2.9	2.7	3.5	3.6	3.6	3.2	**3.3**	**3.2**
(2) Non-energy industrial goods excluding food and tobacco.									
Euro-zone (31.01%).	0.6	0.9	0.7	0.4	0.9	1.5	0.8	**0.8**	**0.8**
USA (29.0%).	0.5	-0.1	-0.5	-0.1	-0.2	-1.5	-2.1	**-1.2**	**-0.5**

The monetary policy in US in the last two years faced lower core inflation than the ECB.

Core inflation in the Euro area has been below that of the US – using an homogeneous measure for both areas-for several years before 2002, but in 2002 and 2003 euro area core was nine and seven tenths of a percentage point higher than US core, respectively. This is an indication that monetary policy possibilities in the two countries have been different in this period.

A tighter monetary policy can be expected in the second half of 2005

Breaking down the total inflation forecasts by means of an econometric model in terms of the contributions of the explanatory variables, it can be seen, figure 1.10, that throughout 2003 and in the first quarter of 2004, the effect of monetary policy which has been pushing up inflation has been compensated by the effects in the opposite direction due to changes in import prices and the output gap. This suggests that a looser monetary policy could have been possible during this period. However for the rest of 2004 and first part of 2005 import prices will add additional pressure to inflation which will not be compensated by the output gap effects. At the end of 2005 the lowering effects of the output gap on inflation will be reduced. All this suggests that there is no room for a looser monetary policy for the time being and that a tighter monetary policy can be expected in the second half of 2005.

Inflation in non-energy goods prices will be higher in 2005 than in 2004

The reduction of the inflation rate in 2005 is due to a reduction in the rate of growth of energy and tobacco prices. All other prices of goods will experience slightly higher rates of growth than in 2004 and service prices will maintain a rate around 2.6%. In the US, total inflation will increase to 2.7% in 2004 to drop to 1.9% in 2005 (table 1.4). In this case the effect of energy prices on the fall in inflation is greater than in Europe, due to the fact that these prices fluctuate much more in the US than in Europe, because they include less indirect taxation. US core inflation is expected to increase by half a percentage point in 2005.

Different inflation rates in euro area countries are reflected in different actual real interest rates and investment opportunities, but the range is narrowing

Inflation forecasts for the euro area reveal significant differences between countries, leading to a range of actual real interest rates through member countries, which for the one year horizon go from negative values in Luxembourg (-0.91%), Ireland, Spain (-0.62%), Portugal and Italy (-0.19%) to positive values in Finland (1.80%), Germany (0.98%), France (0.71%), Austria, Netherlands and Belgium (0.14%) (table 1.5 and figure 1.11). This range is narrower than in past years and, in fact, except in Finland all member countries are experiencing near zero or negative real interest rates, which should favour business investment. On the consumption side, these real interest rates are bringing considerable pressure to bear on housing prices. As opposed to the consumer price index in the US, the HICP in the euro area does not include owner's equivalent rent of primary residence, which represents around 20% of the CPI in the US. Furthermore, in the euro area there is not yet an index of owner-occupied housing prices, from which an inflation measure for this sector could be derived. Since the ECB should control prices in the whole economy, this type of index is certainly needed. Information on housing prices in different member countries show high inflation rates in recent years in this market, with possible bubbles in some of them. It seems that the exclusion of prices of owner-occupied houses from the HICP is generating a downward bias in consumer inflation rates.

