

# **EFN REPORT**

## **ECONOMIC OUTLOOK FOR THE EURO AREA IN 2007 and 2008**



**Winter 2006/07**

## About the European Forecasting Network

The European Forecasting Network (EFN) is a research group of European institutions, founded in 2001 under the auspices of the European Commission. The objective of the EFN is to provide a critical analysis of the current economic situation in the euro area, short-term forecasts of the main macroeconomic and financial variables, policy advice, and in-depth study of topics of particular relevance for the working of the European Economic and Monetary Union. The EFN publishes four quarterly reports. Further information on the EFN can be obtained from our web site, [www.efn.uni-bocconi.it](http://www.efn.uni-bocconi.it) or by e-mail at [efn@uni-bocconi.it](mailto:efn@uni-bocconi.it) .

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### **ECONOMIC OUTLOOK FOR THE EURO AREA IN 2007 and 2008**

#### **Highlights**

- In the second half of 2006 the expansion of world output has slowed down, mainly due to the end of the upswing in the US. World trade, however, continued its brisk pace, driven by the high growth dynamics of most emerging markets economies. In 2007, as production in the industrialized countries will be more or less close to capacity, the world economy will approach a growth path that is close to potential.
- In the coming year, the investment boom in the euro area will have passed its peak. The driving force of growth will be household demand instead of investment: prudence as a motive for saving will become less urgent when labour markets improve further. In addition, the upswing will finally entail a higher wage growth.
- A main risk of this forecast is that the slow down of the US economy might be more severe, and that the indirect spillover effects might be more important than it is assumed here: financial transatlantic ties have become more relevant in recent years. Thus, a weaker dollar means capital losses for many European investors who have invested in the US. In addition, sluggish demand in North America might weaken the ability of multinational firms to invest anywhere, in the US or in Europe.
- The forecasts for headline and core inflation in the euro area for 2006 are around 2.2% and 1.5%, respectively. Considering the impact on euro area inflation of the three percentage point VAT increase in Germany, and assuming that 80-85% of the increase will be transferred to consumer prices, the forecast headline inflation rate for 2007 are around 1.9%, and the probability of meeting the inflation target established by the ECB for 2007 is over 50%. For 2008, we expect the annual growth of the headline price index to be more stable, around an average rate of 1.8%.

**Table 1 Economic outlook for the euro area**

	2004	2005	2006	2007: 1st half		2007: annual		2008: annual	
				Point Forecast	Interval Forecast	Point Forecast	Interval Forecast	Point Forecast	Interval Forecast
					1.7		1.4		1.3
GDP	2.0	1.4	2.7	2.4	2.9	2.2	2.9	2.1	2.9
					1.7		1.7		1.8
Potential Output	1.8	1.6	1.6	1.9	2.0	1.9	2.1	2.0	2.3
					1.7		1.6		0.9
Private Consumption	1.5	1.3	1.9	2.5	3.3	2.4	3.2	1.9	2.8
					0.7		0.6		0.7
Government Consumption	1.2	1.3	2.1	1.2	1.7	1.0	1.4	1.2	1.7
					2.4		1.3		-0.5
Fixed Capital Formation	2.3	2.5	4.9	4.3	6.0	3.6	5.8	2.3	5.1
					3.8		3.5		4.1
Exports	6.8	4.3	8.2	4.8	5.8	4.4	5.3	5.2	6.2
					4.4		3.6		3.2
Imports	6.7	5.3	8.3	5.7	7.0	4.9	6.2	4.6	6.2
					7.3		7.2		6.8
Unemployment Rate	8.8	8.6	7.7	7.5	7.8	7.5	7.8	7.3	7.9
					2.6		2.9		2.9
Labour Cost Index	2.3	2.2	2.2	3.1	3.6	3.4	4.0	3.8	4.6
					0.5		0.3		0.4
Labour Productivity	1.0	0.7	1.5	1.1	1.6	0.9	1.5	1.0	1.7
					1.7		1.5		1.2
HICP	2.1	2.2	2.2	1.9	2.1	1.9	2.3	1.8	2.4
					1.6		1.1		0.5
IPI	2.0	1.2	3.7	2.4	3.2	2.1	3.1	2.0	3.5

Percentage change in the average level compared with the same period a year earlier, except for the output gap that is the deviation of actual GDP from potential GDP as a per cent of potential GDP and except for the unemployment rate. Point forecasts and 80% confidence bounds are taken from EFN forecasting model and based on 2000 stochastic simulations.

