Annex 6
Euro Area Outlook and Forecasts

Economic outlook for 2004 and 2005

After the weak performance of the Euro area economy in the first two quarters of 2003, activity picked up in the second half of the year. This was mainly due to a rebound of exports. Although the Euro appreciated against the Dollar and, to a lesser extent, against other major currencies, exports profited from the revival of the world economy. Consumption nearly stagnated and investment still declined. The modest performance of the domestic economy led to a subdued import growth.

The recovery of the world economy is now well under way…

The recovery of the world economy is now well under way. Geopolitical tensions due to the Iraq war have eased, and SARS disease no longer appears to threaten economic activity on a global scale. The ICT sector, three years after the new economy bubble burst, seems finally to have found promising new fields, in particular in consumer electronics. Monetary policy is very expansive with real short term interest rates now close to zero in the USA, in Japan and in the Euro area and there is no indication that they will be raised at any time in the coming months.

…with the US and Asia as centres of the upswing…

The centres of this recovery are the US and Asia. In the US growth has accelerated throughout 2003. The strong stimulus from low prime rates, expanding public expenditure and substantial tax reductions has already set a strong upswing in motion in the private sector. Growth is expected to be around 4.6 percent in 2004. This acceleration is mainly driven by an increase in business investment. According to the February 2004 report of Consensus Economics, forecasts for investment growth are roughly 10% on average. In contrast, consumption could prove to be the weak point, if households feel that the upswing will continue to side-step the labour market. In this case the saving rate, which is very low by historical as well as international standards, would likely rise. Indeed, up to now there are no clear signs of a significant expansion of employment in spite of the considerable expansion of output; this is due to the strong productivity growth of more than 4%. In our view, labour markets appear to be flexible enough to be finally able to profit from the upswing. Therefore, while the change to a more cautious spending behaviour of households might very well happen in the not too distant future, the risk of an abrupt decline in consumption in the forecasting horizon is low. In line with the Consensus view, we assume strong US GDP growth rates of 4.6% for 2004 and 3.7% in 2005.

The second centre of economic growth is Asia: In 2003, strong growth in China led to a spectacular expansion of imports of around 40%. Japanese exporters profit from this development. This is one reason why Japan, after a decade of stagnation, appears to be returning to a growth path. The Japanese revival is not only driven by exports, but also by private investment, while the expansion of private consumption remains modest. The expanding Asian demand for industrial inputs is a main cause for the quite high oil prices and for the rise in many commodity prices since the autumn of 2003. The upswing in most Asian countries will continue in the forecasting period. Among these, China is becoming increasingly important for European exporters. By now, combined with Hong Kong, it is easily the third most important foreign destination for EU goods, after the US and Switzerland.

…but the Euro area is lagging behind

The US, Japan, and the large countries of the European Union presently all run sizable public deficits. Therefore, fiscal consolidation will become a priority when the upswing is clearly under way at the end of 2004. This will contribute to a slightly lower evolution of world economy in the year to come. According to our forecasts, world trade will expand at around 8.2% in both years of the forecasting horizon, after 4.2% in 2003. Downward risks, however, may stem from a reviving threat of terrorist attacks.

The Euro area lags behind the cyclical upswing of world economy. Its economy performed poorly in the first two quarters of 2003, recording a technical recession. Mainly due to a rebound in exports, activity picked up in the second half of 2003. However, private consumption expanded only at a slow rate, while investment continued to decline. Due to the weak performance of the domestic economy, import growth was rather low.

The output gap will narrow only slowly and will still be significant at the end of 2005

The outlook will improve during the forecasting horizon, but overall performance is expected to remain rather modest. GDP growth is forecast at around 1.4% in 2004 and 2.0% in 2005, see table 1.2. Although quite low, the expansion of output will be higher than the growth rate of potential GDP: the evolution over the past 3 years has slowed down capital accumulation, and the NAIRU has stopped falling. As the weak investment activity in the past hampers current capital stock, potential output growth still declines over the near future. Consequently, the output gap will narrow over the forecasting horizon: both the reduction in potential growth and the acceleration in actual growth account for this development. Nevertheless, the gap will be reduced only gradually from 2004.1 on, see figure 1.1. At the end of 2005, still a significant gap of 1.3% of potential GDP is predicted. Thus, no sizable inflationary pressure is expected from the demand side. The relative weak performance of the economy is also documented in the quarter-on-quarter GDP growth rates, see figure 1.2. From 2004 on, they are almost constant

Table 1.1

Contributions of production sectors						
Year	**GDP growth**	**Agriculture**	**Industrial**	**Construction**	**Services**	**Net taxes**
1999	2,82%	0,07%	0,22%	0,12%	2,11%	0,29%
2000	3,49%	-0,01%	0,87%	0,13%	2,60%	-0,10%
2001	1,59%	-0,03%	0,10%	-0,03%	1,72%	-0,17%
2002	0,87%	0,01%	0,05%	-0,05%	0,88%	-0,02%
2003	0,43%	-0,08%	-0,01%	-0,04%	0,55%	0,01%
2004	1,40%	0,02%	0,25%	0,00%	1,15%	-0,02%
2005	2,00%	0,02%	0,37%	-0,01%	1,57%	0,05%

at the 0.5% level. Hence, an acceleration can hardly be detected.

GDP growth in 2004 and 2005 will be mainly based on the services sector

In the different production sectors it can be seen in table 1.1 that acceleration will be more pronounced on services, but without reaching the growth rates of 2001 in 2005. The recovery in industry will be modest and no growth is expected in construction.

Although the global upswing will be reflected in a rebound of exports, the recent apprec iation of the Euro will take its toll and will support import growth in 2004. Therefore, net exports will only slightly contribute to economic growth in 2004, see figure 1.4. Since import growth is expected to be weakly stronger than export growth in 2005, their impact will even turn to be negative.

Both private consumption and investment are expected to pick up gradually over the forecasting horizon. Compared to recent upturns like 1998-2000, the dynamics remain weak, although financing conditions are favourable: real interest rates are at low levels, and stock prices have been rising since the trough in Spring 2003. However, expectations of households and firms are not overwhelmingly optimistic, see the indicator of economic sentiment in figure 1.5. While the observations in the period from September to November of 2003 are in the upper band of the forecast interval, the improvement has slowed down since then.