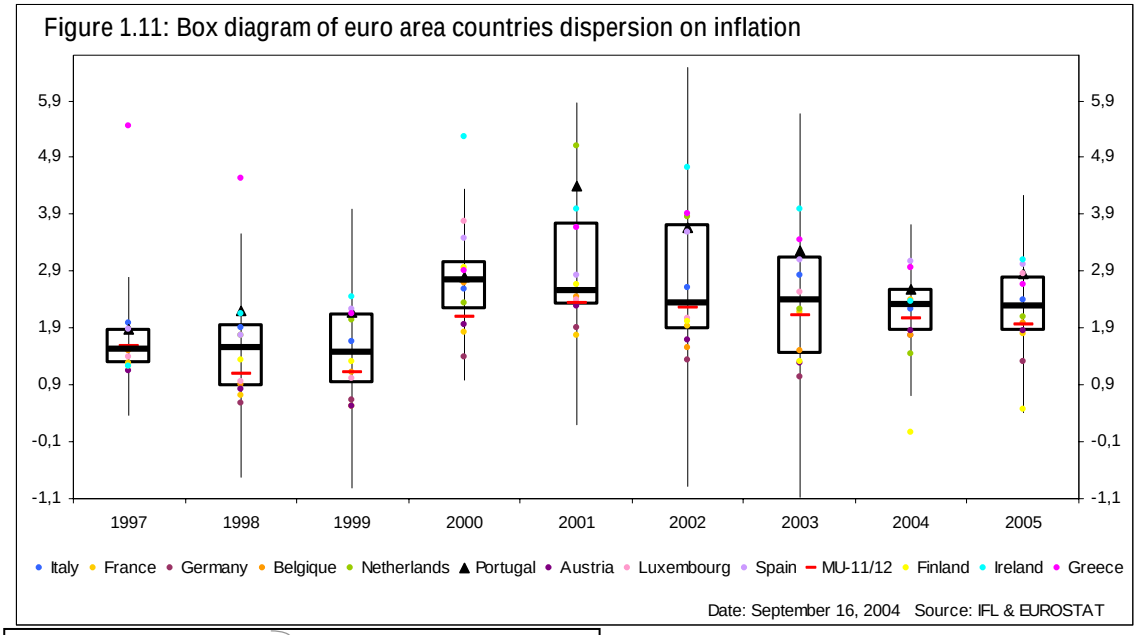
Low or negative real interest rates are pressing on housing prices and these are not included in the HICP

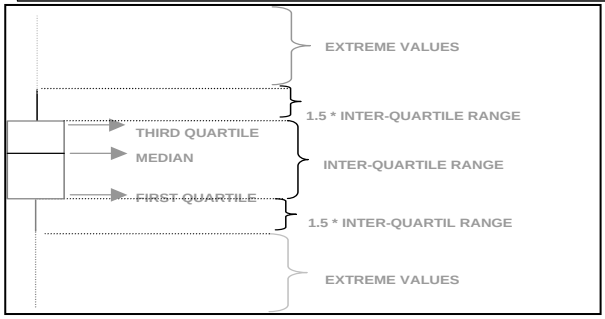
Table 1.5:	INFLATION EXPECTATIONS		REAL INTEREST RATES	
	Three Months	One Year	Three Months	One Year
Luxembourg	3.31	3.29	-1.19	-0.91
Ireland	3.12	3.14	-1.01	-0.77
Spain	3.07	3.00	-0.95	-0.62
Portugal	2.71	2.74	-0.59	-0.36
Italy	2.54	2.57	-0.42	-0.19
Greece	2.35	2.33	-0.23	0.05
Belgium	2.24	2.24	-0.12	0.14
Netherlands	1.97	2.01	0.15	0.36
Austria	1.93	1.91	0.19	0.46
France	1.73	1.67	0.38	0.71
Germany	1.48	1.39	0.63	0.98
Finland	0.54	0.58	1.58	1.80

Source: ECB. Eurostat & EFN

Date: September 17. 2004

Figure 1.11: Box diagram of euro area countries dispersion on inflation





Since May 2004 eight Central European and two Mediterranean countries have joined the European Union. The impact on the euro area for 2004 and 2005 is small. Even the long run economic effects on the current members are minor (see the EFN spring report of 2003). This is also true for the short run, the more so as the institutional integration is not a one-off event but a process that takes place in the years before and after the accession date.

