### **EFN REPORT**

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



**Autumn 2007** 

#### **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 or by e-mail at efn@uni-bocconi.it.

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#### **EFN REPORT**

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

- The turmoil on financial markets has distinctly clouded the outlook for worldwide growth; present risk spreads will probably not shrink by much over the forecasting horizon, and worldwide financial conditions will be less benign than those during the past few.
- In the euro area, production will converge to its potential growth path in autumn, mainly because the investment upswing is coming to an end soon. Consumption will partly fill the gap, as confidence in job security has greatly increased.
- A major downside risk for the euro area is that housing markets will weaken
  where they have been booming for years, particularly in Spain and in Ireland.
  The fear is that rising interest rates might trigger a downturn. In addition, a loss
  of confidence in mortgage related securities as a result of the events in the US
  could aggravate financial conditions for European housing markets.
- In line with the forecasts coming from National Accounts, the updated forecasts
  for the Economic Sentiment Indicator point to a gradual fall of confidence in the
  economy's evolution until the second quarter of 2008, subsequently tending to
  stabilise at levels still high and similar to those observed in mid-2006.
- Inflation forecasts have been revised upwards from the last report, to 2.0% in 2007 and 2.2% in 2008. Practically all basic HICP components contribute to this upwards revision, except non energy industrial goods and services in 2008. It is worth mentioning the upwards revision in forecasts experienced by processed food prices in the last month.

Table 1 Economic outlook for the Euro area

|                         | 2004 | 2005 | 2006 | 2007:             | 2nd half             | 2007              | : annual             | 2008              | : annual             |
|-------------------------|------|------|------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------------|
|                         |      |      |      | Point<br>Forecast | Interval<br>Forecast | Point<br>Forecast | Interval<br>Forecast | Point<br>Forecast | Interval<br>Forecast |
|                         |      |      |      |                   | 1.8                  |                   | 2.3                  |                   | 1.1                  |
| GDP                     | 2.0  | 1.5  | 2.8  | 2.2               | 2.6                  | 2.5               | 2.7                  | 1.9               | 2.5                  |
|                         |      |      |      |                   | 1.6                  |                   | 1.6                  |                   | 1.8                  |
| Potential Output        | 2.0  | 1.7  | 1.9  | 1.7               | 1.9                  | 1.7               | 1.8                  | 2.0               | 2.2                  |
|                         |      |      |      |                   | 1.4                  |                   | 1.4                  |                   | 1.7                  |
| Private Consumption     | 1.6  | 1.5  | 1.8  | 1.9               | 2.3                  | 1.7               | 1.9                  | 2.4               | 3.0                  |
|                         |      |      |      |                   | 1.2                  |                   | 1.6                  |                   | 1.1                  |
| Government Consumption  | 1.3  | 1.3  | 1.9  | 1.6               | 2.0                  | 1.8               | 2.0                  | 1.4               | 1.8                  |
|                         |      |      |      |                   | 1.9                  |                   | 3.8                  |                   | -0.4                 |
| Fixed Capital Formation | 2.3  | 2.6  | 5.0  | 3.3               | 4.7                  | 4.5               | 5.2                  | 1.8               | 3.8                  |
|                         |      |      |      |                   | 3.8                  |                   | 5.1                  |                   | 3.5                  |
| Exports                 | 6.9  | 4.3  | 8.0  | 4.8               | 5.8                  | 5.6               | 6.1                  | 4.4               | 5.4                  |
|                         |      |      |      |                   | 3.4                  |                   | 4.4                  |                   | 3.5                  |
| Imports                 | 6.7  | 5.1  | 7.7  | 4.4               | 5.5                  | 5.0               | 5.5                  | 4.7               | 6.0                  |
|                         |      |      |      |                   | 6.6                  |                   | 6.9                  |                   | 6.3                  |
| Unemployment Rate       | 8.8  | 8.6  | 7.9  | 6.8               | 7.0                  | 7.0               | 7.1                  | 6.7               | 7.1                  |
|                         |      |      |      |                   | 2.2                  |                   | 2.2                  |                   | 2.6                  |
| Labour Cost Index       | 2.6  | 2.4  | 2.4  | 2.4               | 2.6                  | 2.3               | 2.4                  | 3.0               | 3.3                  |
|                         |      |      |      |                   | 0.5                  |                   | 1.0                  |                   | -0.1                 |
| Labour Productivity     | 0.9  | 0.8  | 1.5  | 0.9               | 1.3                  | 1.2               | 1.4                  | 0.5               | 1.1                  |
|                         |      |      |      |                   | 2.1                  |                   | 1.9                  |                   | 1.8                  |
| HICP                    | 2.1  | 2.2  | 2.2  | 2.2               | 2.3                  | 2.0               | 2.1                  | 2.2               | 2.6                  |
| IPI                     |      |      |      |                   | 2.9                  |                   | 3.0                  |                   | 1.4                  |
|                         | 2.1  | 1.3  | 4.0  | 3.3               | 3.7                  | 3.3               | 3.6                  | 2.5               | 3.6                  |