## **Economic Outlook for 2007 and 2008**

### *The world economy*

In the second half of 2006 the upswing of the world economy has slowed down. In the US production expanded at a rate that was clearly below-trend, the expansion of the Japanese economy moderated a bit, and even the healthy upswing in the euro area has lost some dynamics. World trade, however, continued its brisk pace, driven by the high growth dynamics of most emerging markets economies.

In most industrial countries, inflation is still moderate, partly due to energy prices that are roughly at the same level as one year before and to commodity prices that have moved little since summer. Wages continue to grow moderately in the euro area. The same holds for Japan, where deflation is, in spite of the long period of healthy growth, still not definitely over. For all that, the ECB and the Bank of Japan are signalling an inclination to reduce their expansionary policy stance. This means for the euro area that the ECB's key interest rate will probably reach a more or less neutral level in the first half of 2007, while in Japan monetary policy will still be expansionary, albeit to a lesser degree.

Things look differently in the US. Core inflation has been above 2 ½ % since summer and is thus, in the words of the Chairman of the Board of Governors Bernanke, still "uncomfortably high". The slow down of the US economy, however, has made financial markets expect that the Fed will cut interest rates next year. This and the general uncertainties about the path of the US economy in the close future have put pressure on the currency. At mid December, the value of the dollar relative to the euro was almost 10 % lower than at the beginning of 2006.

In principal, capital markets have expected the slow down in the US: yields of long term US bonds have been falling since summer. Stock market prices in the major industrial countries, however, were increasing remarkably in the same period. This was largely due to further rising profits; only moderate price-earning ratios signal that investors do not expect this trend to continue for much longer. In this context it is striking that yield spreads for higher-risk bonds are still quite low. An explanation might be found in the propagation of new financial instruments that are meant to allocate risk more efficiently. Investors appear to trust that these instruments not only work during an upswing, but are also useful shelters in the near future, when economic conditions might be a bit more difficult.

The expansion of the world economy in 2007 will be dampened by a continuation of the moderate downswing in the US. In principal, a weakening demand from the US should be welcome, because this is the way to limit the growing US current account

deficit, which is considered as one of the main risk factors for the world economy in the medium run. A weakening dollar is part of the solution: it increases the competitiveness of the US and gives incentives to US firms to move input factors from the production of nontradables to the production of tradable goods.

In the euro area and in Japan the upswing will continue in 2007, albeit at a clearly more moderate pace. As production in the industrialized countries will be more or less close to capacity, the world economy will expand at a rate close to the potential growth path. This path, however, is probably steeper than in the 80s or 90s, thanks to the high growth dynamics in most emerging markets economies.

In the context of the recent exchange rate volatility, one of the risk factors for the world economy in the coming year will be the exchange rate policy of China: If the Renminbi will be excluded from the revaluation relative to the dollar, some regions as the euro area and the United Kingdom will suffer a noticeable loss of competitiveness. But the Chinese government might have come to the conclusion that the huge current account surplus of the country is more a problem than a blessing: since summer, the Chinese currency was allowed to appreciate at a slightly faster pace relative to the dollar. An acceleration of this process would help the world economy in the year 2007.