Investment growth mainly to ensure competitivenes s by adopting new technologies

One factor explaining the modest path of investment activity consists of non-optimistic sales prospects, as reflected by the evolution of the output gap. Since potential growth was above actual growth in the recent downturn period, stocks are likely to be high. Moreover, profit prospects of investors improve only gradually. Due to a recovery of productivity, real unit labour costs are roughly constant in 2004, and in 2005 a significant decline of roughly 1 percent is expected. However,

the previous cumulative increase of this measure was almost about 2 percent over the 2001-2003 period, see table 1.1. Overall, investment projects will be undertaken not so much in order to meet rising demand, but to ensure competitiveness by adopting new technologies. Brighter profit prospects, the further improvement of financing conditions, and the better financial health of commercial banks will facilitate development. Tendencies for a gradual recovery in investment can be also seen in the survey indicators. The modest investment activity in the Euro area, however, might be accompanied by strong investments by European firms in emerging markets like the accession countries in the globalisation process.

The rise in labour participation will come to a halt

Private consumption will benefit from the improved confidence of households. Consumer price inflation in 2004 will be lower due to the appreciation of the Euro. This, however, will lead to lower wage inflation: wages move in line with prices and productivity, while the labour market situation plays only a minor role. Therefore real incomes will not benefit very much from appreciation. Moreover, weighty factors prevent a more favourable development of consumption: labour market prospects will not conspicuously improve over the forecasting horizon. As GDP growth does not exceed productivity growth in 2005, employment will not significantly profit from the upswing. As a consequence, the unemployment rate is almost constant. The NAIRU is expected to rise, as the long term growth perspectives are lowered. Hence, the unemployment gap shrinks and chances for a rise to employment without accelerating inflation are reduced. Due to the behaviour of the NAIRU, the increase in the labour force participation rate which was observed since 1995 will come to a halt.

Public deficits cause private households to be cautious

Moreover, problems of financing pay-as-you-go pension systems and public sector deficits in major Euro area countries will stay on the political agenda, and are strong reasons for cautious consumer behaviour. Social security reforms were also discussed in the past, but nowadays, the reforms are more fundamental, implying a higher degree of uncertainty of private households.

Likewise, demand management by fiscal policy which appears to be effective in the US is not an option in the Euro area due to the comparatively weak position of public households in large member countries. This fact is true regardless of the question of whether fiscal policy is slightly contractive or expansive and to what extent the de facto suspension of the Stability and Growth Pact has damaged confidence in the soundness of fiscal policy.

The strong positive stimulus from world trade on exports is jeopardized by the increase in the effective exchange rate of the Euro. Against the US Dollar the Euro has appreciated by about 45% since February 2002, when the rise started. The main reason for this development appears to be the sceptical attitude of currency traders towards the sustainability of the large and widening current account deficit in the US. A weaker Dollar, it is argued, will help to reduce the deficit, at least in the medium term. Because the monetary authorities of important Asian

countries like China peg their currencies to the Dollar or, as in the case of Japan, slow down appreciation, a weak Dollar will largely imply a strong Euro.

As Dollar pessimism does not rest on firm economic grounds,

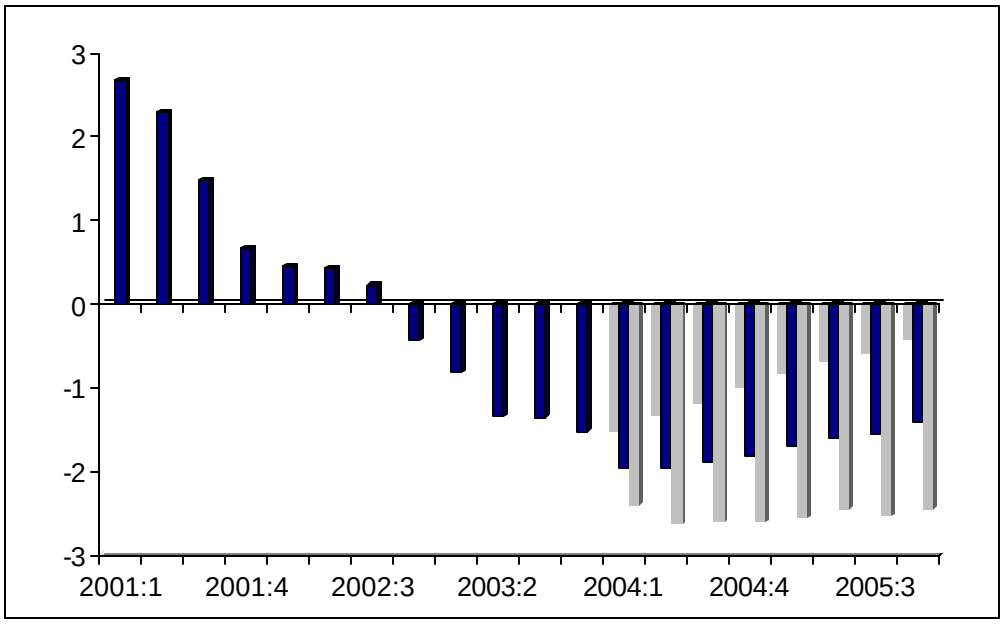
Upon closer inspection, however, Dollar pessimism does not rest on firm economic grounds. It is not convincing that the large US current account deficit of the last years has its main roots in an overvalued Dollar. In that case, the US economy would have performed poorly because of the lack of competitiveness of American products. The true picture is different: it is not the choice between products of different origins but the intertemporal decisions of US households, firms and the government to spend at present, that lead to large capital imports. The counterpart of these imports is the current account deficit. Therefore, a structural reduction of the deficit would only be caused by changes in intertemporal prices, i.e. interest rates, or by a change in the expectations about future incomes in the US. Such a change might be aided by a weaker Dollar, but that does not mean that the currency has to fall until the deficit has shrunk to some level considered as sustainable. According to the EFN forecast, the Dollar will be roughly stable around 1.20 Euro in 2004. Still, measured by purchasing power parities, the Euro appears to be overvalued relative to the Dollar. Therefore, we expect a depreciation of the Euro down to 1.14 for 2005.