Percentage change in the average level compared with the same period a year earlier, 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 and the financial turmoil

The turmoil on financial markets has distinctly clouded the outlook for worldwide growth. News from the real economy had been mixed until recently, showing that production in early summer had stopped expanding in Japan, but continued its swift pace in China and rebounded in the US. Since June, however, rising numbers of mortgage delinquencies, in particular in the subprime sector, have led to drastic devaluations of securities backed by US mortgages; some of those relatively new and sophisticated assets are at present not tradable at all. Strikingly, these problems have spread quickly from the US to other financial markets and from securities backed by mortgages to asset backed securities in general. What aggravates the strains on financial markets is that quite a few institutions holding these longer term assets are refinanced by short term instruments; falling or non-existent market values of their assets have driven them into liquidity shortages. As a consequence, interest rates on interbank money markets, in particular with maturity of three months, have leapt far above key interest rates in the US, in the euro area, and in Britain. Central banks intervened by injecting liquidity (ECB and Fed), lowering the rate for the discount window (Fed), or by extending a credit line to an endangered institution (the Bank of England for the mortgage bank Northern Rock); all these measures appear to have, up to now, only temporary success. Risk spreads for bonds have increased distinctly in all industrial countries and, to varying degrees, for all sorts of risk. The flight to safety has induced stock market evaluations to fall, albeit just modestly in the US.

In assessing the real effects of the financial crisis, it has been argued that the US subprime sector is too small to jeopardize the solvency of financial institutions on a scale that would be large enough to dampen the world economy significantly. From this perspective, the liquidity shortage is a consequence of uncertainties about where the – relatively few – bad risks will be found: banks refrain from lending to each other because of counterparty risk. But such a view might be too complacent for two reasons: the first is the effect of the crisis on the housing markets in the US. Prices will further be dragged down because demand from the subprime sector is disappearing. Construction will continue to contract, and household consumption will slow even more due to significant negative housing wealth effects. Weaker US demand will affect all important regions in the world.

There is a second reason for expecting a notable dampening of the world economy: the crisis appears to be one of confidence in the very nature of the new financial instruments. Evidence for such an interpretation is the fact that valuations of these instruments suffered, whether they were related to housing or not. Their main weakness fol-

lows directly from their ability to diversify risks more efficiently: as the EFN summer forecast in June (before the outbreak of the crisis) argued, "markets might have diversified risk to such a degree that in the end no investor is willing to shoulder monitoring costs." Because investors now appear to hold similar views, the present risk spreads will probably not shrink by much over the forecasting horizon and worldwide financial conditions will be less benign than those of the past few years. The US central bank will lower its target rate, but its room for manoeuvre is limited by a still uncomfortably high core inflation rate. All in all, we expect for the second half of 2007 that the US economy will further slow down, but avoid recession, and that the upswing of the world economy will come to an end, but, thanks to high growth dynamics in the emerging markets countries, continue to expand markedly.