### *The euro area*

In the autumn of 2006 production in the euro area expanded at a healthy, but slower rate than in the first half of the year. Investment lost some of its dynamics, and a larger share of demand growth was met by imports. Data for industrial production point also to slowing dynamics. The upswing, however, is still sound at the end of the year: most confidence indicators are still rising. Among these indicators, the Economic Sentiment Indicator figure for November registered a slight reduction of 0.1 points from October, 2006, to 110.3, so the indicator's expectations worsen slightly, although we continue to expect a small improvement in the next few months, subsequently stabilizing in the last quarter of 2007 at around 111.4 points. Firms in particular have good reasons for confidence: earnings of joint stock companies are still on the rise; capital is still cheap due to low long term interest rates and upbeat equity markets; and wage costs have increased only moderately in 2006. Households find confidence in the clearly improving performance of the labour markets: since the beginning of the year, the harmonized unemployment rate has fallen by half a percentage point, and employment is increasing at its fastest rate since spring 2001.

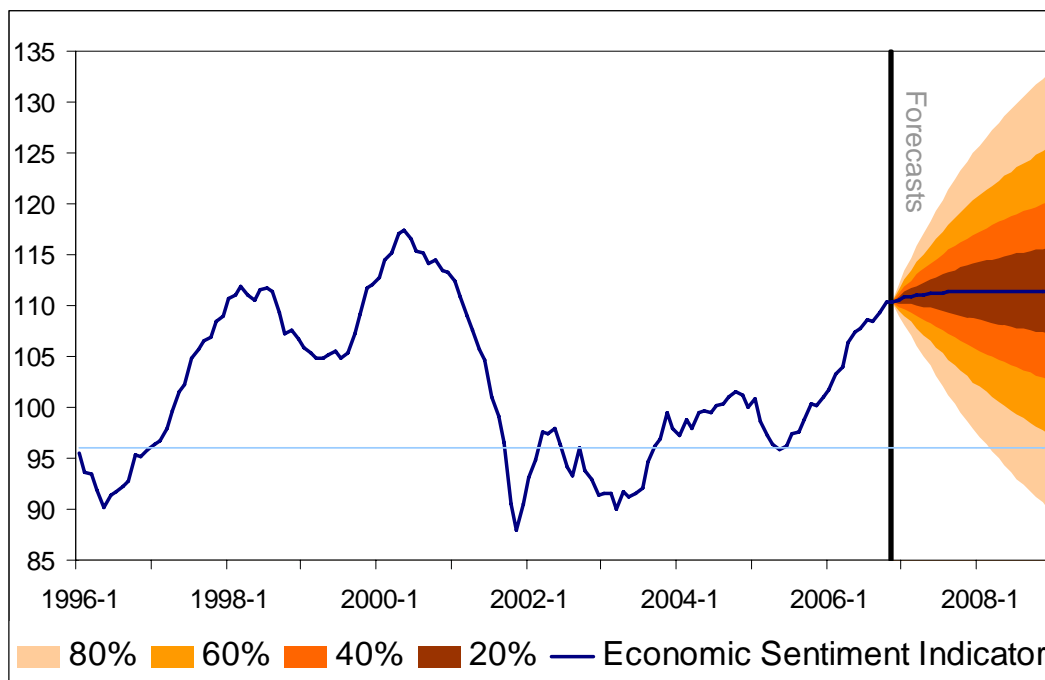
In 2007, the investment boom will have passed its peak. The stimuli from external demand will be weaker due to the slow down in the US and the real effective appreciation of the euro. Furthermore, the increase in short term interest rates will make financing a

bit more expensive. Thus, the driving force of growth will be household demand instead of investment: prudence as a motive for saving will become less urgent when labour markets improve further. In addition, wage growth will finally react to the upswing.