… we do not expect further appreciation of the Euro

More flexible exchange rates are desirable for Asian currencies

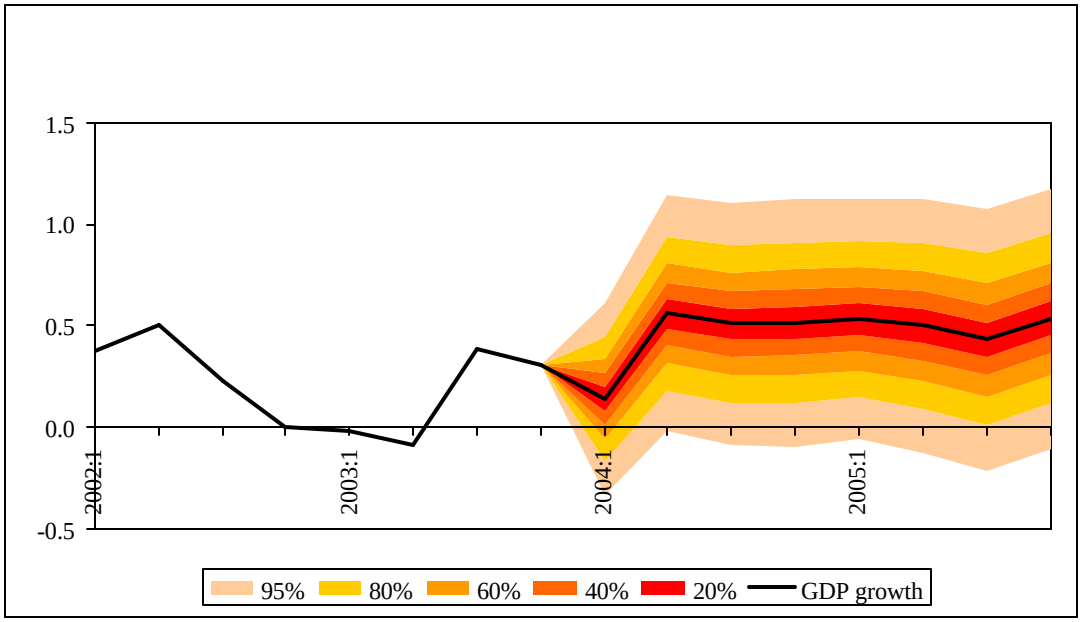
However, exchange rate forecasts are notoriously unreliable. Thus, a further rapid appreciation of the Euro is not to be considered as a totally unlikely event. If it happened, the ECB might very well come under public pressure to counteract with Japanese style intervention. But, since an exchange rate related monetary policy is in danger of being affected by the high degree of instability in the currency markets, the ECB should not depart from its strategic focus on internal stability. The best provision against the pressure from appreciation would be to convince Asian monetary authorities of the merits of more flexible exchange rates. This would mean that the effects of Dollar volatility would be spread more evenly instead of falling predominantly on Euro area producers.

Figure 1.1 Output gap



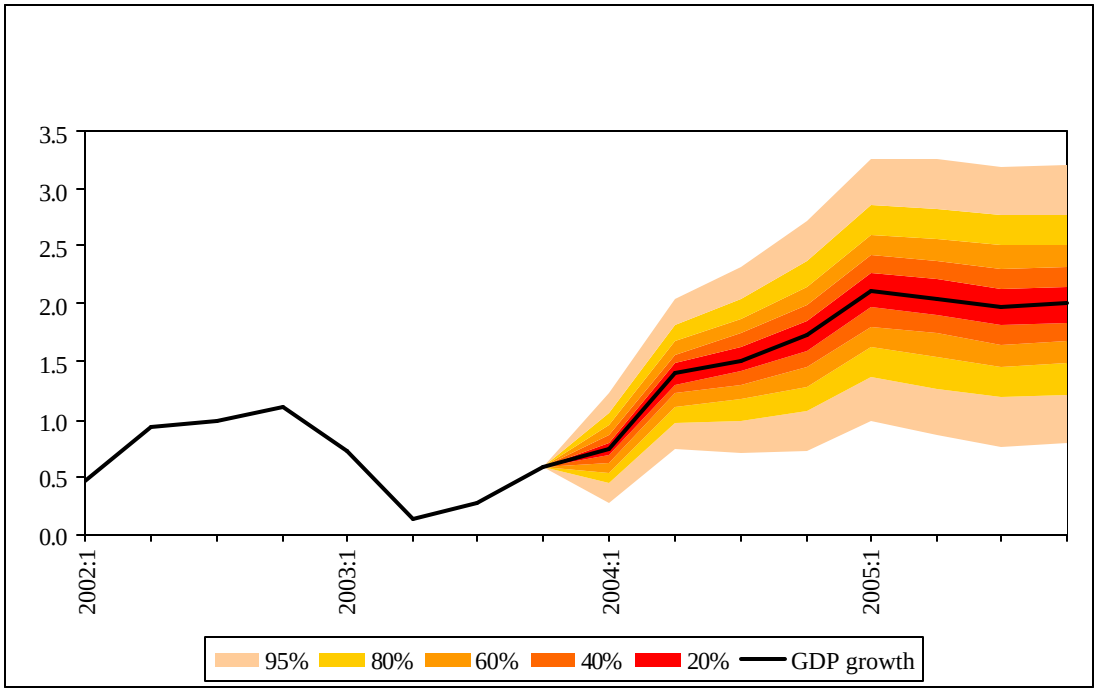
In percent of potential GDP, 80% confidence bands