Risks appear particularly high for this forecast. An upward risk is that the financial crisis will calm down faster than expected, possibly, because public investors from emerging market countries could shift their focus a bit from government bonds to private assets and thus help stabilizing financial markets. A main downward risk is, of course, that the downturn of the US housing market might be more pronounced than expected here. Other risk factors are, as so often in the recent past, the weak dollar (at a record low relative to the euro in September) and high oil prices (at an all time high this month in dollar terms).

#### The euro area

In early summer, euro area production expanded with an annualized rate of 1.4 %, only half as fast as at the beginning of the year. Export growth was still strong, although dynamics have clearly abated from the export boom of 2006. Imports expanded at a lower rate. This was due to sluggish domestic demand: consumption of private households rebounded only modestly from the stagnation of the first quarter; the value added tax increase appears to still dampen consumption in Germany. Investment even contracted slightly. This, however, is largely the result of the unusually mild weather at the beginning of the year that had pushed construction activity temporarily. Investment in equipment has continued to expand briskly.

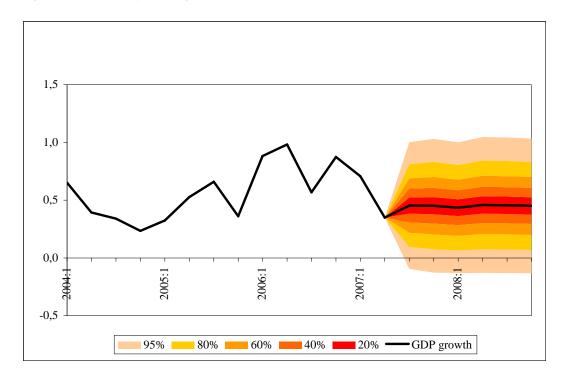
Industrial production kept its healthy pace during the summer, but capital utilization seems to have slided a bit recently, albeit from very high levels. Similarly, confidence of firms (with the exception of retailers) was somewhat declining in the past months, but still strong in August. The real cost of non-financial corporations' external financing had been increasing during early summer, mainly due to rising interest rates, and have certainly increased markedly with the recent trumoils on financial markets. Banks have, at present, a preference for keeping liquidity instead of expanding credit, risk spreads

have increased to levels last observed in the year 2003, and losses on stock markets have made equity financing more expensive. Other forces behind the strong investment growth during the past quarters are for now intact: wage growth is still modest, profits are high and seem even to be further increasing. But wages will – though not dramatically – accelerate due to tighter labour markets, and profits will be squeezed by higher costs for capital, labour, and energy. Thus, the investment upswing is probably coming to an end this autumn, distinctly earlier than forecast in the EFN summer report. Consumption will partly fill the gap, mainly because confidence in job security has greatly increased; indeed, employment expands healthily and the unemployment rate is, with 6.4 % (July), at its lowest since the euro area was established. Employment growth appears, however, also to have passed its peak. Export growth will be dampened by weak demand from the US and this summer's appreciation of the euro, while demand from emerging markets countries will be supportive. Policy will exert little influence: the ECB can be expected to take measures, like the injection of liquidity, that prevent major malfunctions of financial markets. Beyond this, avoiding the interest rate increase that the bank had signaled before the turmoil began appears to be at the limit of what the ECB regards as compatible with its focus on price stability. Fiscal policy is restrictive this year, but will be slightly accommodative in 2008 due to tax cuts in France and, probably, a cut in social security contributions in Germany.

All in all, production will converge to its potential growth path in autumn. The major downside risk for the euro area – alongside those for the world economy as a whole – is that housing markets will weaken where they have been booming for years, particularly in Spain and in Ireland. Until recently, the fear was that rising interest rates might trigger a downturn: house price growth is moderating in many countries, and the expansion of mortgage lending has declined considerably in the first half of the year. Confidence in the construction industry is, according to the European Commission's survey, waning, albeit mostly from high levels. Now an additional risk has emerged: a loss of confidence in mortgage related securities as a result of the events in the US could aggravate financial conditions for European housing markets. This risk is, however, limited by the fact that European residential mortgage-backed securities have – at least up to now – very high ratings.