The EFN outlook and forecasts for the euro area are summarized in Table 1.6.

Table 1.6: Economic outlook for the Euro area

	2001	2002	2003	2004:	2004: annual		2005: annual	
				1st half	Point Forecast	Interval Forecast	Point Forecast	Interval Forecast
GDP	1.6	0.8	0.5	1.6	1.8	1.6 2.1	1.9	1.3 2.5
Potential Output	2.5	2.4	2.2	1.8	1.8	1.6 1.9	1.8	1.2 2.3
Private Consumption	1.8	0.5	1.0	1.0	1.3	1.1 1.6	1.8	1.2 2.4
Government Consumption	2.5	3.0	1.9	1.7	1.5	1.3 1.7	1.4	1.0 1.9
Fixed Capital Formation	-0.3	-2.9	-0.6	0.6	1.0	0.0 1.9	3.0	0.3 5.7
Exports	3.3	1.5	0.1	5.6	6.0	5.4 6.6	6.4	4.5 8.3
Imports	1.7	0.3	1.9	4.6	5.6	4.9 6.4	7.0	5.0 9.1
Unemployment Rate	8.0	8.5	8.9	9.0	9.0	8.9 9.1	9.0	8.7 9.4
NAIRU	8.6	8.4	8.3	8.4	8.5	8.4 8.6	8.7	8.5 8.9
Labour Cost Index	3.4	3.5	2.7	2.1	2.2	2.1 2.4	2.7	2.2 3.1
Labour Productivity	0.3	0.2	0.0	1.4	1.7	1.4 2.1	1.9	1.1 2.7
HICP	2.3	2.2	2.1	2.0	2.1	1.6 2.6	1.9	1 2.9
IPI	0.5	-0.5	0.4	4.01	2.3	1.2 3.4	2.4	1.3 3.5

Percentage change in the average level compared with the same period a year earlier, except for unemployment rate and NAIRU that are expressed in levels. Labour productivity is measured as a long run concept and refers to employment potential. Point forecasts and 80% confidence bounds are taken from the EFN forecasting model and are based on 2000 stochastic simulations.

Comparison with alternative forecasts

Compared to other forecasts, the EFN is slightly more pessimistic about investment, …

The forecasts presented above were obtained from the EFN macroeconometric model, described in detail in the Spring 2002 report. Table 1.7 shows a comparison of the EFN forecasts for the main macroeconomic aggregates with other forecasts, notably those of the European Commission, the IMF, the ECB, the OECD, and Consensus Economics Inc.

Due to different information sets, the forecast comparison is biased. For example, the EFN forecast is based on a dataset including the 1st quarter of 2004, which has only been available since June. However, for both years of the forecasting horizon, the EFN outlook is slightly more pessimistic, in particular regarding the development of gross fixed capital investment. This outlook seems plausible, given that investment expanded in the first quarter of 2004 only very modestly and that leading indicators point to a slow revival. While investment and private consumption are on a lower path than in other forecasts, our outlook for government consumption is higher. These issues are related, as government has behaved anti-cyclically in the past. Hence, if the outlook for domestic demand is more pessimistic, government consumption is likely to be stronger. Also, because at present the Stability and Growth Pact is de facto in abeyance, its restrictions appear to be less binding.

… and estimates slightly more inflation for 2004 and 2005

Our inflation forecasts are slightly higher than those from other institutions, possibly because we are given an individual treatment to energy prices in the HICP. Our forecasts, like all others, suggest a fall in inflation in 2005, but we explain that this is due to energy and tobacco prices and that for other non-energy goods prices inflation increases slightly in 2005.