Figure 1.2 Quarterly GDP growth rates and confidence bands



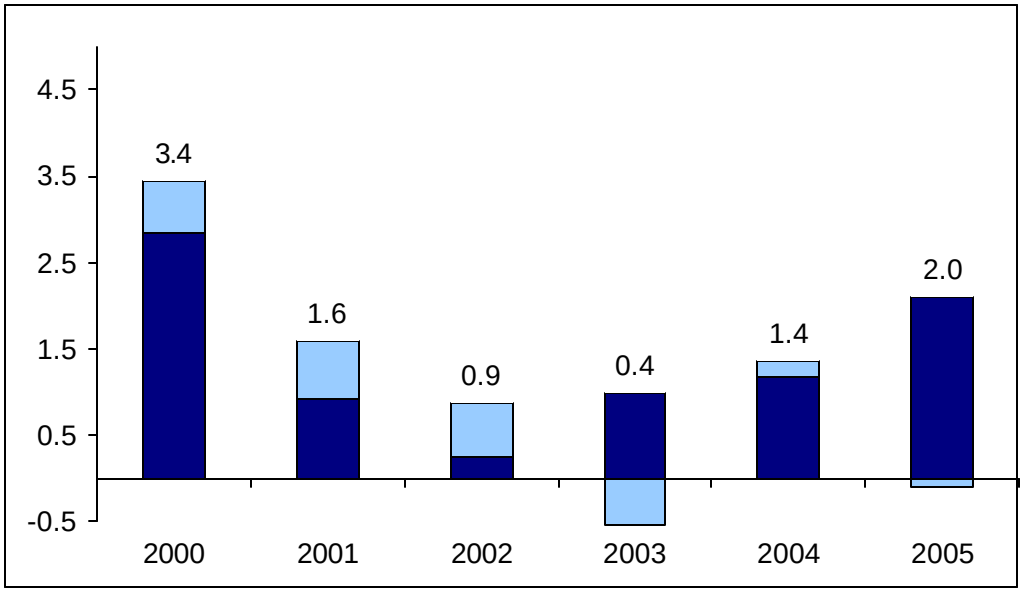
Percentage change over the previous quarter

Figure 1.3 Year-on-year GDP growth rates and confidence bands



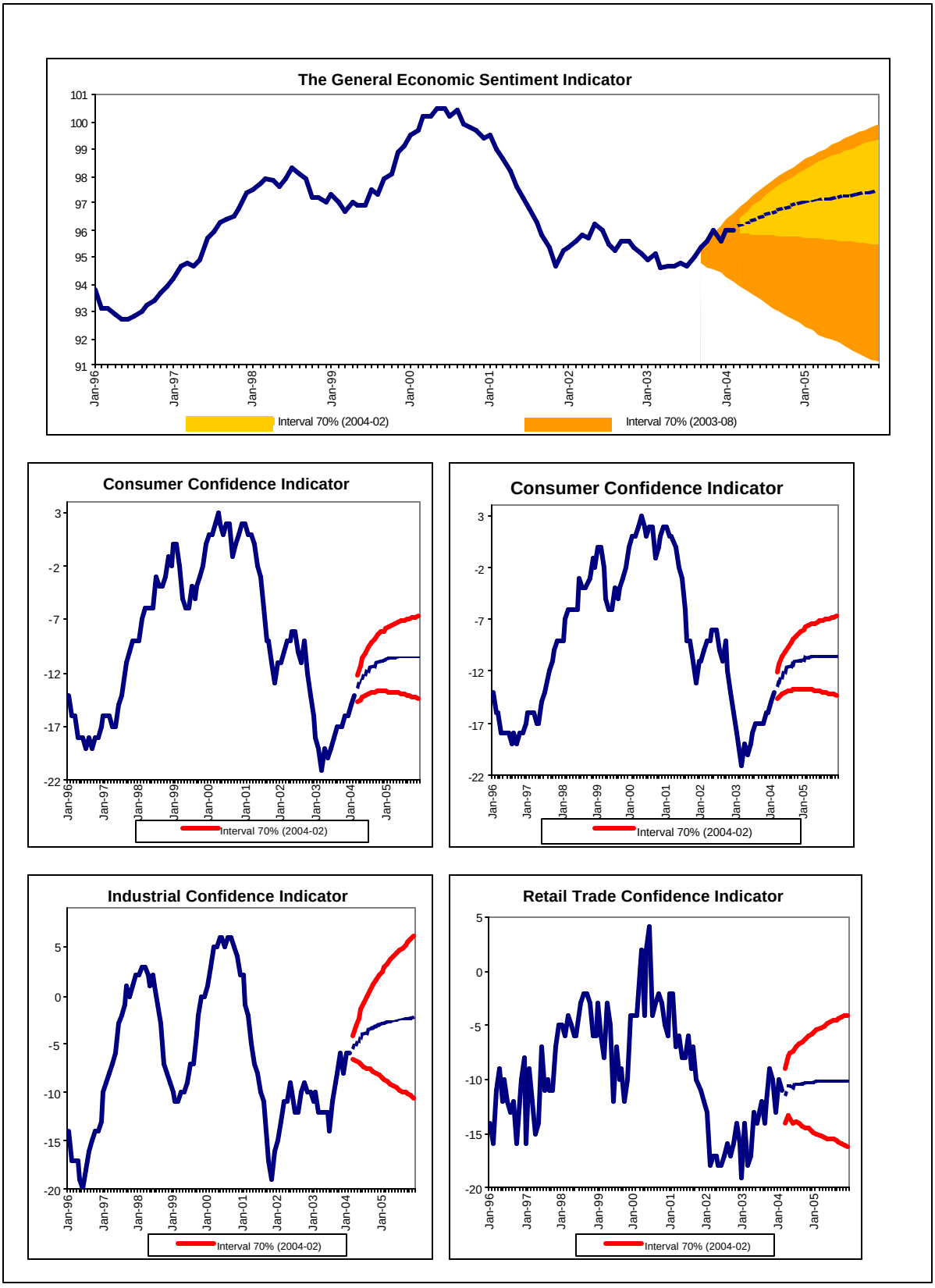
Percentage change over the same quarter in t he previous year

Figure 1.4 Contributions of domestic components and net exports to GDP growth



Domestic demand bright, net exports dark area. Percentage points; figures above the columns indicate overall GDP growth

Figure 1.5


The General Economic Sentiment Indicator
101
100
99
98
97
96
95
94
93
92
91
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Interval 70% (2004-02)
Interval 70% (2003-08)
Consumer Confidence Indicator
3
-2
-7
-12
-17
-22
Interval 70% (2004-02)
Consumer Confidence Indicator
3
-2
-7
-12
-17
-22
Interval 70% (2004-02)
Industrial Confidence Indicator
5
0
-5
-10
-15
-20
Interval 70% (2004-02)
Retail Trade Confidence Indicator
5
0
-5
-10
-15
-20
Interval 70% (2004-02)

BOX 1.1 : GDP FORECAST BY PRODUCTION SECTORS

The macroeconometric model used to generate the forecasts given in this report is based on a disaggregation of GDP by expenditure components.