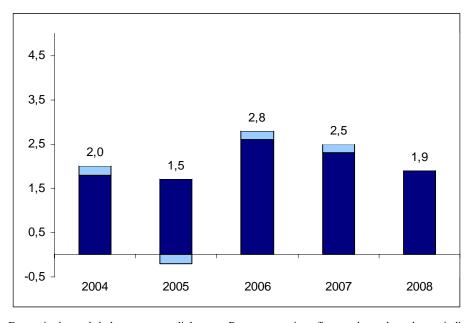
Overall, we expect a GDP growth of 2.5% in 2007 and 1.9% in 2008 in the euro area. Figure 1 shows the evolution of the quarterly GDP growth rate, and the uncertainty about it. Figure 2 reports the contribution of domestic components and net exports to GDP growth.

Figure 1 Quarterly GDP growth rates and confidence bands



Percentage change over previous quarter

Figure 2 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

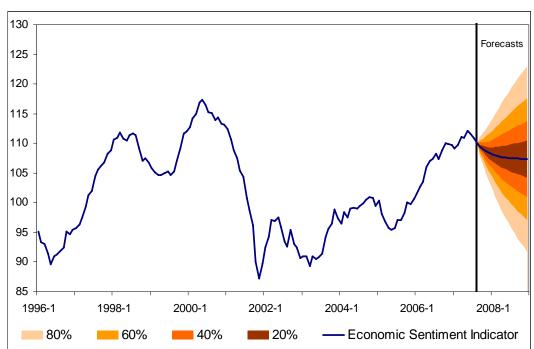


Figure 3 Euro Area Economic Sentiment Indicator

The Euro Area Economic Sentiment Indicator (ESI) complements the information coming from the Quarterly National Accounts, offering figures for the beginning of the third quarter. The latest available figures correspond to August 2007. As Figure 3 shows, in the last three months this indicator has started to decline, registering worse than expected figures in June, July and August. The decline in August was due to a falling confidence of economic agents in the construction, services and consumer goods sectors. In line with the perspectives coming from the National Accounts, which announce lower growth for 2008, the forecasts for this indicator point to a gradual fall of confidence in the economy's evolution until the second quarter of 2008, subsequently tending to stabilise at levels still high and similar to those observed in mid-2006.

Analysing GDP growth forecasts from a supply-side perspective, Table 2 shows that industrial and market services will account for most of the drop in GDP growth in 2007. The difference between 2006's growth and 2008's expected growth, almost 1 percentage point, would be the result of a lower contribution in 2008 from the industry, construction and market services sectors. The first one would show in 2008 a contribution half the one it had in 2006, the construction sector would reduce its contribution to almost 0% and market services' contribution would be one third below its contribution in 2006.

**Table 2 Contributions of production sectors** 

|      |            |             |            |              | Services |           |        |           |
|------|------------|-------------|------------|--------------|----------|-----------|--------|-----------|
| Year | GDP Growth | Agriculture | Industrial | Construction | Market   | Financial | Public | Net taxes |
| 2003 | 0.80%      | -0.13%      | 0.05%      | 0.00%        | 0.13%    | 0.39%     | 0.18%  | 0.18%     |
| 2004 | 2.00%      | 0.24%       | 0.37%      | 0.04%        | 0.47%    | 0.38%     | 0.33%  | 0.17%     |
| 2005 | 1.50%      | -0.11%      | 0.17%      | 0.07%        | 0.31%    | 0.64%     | 0.27%  | 0.15%     |
| 2006 | 2.80%      | -0.03%      | 0.70%      | 0.25%        | 0.55%    | 0.74%     | 0.25%  | 0.35%     |
| 2007 | 2.50%      | 0.03%       | 0.59%      | 0.17%        | 0.45%    | 0.78%     | 0.25%  | 0.24%     |
| 2008 | 1.90%      | 0.01%       | 0.34%      | 0.03%        | 0.39%    | 0.69%     | 0.25%  | 0.21%     |