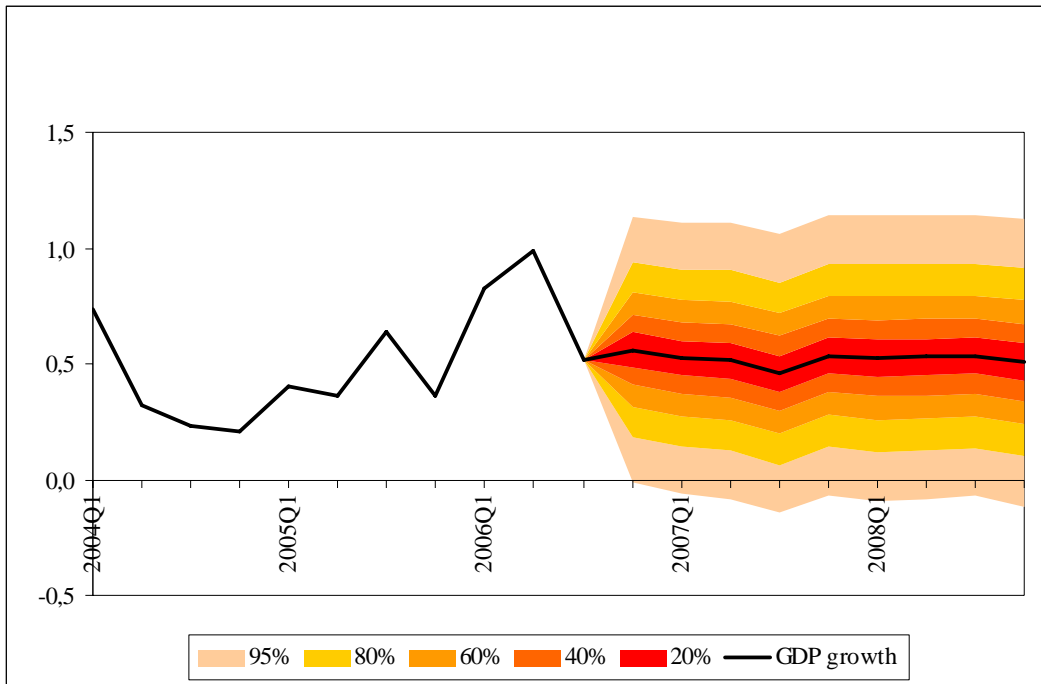
Still, demand will not expand as dynamically as in 2006; an important drag on growth will be the fiscal policy of Germany and Italy. In both countries taxes will be raised to a substantial degree in order to reduce deficits.

All in all, production is expected to expand by 2.2 % in 2007 and by 2.1 % in 2008. Our forecast for 2008 is close to the potential growth path of the euro area. This forecast regards the effects of the slow down in the US as only moderate. As a destination for export goods from the euro area, North America has indeed a share not larger than about 15 %. The financial transatlantic ties have, however, become more relevant in recent years. Thus, a weaker dollar means capital losses for many European investors who have invested in the US. In addition, sluggish demand in North America reduces the profit forecasts for multinational firms that are active there and might weaken their ability to invest anywhere, in the US or in Europe. A main risk of this forecast is that the slow down of the US economy might be more severe, and that the indirect spillover effects might be more important than it is assumed here.