Table 1.7: Comparison of EFN forecast with alternative forecasts

	EFN		EU		IMF		ECB		OECD		Consensus	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
GDP	1.8	1.9	1.7	2.3	1.9	2.4	1.7	2.2	2.0	2.6	1.8	2.0
Private Consumption	1.3	1.8	1.6	2.3	1.3	2.2	1.2	2.0	2.1	2.6	1.3	1.8
Gov. Consumption	1.5	1.4	1.2	1.3	1.5	1.4	1.4	0.9	0.7	1.1	1.4	1.4
Fixed Capital Form.	1.0	3.0	2.4	3.6	2.7	3.5	1.8	3.5	3.1	4.4	1.4	3.0
Unemployment rate	9.0	9.0	8.8	8.6	9.1	8.9	na	na	8.8	8.5	9.0	8.8
HICP	2.1	1.9	1.8	1.6	1.7	1.6	2.1	1.7	1.7	1.4	2.1	1.8
Industrial Production	2.3	2.4	na	na	na	na	na	na	na	na	2.1	2.5

BOX 1.1: VARIABLES OF THE WORLD ECONOMY

Important variables indicating the state of the world economy are shown in the table below. For the US and Japan, an upswing is expected, in particular for 2004. This is reflected in an increase in GDP growth rates, while inflation will remain moderate. At the end of 2004, the oil price is forecasted at 39 US dollar per barrel, and a weak relaxation is expected for 2005. The Euro is predicted to depreciate slightly in 2005 against the US dollar and the Yen, in line with the international parity conditions. In particular, purchasing power parity holds as a long run relationship.

Table 1.8 Variables of the world economy

	2004	2005
US GDP Growth Rate	4.3	3.5
US Consumer Price Inflation	2.7	2.4
US Short Term Interest Rate	2.0	3.0
US Long Term Interest Rate	4.7	5.2
Japan GDP Growth Rate	4.3	1.8
Japan Consumer Price Inflation	0.1	0.0
Japan Short Term Interest Rate	0.1	0.1
Japan Long Term Interest Rate	1.7	1.8
World Trade	7.8	8.2
Oil Price	39	35
USD/Euro Exchange Rate	1.23	1.19
100Yen/Euro Exchange Rate	1.29	1.18

Apart from the development of world trade and nominal exchange rates, all variables are exogenous to the EFN forecast, and taken from Consensus Economics, Forecasts September 2004. Oil prices, interest rates and exchange rates refer to the end of the period. The oil price is in US dollars per barrel, all other variables in percent.