In order to give forecasts for the production sectors in the Euro-area another model has been employed. In this case, GDP is broken down into five components: GVA for each of the following sectors, agriculture, industry, construction and services, and taxes less subsidies on products. A vector equilibrium correction mechanism (VEqCM) model with leading indicators is constructed. In the industry and construction sectors the corresponding sentiment indicators published by the European Commission have been used as leading indicators. For the services sector the general economic sentiment indicator has been considered and for agriculture and taxes no indicators have been contemplated. The leading indicators turn out to be exogenous and in the vector a cointegrated relationship connecting GVA in the services sector with GVA in the other sectors, taxes and a positive deterministic trend is found. The leading indicators are forecast by means of non-linear time series models, to take into account the asymmetric behaviour through the cycle phases.

Table 1.2 Economic outlook for the Euro area

	2001	2002	2003	2004: 1st half		2004: annual		2005: annual	
				Point Forecast	Interval Forecast	Point Forecast	Interval Forecast	Point Forecast	Interval Forecast
GDP	1.6	0.9	0.4	1.1	0.7 1.4	1.4	0.9 1.8	2.0	1.4 2.7
Potential Output	2.5	2.4	1.9	1.9	1.6 2.4	1.9	1.5 2.5	1.7	1.0 2.4
Private Consumption	1.8	0.1	1.0	0.8	0.3 1.3	1.1	0.6 1.5	1.7	1.0 2.4
Government Consumption	2.4	2.7	1.9	2.0	1.7 2.4	2.0	1.6 2.4	1.8	1.2 2.3
Fixed Capital Formation	-0.1	-2.9	-1.2	0.2	-1.3 1.7	1.0	-0.7 2.7	3.5	1.1 5.7
Exports	3.3	1.7	0.0	3.9	2.6 5.1	4.8	3.3 6.3	7.2	4.8 9.3
Imports	1.7	0.1	1.5	3.6	2.2 5.0	4.7	3.2 6.2	7.6	5.3 10.0
Unemployment Rate	8.0	8.4	8.8	8.8	8.6 9.0	8.9	8.6 9.1	8.8	8.3 9.2
NAIRU	8.6	8.3	8.2	8.3	8.1 8.5	8.4	8.2 8.6	8.6	8.2 9.0
Labour Cost Index	3.3	3.4	2.9	2.6	2.4 2.8	2.7	2.5 3.0	3.1	2.7 3.5
Labour Productivity	0.4	0.3	0.5	0.5	-0.1 1.1	0.8	0.1 1.4	2.0	1.1 2.9
HICP	2.3	2.2	2.1	1.7	1.2 2.2	1.8	0.9 2.7	1.9	0.9 2.9
IPI	0.5	-0.5	0.4	1.5	1.3 1.6	1.8	0.9 2.9	1.8	0.9 2.9

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. Point forecasts and 80% confidence bounds are taken from EFN forecasting model and based on 2000 stochastic simulations.

BOX 1.2: 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 economic recovery is expected, in particular for 2004. This is reflected in an increase in GDP growth rates; while inflation will remain moderate. A roughly constant oil price of 30 US dollar per barrel is expected for the forecasting period. 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 1.3 Variables of the world economy

	2004	2005
US GDP Growth Rate	4.6	3.7
US Consumer Price Inflation	1.7	1.9
US Short Term Interest Rate	1.2	1.8
US Long Term Interest Rate	4.1	4.2
Japan GDP Growth Rate	2.8	1.6
Japan Consumer Price Inflation	-0.2	-0.2
Japan Short Term Interest Rate	0.1	0.1
Japan Long Term Interest Rate	1.3	1.3
World Trade	8.2	8.2
Oil Price	30.0	30.0
USD/Euro Exchange Rate	1.20	1.14
100Yen/Euro Exchange Rate	1.21	1.13

Apart from the development of world trade, long term interest rates and nominal exchange rates, all variables are exogenous to the EFN forecast, mostly taken from Consensus Economics. Oil price in US dollar per barrel, all other variables in percent.

The economic sentiment indicator in February keeps anticipating a moderate recovery in GDP

ECONOMIC SENTIMENT INDICATOR

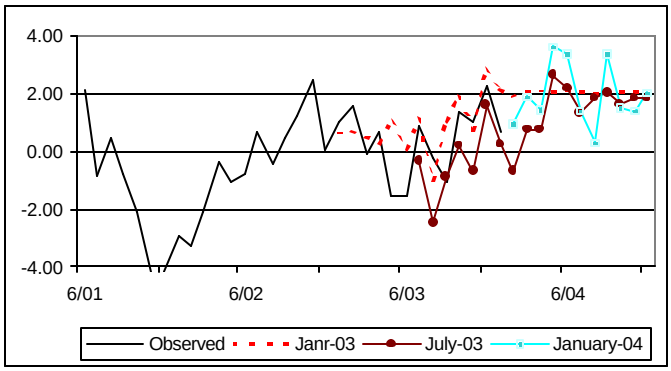
Besides the evolution of GDP and its components, it is of interest to analyse the behaviour of a general indicator of the Euro-area economy, such as the monthly Economic Sentiment Indicator plotted in figure 1.5 together with its components. The plot for the general indicator shows the observed data and the forecast intervals made in this and in the previous reports. It can be seen that the observations corresponding to the period September to November of 2003 have been in the upper band of the forecast interval made with information until August 2003, showing an important recovery in this indicator. This improvement has moderated later, but still the whole evolution of the indicator during the six months since the last report shows a significant recovery. This contrasts with the stagnation observed for the same period in GDP. As far as this indicator leads GDP, the recovery of the indicator and its future projection indicates that a recovery in GDP could take place soon. But according to our GDP forecasts, the recovery which could be anticipating the Economic Sentiment Indicator is going to be moderate, without reaching the rates of growth experienced in 2000.

Industrial production during the last six months experienced the recovery forecast in the previous report.

INDUSTRIAL PRODUCTION

An analysis of the economic situation of the European economy also needs a short term perspective based on a quantitative monthly indicator. The Index of Industrial Production seems to be the best option for this purpose. There have appeared six new values since our last report, for August, September, October, November, December of 2003 and January 2004. The observed values (see figure 1.6) have confirmed the expected recovery, which has been a little better than the forecast. While with data until July it was expected that there would be a decrease in the average annual rate of growth of Industrial Production in 2003 of 0.1%, now a moderate recovery of 0.4% has been observed. Predictions for 2004 have also been upwards revised from 1.4 to 1.8%. The forecast for 2005 is also of 1.8%. Figure 4 shows the change in expectations in the last EFN reports.