**Figure 1 Euro Area Economic Sentiment Indicator**

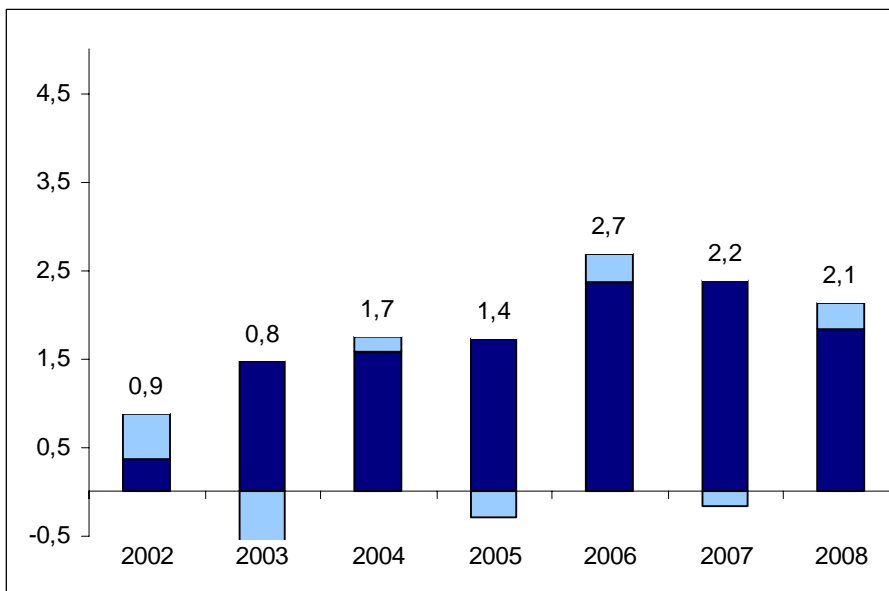


**Figure 2 Quarterly GDP growth rates and confidence bands**



Percentage change over previous quarter

**Figure 3 Contributions of domestic components and net exports to GDP growth**



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



**Table 2 Contributions of production sectors**

Year	GDP Growth	Agriculture	Industrial	Construction	Services			Net taxes
					Market	Financial	Public	
2001	1.90%	-0.04%	0.31%	0.10%	0.56%	0.61%	0.28%	0.07%
2002	0.90%	-0.02%	-0.06%	0.01%	0.23%	0.37%	0.33%	0.03%
2003	0.80%	-0.12%	0.04%	0.02%	0.00%	0.43%	0.28%	0.14%
2004	2.00%	0.26%	0.49%	0.07%	0.51%	0.31%	0.24%	0.12%
2005	1.40%	-0.10%	0.23%	0.05%	0.35%	0.54%	0.23%	0.10%
<b>2006</b>	<b>2.70%</b>	<b>-0.01%</b>	<b>0.76%</b>	<b>0.18%</b>	<b>0.66%</b>	<b>0.72%</b>	<b>0.24%</b>	<b>0.15%</b>
<b>2007</b>	<b>2.20%</b>	<b>0.01%</b>	<b>0.39%</b>	<b>0.12%</b>	<b>0.57%</b>	<b>0.67%</b>	<b>0.27%</b>	<b>0.18%</b>
<b>2008</b>	<b>2.10%</b>	<b>0.00%</b>	<b>0.33%</b>	<b>0.09%</b>	<b>0.51%</b>	<b>0.66%</b>	<b>0.27%</b>	<b>0.24%</b>

From a supply-side perspective, GDP growth for 2007 and 2008 is driven by expansion in services, in particular market and financial services, and the industrial sector (see Table 2). The services sector will be responsible for more than 50% of GDP growth in 2007 and it is expected that this proportion will continue in 2008.