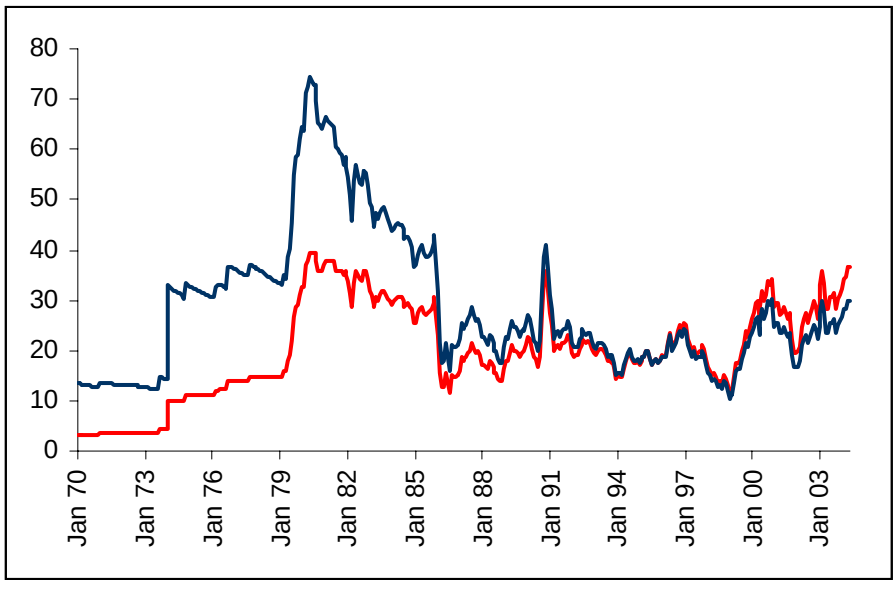
BOX 1.2: IMPACTS OF A RISE IN OIL PRICES ON THE ECONOMIC OUTLOOK

In this box, a quantitative assessment of the impacts of higher oil prices on GDP growth and inflation is provided. Since January 2002, oil prices have more than doubled. In August 2004, the oil price has reached its all time high in nominal terms at about 43 US Dollar per barrel (Brent). The hike is partly caused by worries about stability in the Middle East, about a possible disruption of supplies from Russia due to the Yukos crisis, and about the political turbulences in Venezuela. In addition, a key determinant for the oil price development is the strong growth in demand, driven in particular by the US and China. Both political risks in important oil producing countries and growth processes in North America and Asia are likely to last, and therefore oil prices will probably stay significantly higher than during the 90s. In the 1970s, two oil crises led to significant downturns of economic activity. Thus, the worldwide upswing and the economic recovery in the Euro area appear to be endangered.

From a global perspective, the economic costs of higher oil prices are not so obvious because, naturally, a higher price not only means higher costs for the buyer, but also higher revenues for the seller. But in the long run, there will be a global loss of output if more resources are bound by more expensive oil production and by measures to use energy more efficiently. In the short run, the world economy has to bear the costs of adaptation to an abruptly changing price system. In addition, importing regions like the euro area suffer from a deterioration of their terms of trade. Due to higher oil prices, disposable incomes of households in importing countries are reduced, and profits of firms are squeezed. As a consequence, macroeconomic demand falls. While in the very short term, the price level goes up because of higher oil prices, weaker demand soon puts a downward pressure on inflation. Therefore, the long term inflation rate will not rise as a consequence of the impact of the oil price hike on the price level. Thus, provided that unions do not open a wage-price spiral by trying to achieve a compensation for the decrease of real wage income, restrictive measures in response to an oil price hike are not the appropriate monetary reaction. This is specifically true for the ECB because of the fragile situation of the euro area economy.

The actual price jump appears, however, less dramatic, when the change in the overall price level is taken into account, see figure. It shows that real oil prices are 50 percent below their peak in 1980. Moreover, the increase in oil prices shown in figure 1.9 is exaggerated for the Euro area, as the Euro has appreciated against the US Dollar by more than 30 percent since 2002.

Figure 1.9: Oil prices in nominal (red) and real (blue) terms, US Dollar



Real series: nominal series deflated by the US consumer price index (1995=1), all items

Table 1.6: GDP growth and HICP inflation effects of an increase of the oil price to 50 USD per barrel

	2004	2005	2006	2004-2008
GDP growth	-0.1	-0.3	-0.3	-0.8
HICP inflation	0.2	0.3	0.1	0.7

Differences to baseline in percentage points

Apparently, higher oil prices exert negative impacts on the macroeconomic evolution. While the contemporaneous effects appear to be negligible, GDP growth (inflation) is 0.3 percentage points below (above) the baseline in the year after the shock. The losses in real GDP growth cumulate to almost 1 percentage point over a 5-year horizon[1]. The magnitude of these effects is broadly in line with those reported in a number of other recent studies, including Global Insight (2004), Oxford Economic Forecasting (2000), and International Energy Agency (2004).

Although the effects appear to be quite substantial, they seem to be lower when compared to the past experience. According to the Deutsche Bundesbank, each of the two oil crises in the 1970s led to cumulative losses in German output growth in the range of 4 percentage points. A reason for the smaller effect of an oil price hike today might be that due to the liberalization of international capital markets, nowadays the windfall profits of oil producing countries can be transferred more easily to consumption and investment spending, whereas in the 1970s, the so-called recycling of the petrodollars turned out to be a serious problem, caused by the change in the income distribution between oil producers and oil importers. Moreover, the industrialized countries have become more efficient in their use of energy, and the abilities of end-users to switch away from oil have increased. As a consequence of these developments, the amount of oil needed to produce one unit of GDP roughly halved since the 1970s.