Figure 1.6 : Updates in the annual rate of growth of EMU IP forecasts



Source: Eurostat and IFL Date: March 17th, 2004

Source: Eurostat and UC3M, Date: March 17th, 2004

Industrial recovery comes from sectors producing capital and intermediate goods.

The average annual rates of growth for the different industrial sectors classified according to the destination of goods are in table 1.3. This table shows there is a recovery in Capital and Intermediate goods but the expectations for 2004 and 2005 for their rates of growth are still below the mean levels they registered from 1998 to 2000. A recovery in consumer goods has not taken place during 2003, probably due to the effect of the exchange rate on exports, and this will be slow in 2004 and 2005 with values around 1 and 0% in Durable Consumer goods and around 0 and 1% for Non Durable Consumer goods

Table 1.3

ANNUAL AVERAGE RATES FOR INDUSTRIAL PRODUCTION IN EMU(***)

	1998	1999	2000	2001	2002	2003	2004	2005
Capital	6.7	2.4	8.1	1.6	-1.5	0.1	**3.8**	**3.1**
Durable	4.2	1.3	6.1	-2.1	-5.7	-4.9	**1.1**	**0.0**
Intermediate	3.7	1.9	6.2	-0.5	0.0	0.5	**2.5**	**2.0**
Non Durable	2.1	1.2	0.9	0.8	0.5	0.0	**0.3**	**0.8**
Energy	1.6	0.8	1.9	1.4	1.0	3.0	**-1.0**	**1.1**
Total EMU	3.8	1.8	5.2	0.4	-0.5	0.4	**1.8**	**1.8**

(***)Bold figures are forecasts. Working day adjusted data.

Source: Eurostat and UC3M.

Date: March 17th, 2004

Table 1.4

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	**3.9**	**4.2**
Non Durable Consumer Goods	2.3	-0.1	1.7	0.4	-0.6	-1.8	**2.2**	**1.3**
Equipment and Supplies	8.1	4.8	5.9	-4.1	-0.6	0.4	**3.6**	**3.0**
Materials	5.2	5.7	5.3	-4.5	0.4	0.6	**4.4**	**3.7**
TOTAL US	5.6	4.3	4.7	-3.5	-0.6	0.2	**3.1**	**3.2**

(1) Bold figures are forecasts.

Source: Federal Reserve and IFL./ Date: February 25th 2004

Since the last report GDP experienced a stagnant behaviour, inflation moved as expected and qualitative indicators showed recovery with a moderate projection for 2004 and 2005.

Some conclusions emerge from an analysis of the real economy through the production sectors and monthly, quantitative and qualitative, indicators. The projection that would be obtained for GDP growth in 2004 would be slightly more optimistic than the one obtained by the macroeconometric model for an expenditure breakdown of GDP. Nevertheless the difference is not significantly different from zero. Certainly, since the last report, the GDP performed slightly worse than expected, and industrial production better than had been forecast. Also the general economic sentiment indicator experienced an important recovery in the last months of 2003 which has moderated later . It can be said that recent figures for expectations signal a recovery which has not yet been quite observed on GDP, but it is going to be a mild recovery without reaching the rates of growth experienced in 2000.

In the last six months inflation behaved quite closed to our previous forecasts.

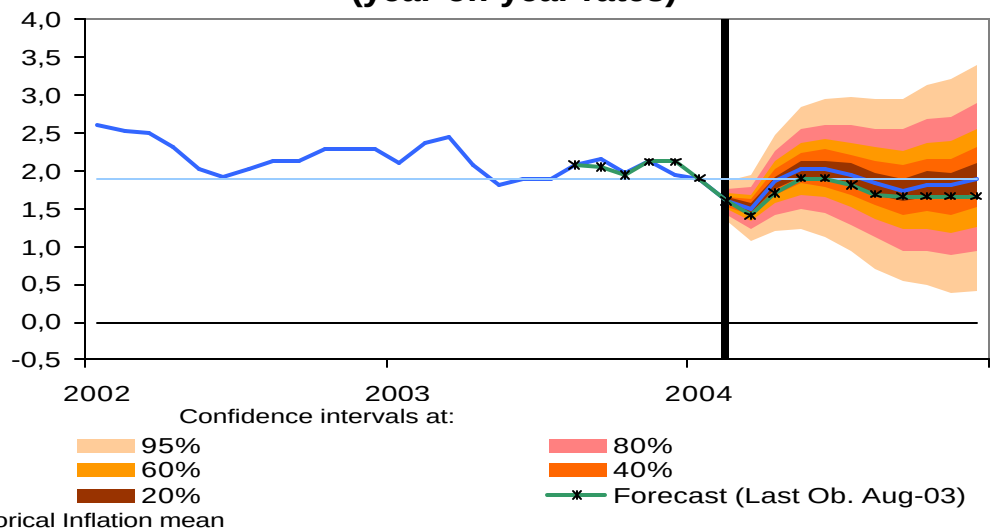
INFLATION

In last autumn's report the inflation forecasts were constructed using information until August and they showed that inflation in the remaining months of 2003 would be just over 2%, before slowing during 2004 with an average annual rate of 1.7%. The five additional observations which are now available show that inflation from September to February has behaved quite closely to the previous forecasts, and the new forecasts (see figure 1.7) for the average annual rates in 2004 and 2005 have been update from 1.7 and 1.8% to 1.8 and 1.9%, respectively. The update is due to new expectations an international brent prices and slightly higher forecast for inflation in non-energy goods.

The monthly profile forecast for the year-on-year inflation rate during 2004 and 2005 shows some oscillations, with low values in February and March of 2004 and a subsequent recovery from April. These low inflation values were also forecast in the previous report and the observed values for January and February can not be considered as a downward innovation on inflation which could even generate changes on the monetary policy, but as something quite expected, which will be followed by a recovery in April. The year-on-year inflation in 2005 shows an increment at the end of the year. A causal explanation of the inflation forecasts are be given in terms of (see box 1.2 in 2003 Spring export): (1) the deviation of money supply from nominal output, (2) the deviation of prices from unit labour costs, (3) the output gap, (4) changes in import prices, (5) past inflation (transitory dynamic factors) and (6) oscillations explained at the sector level.

