Changes in EUREN

The European Economic Network EUREN can look back on an eight years history. It was formed in 1999, at first constituting a fairly loose co-operation designed to develop closer links between leading economic research groups. In 2002, its members made their first joint forecast for the European Union which was published as "The Economic Outlook in Europe". This was the start of a series of reports appearing twice a year. The eighth report appeared in June 2006 and was presented at a conference in Paris.

However, 2006 brings about several changes in the network. The most visible alteration: EUREN has decided for a new publication strategy. Instead of two large reports a year it will present the results of its research more often, and in a more concise format, in "EUREN-News", an internet-based newsletter scheduled to appear six times a year. The presentation may change, but the EUREN institutes will continue to produce a joint forecast for the EU countries, which will appear in two of the six yearly issues of "EUREN-News". Additionally, it is planned to present results of the research of the EUREN members which is of European interest.

On the back page of each newsletter, the reader will find information on the current economic situation in the Euro area. It is condensed into two indicators: The Coe/Rexecode leading indicator for the Euro Area has already been part of the former EUREN publications. It is used to anticipate turning points in the growth cycle. The most recent indicator is still below the 60 threshold, pointing out that there still is a rather small possibility of a downturn. It is supplemented by a newly developed indicator, providing a short term GDP forecast which is based on the EUREN/CEPREDE high frequency model. A short summary of the methodology applied is given in this newsletter.

This change in the presentation of EUREN research coincides with fluctuations in the membership. Unfortunately, two institutes had to pull out of the network. However, we are glad to welcome two new members that will reinforce the EUREN team.

Ref. („Ricerche per l'Economia e la Finanza", Milan, www.ref-online.it) is an independent research center founded in 2000. It is one of the leading institutes in the field of macroeconomic analysis and forecasting. With the membership of Ref., expertise from the most important EU countries (as measured by GDP) is present in the network again.

The "Centre of Planning and Economic Research" (KEPE) from Athens (Greece, www.kepe.gr) was formed in 1959 and has a long record of short and medium term forecasting. But research on human resources and sectoral studies are also part of the institute's objectives.

KEPE and Ref joined EUREN

The EUREN/CEPREDE High-Frequency-Model for the Euro area

In this newsletter, the EUREN institutes publish for the first time a forecast of Euro area GDP growth in the next quarters. It is based on a high frequency model which has been developed by CEPREDE. Subsequently a brief summary of the methods employed in this model will be presented. For details on the model please contact Julián Pérez from CEPREDE (julian.perez@uam.es).

The forecast of the high frequency model is constructed in several steps. First of all, a large set of monthly indicators for the Euro Area is selected. It comprises data for the Euro area as a whole as well as information on single Euro area countries. Many of them originate from business sentiment surveys. But also "hard" data on production, labour market, and the monetary sphere are included. Details are shown in the table. ARIMA models are used to extend the time series of all these variables to give a forecast for the remaining months of the current quarter and for the following two quarters. Whenever new data are released the ARIMA estimates can be replaced by the observations.

In a second step, a factor analysis is applied to extract a small number of factors from these data. However, all indicators are available on a monthly base, whereas GDP is measured quarterly only. To avoid a loss of information due to mixed frequencies, in a third step a monthly GDP is constructed using a method proposed by Chow/Lin. In a fourth step, monthly GDP is regressed on the factors derived from step two of the analysis.

The entire procedure could be repeated every time new data are released. For practical reasons, the forecast is updated once a month only between the sixth and tenth day. The results of the forecasts produced since July 2006 are shown on the back side of this newsletter.

The best test of the forecasting power of the model would be an evaluation of its out of sample forecasts. However, the possibility to do so is restricted for data reasons

at the time being. Many indicators for the Euro area only are available since 1996. This year was chosen as a starting point for the analyses in order to have a balanced sample. To make sure that the sample period is long enough to cover at least one full business cycle, the first out of sample forecast was made for 2006Q2. For this quarter, the model predicted a year-over-year increase of GDP of 2.3% in July, which was revised upward in August to 2.7%. When EUROSTAT published its flash estimate of Euro area GDP, the data indeed showed a GDP rate of 2.7%. Also the forecast of quarter-over-quarter growth was quite accurate.

For the third quarter, the short term model forecast of the year over year rate was lifted several times increased from 2.3% (15 July 2006) to 2.8% (10 November 2006). The first publication by EUROSTAT showed a 2.6% increase, which is again quite close to the model forecast. For the quarter over quarter rates the difference is somewhat bigger. The November model forecast suggested a quarterly GDP rate of 0.7% whereas the first official figure was 0.5%. Nevertheless, these differences are quite small compared to the revisions of the EUROSTAT figures observed in the past.