In line with a lower contribution to GDP growth from the industrial sector, forecasts for the Industrial Production Index (IPI) point to a progressive decrease in the average annual growth rate from 4.0% in 2006 to an expected 2.5% in 2008. These forecasts have been revised upwards since our last report, taking into account the better than expected figures registered in two of the last three months in the IPI and the Industrial Confidence Indicator (ICI). The latest figures for the IPI correspond to July, when it grew more than expected as the result of upwards innovations in practically all productive sectors. The latest figures for the ICI correspond to August, and the updated forecasts point to a gradual fall in the confidence of economic agents in the industrial sector's evolution in 2007 and 2008, tending to stabilise in the last quarter of next year at values which, although lower than those observed since the second quarter of 2006, are clearly higher than those found in years when the sector experienced a low growth rate.

Table 3 reports the average annual rates of growth in the euro area Industrial Production Index for different industries classified according to the destination of goods. It shows that all sectors but non durable goods will contribute to the expected decrease between 2006 and 2007 in the annual IPI growth rate. In 2008, it will be energy the only sector that will not contribute to the expected further slowdown.

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

|              | 2002  | 2003  | 2004 | 2005  | 2006 | 2007  | 2008 |
|--------------|-------|-------|------|-------|------|-------|------|
| Capital      | -1.4% | -0.1% | 3.4% | 2.8%  | 5.8% | 5.5%  | 3.8% |
| Durable      | -5.9% | -4.4% | 0.1% | -1.0% | 4.2% | 2.1%  | 1.2% |
| Intermediate | -0.1% | 0.3%  | 2.4% | 0.9%  | 5.0% | 3.6%  | 2.2% |
| Non Durable  | 0.7%  | 0.3%  | 0.7% | 0.7%  | 2.2% | 2.7%  | 0.9% |
| Energy       | 1.5%  | 2.8%  | 2.2% | 1.3%  | 0.8% | -0.6% | 3.4% |
| Total EMU    | -0.4% | 0.3%  | 2.2% | 1.3%  | 4.0% | 3.3%  | 2.5% |

With regards to inflation, our forecasts have been revised upwards since our summer report, to 2.0% for 2007 and 2.2% for 2008. Practically all basic HICP components contribute to this upwards revision, except non energy industrial goods and services in 2008. The inflation perspectives for non energy industrial goods had been progressively being revised downwards during the last four months, but with August figures, forecasts for 2007 and 2008 for these goods were revised upwards in such a way that for 2007 they are now at the same rate as in our last report and for 2008 they are still slightly below. It is also worth mentioning the upwards revision experienced by processed food in our latest update. This component registered a monthly rate in August significantly above the usual rate for the month.

Figure 4 Year-on-year inflation and confidence bands

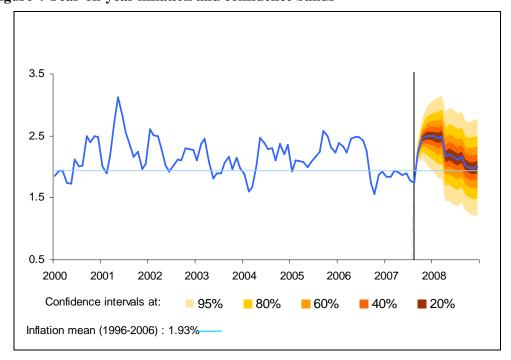


Figure 4 shows the expected evolution of annual HICP growth rates in the next months. Inflation is expected to rise significantly at the end of the year, to values of 2.5%, mainly as the result of the forecast evolution of energy prices. Following a first quarter of 2008 at this rate, inflation is expected to return to values close to 2.0-2.2%. For the whole forecasting period we are expecting inflation to be above the average of the last ten years.