Graph 1.7

ANNUAL FORECASTS FOR THE EMU INFLATION (year-on-year rates)



Source: Eurostat & IFL Date: March 17, 2004

In 2003 the monetary pressure from inflation has been compensated by the output gap and import prices.

The deviation of money from nominal GDP increased during 2003, augmenting the pressure on inflation (see figure 1.8). This effect was compensated, especially from the second quarter onwards, by the increase in the output gap and the favorable performance of import prices, confirming comments made in previous reports that given the expected evolution of the output gap and other variables affecting inflation, the ECB could go some way further in applying a loose monetary policy.

A tighter monetary policy could be adopted in the second half of 2005.

In forecasting inflation the money aggregate is exogenous and its annual rate of growth is forecast taken its mean during the last thirteen years. This implies that the deviation of M3 from nominal income (computed at consumer prices) will keep increasing during 2004 and 2005. The bars in each quarter, see figure 1.8, represent the contribution of the explanatory variables mentioned above to the deviations of inflation from its mean point cut served that monetary policy is expected to have a positive impact in deviating inflation from its mean, but until mid-2005 this is compensated mainly by the output gap and transitory dynamic effects. But at the end of 2005 this compensation will not take place and it can be said that according to our macroeocnomic projections we can expect a change to a tight monetary policy in the second half of 2005.

Figure 1.7 also give confidence intervals by means of a fan chart and can be used to evaluate the probability of deflation during 2004 and 2005. At the 95% confidence level, the risk of deflation is null. This is so even at the end of the first quarter of 2004, when the year-on-year inflation rate is expected to reach a low value of 1.5%

Figure 1.8

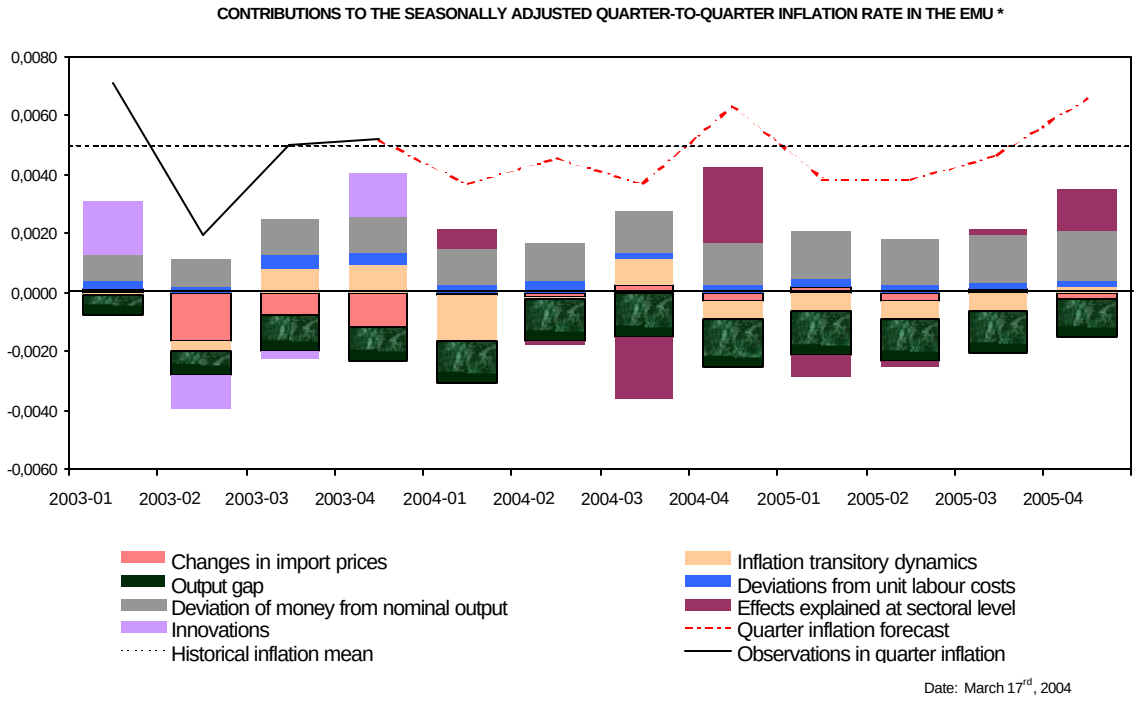


Table 1.5: Contributions to the average inflation rate

Date	Average quarter-to-quarter inflation rate (seasonally adjusted)	Constant term	Changes in import prices	Lagged Inflation	Output Gap	Deviations from unit labour costs	Deviation of money from nominal output	Heterogeneous inflation situations through markets
2004(1Q)-2004(4Q)	0,46%	0,46%	0,00%	-0,04%	-0,15%	0,03%	0,14%	0,02%
2005(3Q)	0,47%	0,46%	0,02%	-0,06%	-0,15%	0,01%	0,17%	0,02%
2005(4Q)	0,66%	0,46%	-0,02%	0,02%	-0,13%	0,02%	0,17%	0,14%

Source: Eurostat & EFN

Date: March 17nd,2004

Table 1.6: Inflation Rates in the EMU and US

(year on year)*

	1998	1999	2000	2001	2002	2003	Forecasts 2004	Forecasts 2005
TOTAL INFLATION								
Euro-zone (100%).	1.1	1.1	2.1	2.3	2.3	2.1	1.8	1.9
USA (81.5%). [1]	1.1	2.1	3.5	2.6	0.9	2.2	**2.0**	1.5
A HOMOGENEOUS MEASURE OF CORE INFLATION [2]								
Services and Non-energy industrial goods excluding food and tobacco.								
Euro-zone (72.34%).	1.4	1.1	1.0	1.8	2.4	1.8	1.9	1.9
USA (55.6%).[1]	1.8	1.4	2.1	2.1	1.5	1.1	1.3	1.8
DIFFERENT COMPONENTS OF THE HOMOGENEOUS MEASURE OF CORE INFLATION								
(1) Services.								
Euro-zone (41.33%).	1.9	1.5	1.5	2.5	3.1	2.6	2.6	2.7
USA (27.4%).[1]	2.9	2.7	3.5	3.6	3.6	2.9	2.6	2.7
(2) Non-energy industrial goods excluding food and tobacco.								
Euro-zone (31.01%).	0.9	0.7	0.4	0.9	1.5	0.8	0.9	0.9
USA (29.0%).	-0.1	-0.5	-0.1	-0.2	-1.5	-2.0	-1.3	-0.1

[1] less owner's equivalent rent of primary residence.