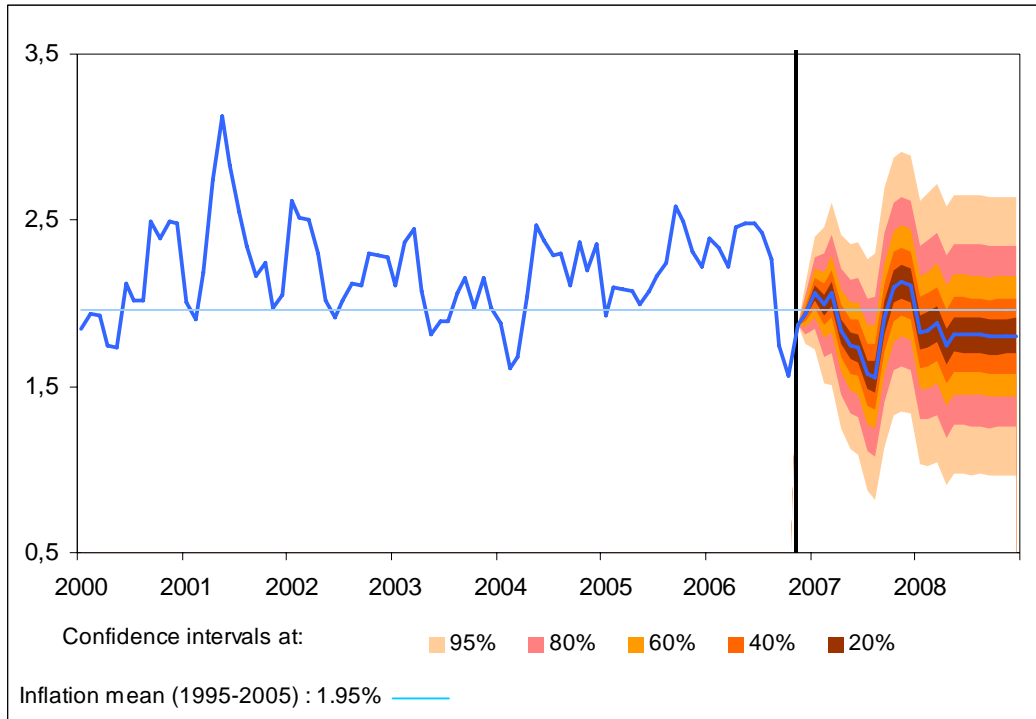
**Table 3 Annual average rates for industrial production in the euro area**

	2002	2003	2004	2005	<b>2006</b>	<b>2007</b>	<b>2008</b>
Capital	-1.6%	-0.1%	3.3%	2.6%	<b>5.2%</b>	<b>3.2%</b>	<b>3.2%</b>
Durable	-6.3%	-4.4%	0.1%	-0.9%	<b>4.1%</b>	<b>1.4%</b>	<b>0.3%</b>
Intermediate	-0.1%	0.3%	2.2%	0.8%	<b>4.7%</b>	<b>2.9%</b>	<b>2.1%</b>
Non Durable	0.7%	0.4%	0.6%	0.8%	<b>1.9%</b>	<b>1.1%</b>	<b>0.9%</b>
Energy	1.5%	2.8%	2.0%	1.3%	<b>1.0%</b>	<b>-1.1%</b>	<b>1.3%</b>
Total EMU	-0.4%	0.3%	2.0%	1.2%	<b>3.7%</b>	<b>2.1%</b>	<b>2.0%</b>

The average annual rates of growth in the monthly industrial indexes of production for different industries classified according to the destination of goods are shown in Table 3. All sectors increase their growth rates for 2006 and the highest recoveries are expected in the capital goods, intermediate goods and durable goods production sector, pushing IPI growth up to 3.7%. For 2007, the growth rate forecasts for all sectors are lower than in 2006, especially for energy goods with a negative variation rate, so the IPI growth rate for 2007 will be around 2.1%. For 2008, the IPI growth rate will remain stable, at 2%. As shown in Tables 2 and 3, the pattern of growth for the IPI is practically the same as forecast for the Gross Value Added of the industrial sector.

With regards to euro area inflation, a worsening in the expectations of both processed food and non energy industrial prices has been observed, comparing with our last report, and the average annual core inflation rate for 2006 is revised upwards by 0.1 percentage points to 1.5%. However, the average annual core inflation increase is sterilized by the improvement in the expectations on energy prices, so the forecast for the headline inflation remains unaltered in the euro area, at 2.2%.

**Figure 4 Forecasts for the Inflation in the Euro Area (y-o-y rate)**



Considering the impact on euro area inflation of the three percentage point VAT increase in Germany, and assuming that 80-85% of the increase will be transferred to consumer prices, the forecast headline inflation rate in the euro area for 2007 is around 1.9% ( $\pm 0.35$ ).<sup>1</sup> The probability of meeting the inflation target established by the ECB for 2007 is over 50% (see figure 4). As for the evolution of inflation expectations in the euro area, we expect a stable evolution of core inflation throughout 2007 and 2008, with annual rates of around 1.8% and 1.6%, respectively. However, headline inflation will accelerate slightly in the first quarter of 2007 to rates of around 2.1%, falling closer to 1.7% in the second and third quarters and increasing again in the last quarter of next year to annual rate values of around 2.1%. For 2008, we expect the annual growth of the headline price index in the euro area to be more stable, ranging from 1.7% to 1.9%, with

<sup>1</sup> The values in brackets correspond to 80% confidence intervals calculated with historical errors.

the forecast average rate of headline inflation for the euro area remaining at 1.8% ( $\pm 0.58$ ).