Generally, the vulnerability of oil importing countries to higher oil prices depends on their energy intensity of production, which is larger in developing countries. For example, oil consumption per unit of real GDP exceeds the OECD average by a factor of 2 in China and 3 in India. Consequently, the adverse impacts on the macroeconomic performance take almost the double size in these countries, see International Energy Agency (2004).

[1] As the foreign countries (US, Japan) are endogenously determined, the effects are larger than in previous reports.

BOX 1.3: AN EVALUATION OF LEADING INDICATOR FORECASTS

Since the pioneering work of Mitchell and Burns (1938) and Burns and Mitchell (1946), leading indicators have attracted considerable attention, in particular by politicians and business people, who consider them as a useful tool for predicting future economic conditions. Economists and econometricians have developed more mixed feelings towards the leading indicators, starting with Koopmans's (1947) critique of the work of Burns and Mitchell, considered as an exercise in "measurement without theory". The resulting debate has stimulated the production of a vast literature that deals with the different aspects of the leading indicators, ranging from the choice and evaluation of the best indicators, possibly combined in composite indexes, to the development of more and more sophisticated methods to relate them to the target variable. Marcellino (2004) provides a summary updated guide for the construction, use and evaluation of leading indicators and, more important, an assessment of the most relevant recent developments in this field of economic forecasting.

In this box we summarize the performance of leading indicator based forecasts for the latest recession in the US, dated from March to November 2001 by the NBER. It is interesting to mention that the CEPR dating committee did not spot a similar event for the euro area, in line with the findings based on formal analysis by Artis, Marcellino and Proietti (2003). Yet, these authors pointed out that if the focus is on the deviation cycle rather than on the classical cycle, then a trough in 2001 is identified also for the euro area.

Filardo (2002), found that the two-month negative growth rule applied to the Conference Board's Composite Leading Indicator, CLI_{CB}, worked well in predicting the 2001 US recession, but sent several false alarms in the '90s. A probit model with a 3-month forecast horizon and the term spread, corporate spread, S&P500 returns and the CLI_{CB} as regressors also worked well, predicting the beginning of the recession in January 2001 using a 50% rule (namely, indicating a recession when the predicted probability is higher than 0.50). Instead, Stock and Watson's (1989) Composite Recession Indicator (CRI) did not perform well.

Stock and Watson (2003) analyzed in details the reasons for the poor performance of their indicator, concluding that is was mostly due to the particular origin of the recession (coming from the decline in stock prices and business investment), which is not properly reflected by most of the indicators in their CRI. In particular, the best indicators for the GDP growth rate were the term spread, the short term interest rate, the junk bond spread, stock prices, and new claims for unemployment. Notice that most of these variables are included in Filardo's (2002) probit models. Moreover, they found that pooled forecasts worked well, but less well than some single indicators in the list reported above.

Dueker (2003) found that his Qual-VAR model, a combination of a binary model and a linear VAR estimated with Bayesian techniques, predicted the timing of the 2001 recession quite well relative to the professional forecasters, while the evidence in Dueker and Welshe (2001) is more mixed. Dueker (2002) noticed that a MarkovSwitching probit model with the CLI_{CB} as regressor worked also rather well in this occasion, providing a 6-month warning of the beginning of the recession (but not in the case of the previous recession).

Overall, there are differences in the ranking of models and usefulness of the leading indicators because of the choice of the specific coincident and leading variables, sample period, criteria of evaluation, etc. Yet, a few findings are rather robust. First, indicator selection and combination methods are important, and there is hardly a one fits all choice, even though financial variables and the equal weighted CLI_{CB} seem to have a good average forecasting performance. Second, the model that relates coincident and leading indicators also matters, and a Markov Switching feature is typically helpful. Finally, in general pooling the forecasts produces good results, even though there is only a limited evidence as far as turning point prediction is concerned.

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