[2] This homogeneous measure of underlying inflation does not coincide with the usual measure of core inflation for the EMU nor for the USA. It has been constructed in order to compare the data in the EMU and in the USA.

Source: EUROSTAT & BLS & IFL. Date: March 17 / 2004

Table 1.6 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	1.4	2.0	1.8	2.3	1.9	na	1.6	2.4	1.8	2.5	1.7	2.1
Private Consumption	1.1	1.7	1.6	2.0	1.9	na	1.6	2.2	1.7	2.4	1.4	2.0
Gov. Consumption	2.0	1.8	1.3	1.4	1.4	na	1.1	0.8	1.0	1.0	1.5	1.2
Fixed Capital Form.	1.0	3.5	2.4	3.0	3.1	na	1.7	3.9	2.3	3.9	2.1	3.3
Unemployment rate	8.9	8.8	9.1	8.9	9.2	na	na	na	9.0	8.7	8.8	8.6
HICP	1.8	1.9	1.9	1.7	1.6	na	1.8	1.6	1.5	1.4	1.7	1.6
Industrial Production	1.8	1.8	na	na	na	na	na	na	na	na	2.3	2.5

EU: European Commission, European Economy, No. 5, 2003; IMF: World Economic Outlook, September 2003; ECB: ECB Monthly Bulletin, December 2003, OECD: OECD Economic Outlook, No. 74, December 2003; Consensus: Consensus Economics Inc., Consensus Forecasts, March 2004. IMF forecasts for demand components refer to the European Union. ECB figures correspond to their macroeconomic projections. Numbers in the table refer to the mean of the respective projected interval.

Compared to other forecasts, the EFN is slightly more pessimistic about private consumption,

while weak acceleration of inflation is seen in 2005

Comparison with alternative forecasts

The forecasts presented above were obtained from the EFN macroeconometric model, described in detail in the Spring 2002 report. Table 1.5 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.

To some extent, the comparison is biased because of the different information sets. For example, the EFN forecast is based on a dataset including the 4th quarter of 2003, which has only been available since March 2004. However, for both years of the forecasting horizon, the EFN outlook is more pessimistic, in particular regarding the development of private consumption. In our view, uncertainties in respect to working prospects and the financing of the social security system will lead to a comparatively weak performance of consumption and cause the saving rate to rise over the forecasting period. While consumption of private households is on a lower path than in other forecasts, our outlook for government consumption is higher. However, these issues are related, as government had behaved anti-cyclically in the past. Hence, if the outlook is more pessimistic, government consumption is likely to be stronger. Also, the restrictions of the Stability and Growth Pact appear to be less binding.

All inflation forecasts show a nearly constant inflation rate in the years of the forecasting horizon. The EU, the ECB and the OECD forecast a slight decline, while our quarterly predictions point to an increase at the end of 2005 because of some decline in the output gap.

Achieving a higher level of confidence is a major policy task

Forecast comparison with previous outlooks

Table 1.6 provides a comparison between the forecast for 2003 and 2004 with the forecasts in the previous reports since 2003. The growth rates of GDP and most demand components, in particular private consumption, have been successively revised downwards. This points to a central policy task for Euro area growth: confidence of private households is of key importance. This can be achieved by means of more sustainable policies concerning public households and social security systems. This would also contribute to a more optimistic outlook on business investment. Higher investment rates will strengthen potential GDP and productivity growth, thereby supporting the competitiveness of Euro area products in international markets.

Table 1.6 Revisions of forecasts from previous outlooks

	Spring 2003		Autumn 2003		Spring 2004	
	2003	2004	2003	2004	2003	2004
GDP	1.2	2.1	0.5	1.5	0.4	1.4
Private Consumption	1.0	2.0	1.1	1.3	1.0	1.1
Government Consumption	1.8	1.3	1.9	2.0	2.0	2.0
Fixed Capital Formation	0.9	4.3	-1.8	1.2	-1.2	1.0
Exports	3.3	6.3	-0.5	4.0	0.0	4.8
Imports	4.0	7.7	1.4	3.9	1.5	4.7
Unemployment rate	8.8	9.0	9.0	9.3	8.8	8.9
HICP inflation	2.4	1.8	2.1	1.7	2.1	1.8
Industrial Production	0.8	2.0	-0.1	1.4	0.4	1.8

BOX 1.3: FORECASTING METHODS

Short term forecasts are obtained from a quarterly simultaneous macroeconometric model. Here, the Euro area is treated as a single entity and variables are obtained as Euro area aggregates. The underpinning theoretical framework refers to an open economy with competitive markets. Agents have been aggregated into the sectors of households, firms, government and foreign countries. Within each sector, individuals are assumed to be homogeneous. The goods, labour and financial assets markets are included. The latter covers money, bonds and foreign exchange. Households and firms maximize individual utilities or profits, respectively. Government and foreign countries are broadly exogenous. Due to sluggish prices and wages, output and employment are demand-driven in the short run and determined by the supply side in the long run. Short-run imbalances are captured by the output and unemployment gap. The former is defined as the difference between actual and potential output. On the base of the output gap, the unemployment gap is determined via an Okun relationship. Disequilibria initiate wage and price adjustments, leading to interest rate reactions via a Taylor rule. Due to the non-stationarity of most variables, the equations are specified in error correction form. Point forecasts are extended by confidence bands to quantify the range of uncertainty around the most likely development. The model is discussed in more detail in the spring 2002 report of the EFN.

HICP forecasts are obtained from a disaggregated monthly model for the components of the index, see the spring 2002 report for details. This provides a better insight into the process of inflation in individual markets. Different stochastic trends in the main price components (food, energy, non energy industrial goods, and services) require a disaggregated framework which is based on leading indicators and non-linear structures. According to the division of markets, total inflation is split into core and residual inflation, where the former is especially relevant for international competition. For robustness issues, the disaggregated forecast is compared with the model outcome, where the overall HICP index is explained by the output gap, import prices, unit labour costs and the stock of money. The model equation is also at work in the case of sensitivity analysis.