#### Comparison with alternative forecasts

The forecasts presented above were obtained from the EFN macroeconometric model. Its basic version is described in detail in the EFN Spring 2002 report. Table 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 staff of the ECB, the OECD, and Consensus Economics Inc.

The EFN numbers for 2007 are very close to those of the ECB, that have been published this month. For 2008, EFN is more pessimistic. With regards to GDP growth, this is basically because in our forecast, the investment upswing comes to an end this autumn; on the other hand, the positive swing of private consumption is more pronounced than in alternative forecasts. On inflation, there is quite a broad consensus at 2.0% for 2007 and 2008, the EU and OECD forecasts being the most optimistic for 2007. For 2008, EFN forecast is the most pessimistic at 2.2%, and it is the only one that considers a rise in inflation in 2008. Regarding industrial production, EFN expects higher growth rates than Consensus.

Table 5 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                 | 2.5  | 1.9  | 2.6  | 2.5  | 2.3  | 2.3  | 2.5  | 2.3  | 2.7  | 2.3  | 2.6       | 2.2  |
| Priv. Consumption   | 1.7  | 2.4  | 2.1  | 2.4  | 1.7  | 2.0  | 1.6  | 2.1  | 2.0  | 2.3  | 1.6       | 2.1  |
| Gov. Consumption    | 1.8  | 1.4  | 1.8  | 1.8  | 1.4  | 1.6  | 1.8  | 1.7  | 1.8  | 1.6  | 1.9       | 1.6  |
| Fixed Capital Form. | 4.5  | 1.8  | 4.4  | 3.6  | 4.1  | 3.6  | 4.4  | 3.0  | 4.3  | 3.0  | 5.0       | 2.9  |
| Unemployment rate   | 7.0  | 6.7  | 7.3  | 6.9  | 7.3  | 7.1  | na   | na   | 7.1  | 6.7  | 7.0       | 6.7  |
| HICP                | 2.0  | 2.2  | 1.9  | 1.9  | 2.0  | 2.0  | 2.0  | 2.0  | 1.8  | 2.0  | 2.0       | 2.0  |
| IP                  | 3.3  | 2.5  | na   | na   | 2.0  | na   | na   | na   | na   | na   | 2.9       | 2.3  |

EU: European Commission, European Economy, No. 2, 2007 (Spring); IMF: World Economic Outlook, 2007; ECB: ECB Monthly Bulletin, September 2007, OECD: Economic Outlook, No. 81, May 2007; Consensus: Consensus Economics Inc., Consensus Forecasts, September 2007. 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 6 below. For the US, GDP growth will be below potential: clearly so in 2007 and still quite a bit in 2008. Japanese growth is assumed to slow in the coming quarters. Inflation in the US will recede slowly, while the price level in Japan will not rise before 2008. The oil price is assumed to recede somewhat from its present near-record level. We assume that the devaluation of the dollar relative to the euro comes to a halt. We forecast that world trade, that started sluggishly into 2007, will expand roughly at its trend rate in the second half of this year and in 2008.

Table 6 Variables of the world economy

|                                | 2007 | 2008 |
|--------------------------------|------|------|
| US GDP Growth Rate             | 1.9  | 2.6  |
| US Consumer Price Inflation    | 2.8  | 2.4  |
| US Short Term Interest Rate    | 4.7  | 4.5  |
| US Long Term Interest Rate     | 4.8  | 5.0  |
| Japan GDP Growth Rate          | 2.4  | 2.1  |
| Japan Consumer Price Inflation | 0.0  | 0.4  |
| Japan Short Term Interest Rate | 0.7  | 1.3  |
| Japan Long Term Interest Rate  | 1.8  | 2.2  |
| World Trade                    | 6.0  | 7.2  |
| Oil Price                      | 68   | 70   |
| USD/Euro Exchange Rate         | 1.35 | 1.37 |
| 100Yen/Euro Exchange Rate      | 1.60 | 1.55 |

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 (2007) and OECD (2006). US short term interest rate: 3 months government bills. Oil price (end of period) in US dollar per barrel (Brent), all other variables in percent.