### *Comparison with alternative forecasts*

The forecasts presented above were obtained from the EFN macroeconomic model, described in detail in the EFN Spring 2002 report. Table 4 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.

The GDP forecasts for 2007 and 2008 are quite similar. However, we forecast a more dynamic expansion of private household consumption, mainly due to more favourable developments in labour markets.

On inflation, the OECD forecasts are the same as those published by EFN for average annual headline inflation rates both for 2006 and 2007, although the remaining institutions estimate a slightly higher inflation rates than EFN. In all cases, inflation rates are expected to be lower in 2008 than in 2007.

**Table 4 Comparison of EFN forecasts with alternative forecasts**

	EFN		EU		IMF		ECB		OECD		Consensus	
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
GDP	2.2	2.1	2.1	2.2	2.0	na	2.2	2.3	2.2	2.3	2.0	na
Priv. Consumption	2.4	1.9	1.6	2.1	1.7	na	1.8	2.0	1.7	2.3	1.6	na
Gov. Consumption	1.0	1.2	1.4	1.4	1.5	na	1.0	1.3	1.6	1.7	1.5	na
Fixed Capital Form.	3.6	2.3	3.0	3.0	3.6	na	4.0	3.4	4.2	3.2	3.6	na
Unemployment rate	7.5	7.3	7.7	7.4	7.7	na	na	na	7.4	7.1	7.5	na
HICP	1.9	1.8	2.1	1.9	2.4	na	2.0	1.9	1.9	1.8	2.1	na
IP	2.1	2.0	na	na	na	na	na	na	na	na	2.2	na

EU: European Commission, European Economy, No. 5, 2006 (Autumn); IMF: World Economic Outlook, September 2006; ECB: ECB Monthly Bulletin, December 2006, OECD: Economic Outlook, No. 80, November 2006; Consensus: Consensus Economics Inc., Consensus Forecasts, December 2006. ECB figures correspond to their macroeconomic projections. Numbers in the table refer to the mean of the respective projected interval.

### Variables of the world economy

Assumptions concerning the evolution of important variables related to the state of the world economy are shown in Table 5 below. For the US, GDP growth will be below potential in 2007 and 2008. Production in Japan is assumed to continue its pace of the second half of 2006. Inflation will decrease in the US in 2007, in line with the slow down of demand, while prices in Japan will still move very slowly. An oil price of 61 (63) dollar per barrel is expected for the end of 2007 (2008). As a technical assumption, the exchange rates of the euro relative to the US dollar and the yen are held constant.

**Table 5 Variables of the world economy**

	2006	2007	2008
US GDP Growth Rate	3.3	2.3	2.8
US Consumer Price Inflation	3.3	2.0	2.0
US Short Term Interest Rate	4.9	5.1	5.1
US Long Term Interest Rate	4.8	4.9	5.3
Japan GDP Growth Rate	2.4	2.0	2.0
Japan Consumer Price Inflation	0.2	0.3	0.6
Japan Short Term Interest Rate	0.3	0.5	0.7
Japan Long Term Interest Rate	1.7	2.0	2.2
World Trade	9.1	6.2	7
Oil Price	65	61	63
USD/Euro Exchange Rate	1.3	1.3	1.3
100Yen/Euro Exchange Rate	1.5	1.5	1.5

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 (2006) and OECD (2006). Oil price (end of period) in US dollar per barrel, all other variables in percent.