To sum up, the performance of the high frequency model is quite promising so far. Nevertheless, a longer forecast record is required of course to give a sound evaluation of the model's forecast properties.

For the final quarter of 2006 the indicators released by November 2006 suggest a slight deceleration of growth. The quarter-over-quarter rate is estimated to be 0.4%, which generates a year over year rate of 2.8%. For 2006 as a whole the estimate of growth is 2.6%. In the first quarter of 2007 the short term model predicts an improvement in the quarterly figures to 0.7% compared to the previous quarter. The year-over-year rate is forecasted at 2.8%. Hence, the model supports the view of the COE-Rexecode indicator that the upswing has not come to an end yet.

Data included in the EUREN/CEPREDE high frequency model
Last update: 10 November 2006

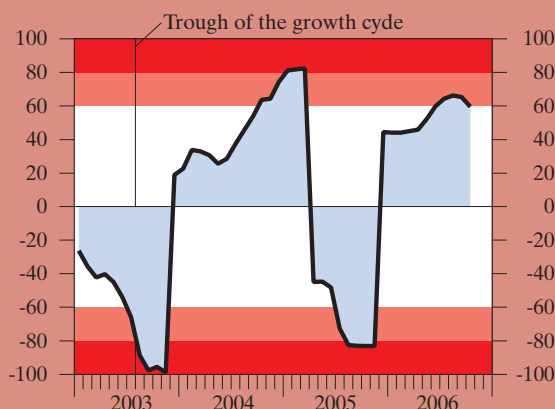|	data available	actual level	change over previous month	change year on year	2006 ave.	2005 ave.
Economic Sentiment Indicator	(oct)	110,3	1,0	9,9	107,4	98,4
Industrial Confidence Indicator	(oct)	5,2	0,8	10,9	2,3	−7,3
Construction Confidence Indicator	(oct)	2,5	−1,6	7,5	0,4	−6,9
Retail Trade Confidence Indicator	(oct)	3,7	0,4	8,9	0,7	−7,5
Consumer Confidence Indicator	(oct)	−7,8	0,2	5,4	−9,2	−13,8
Service Confidence Indicator	(oct)	20,8	2,4	6,8	18,4	11,1
Harmonised Unemployment Rate	(sep)	7,8	0,0	−0,7	7,9	8,6
Harmonised Unemployment (thousand)[1]	(sep)	11499,0	0,0	−8,3	−8,5	−1,7
Industrial Production[1]	(aug)	109,3	1,6	5,1	4,3	1,2
Retail Trade Deflated Turnover						
Food[1]	(sep)	107,2	0,4	0,6	0,8	0,7
Textiles[1]	(aug)	109,5	3,1	4,7	2,8	2,2
Household Goods[1]	(aug)	109,3	2,4	4,9	3,6	1,2
New Car Registrations (1)	(sep)	98,1	2,9	−0,1	0,6	1,4
Money Supply M3	(sep)	8,7	0,5	0,4	8,5	7,4
3-months interest rates	(oct)	3,6	0,2	1,4	3,1	2,2
Long Term Government Yields	(oct)	3,8	−0,1	0,5	3,8	3,4
Economic Sentiment Indicator						
Germany	(oct)	108,1	1,3	10,4	106,1	95,6
Spain	(oct)	99,8	0,9	0,1	97,7	99,6
France	(oct)	110,0	1,6	5,5	107,3	103,7
Italy	(oct)	112,5	−0,7	10,1	109,9	98,6

[1]Figures for last four columns are % of change

However, it must be pointed out that no a priori information except the trend values of the indictors listed is included in the model. In particular, the potential impact of fiscal measures is not incorporated. In the present situation there is reason to assume, that the policy impact may lead to a higher growth in 2006Q4 and a lower rate in 2007Q1. On January 1st, the VAT rate in Germany will be raised by 3 percentage points. This is the strongest VAT-rate hike ever experiences in Germany. Many consumers may anticipate this by pulling forward consumption to the last quarter of 2006 to benefit from the then still lower tax. In 2007Q1 they will reduce their outlays accordingly. Therefore, Euro area GDP may grow somewhat stronger than forecasted by our model in 2006Q4, and accordingly growth may be somewhat lower in the first quarter of 2007.

COE-Rexecode Leading Indicator for the Euro Area

The leading indicator for the euro area is used to anticipate the next economic slowdown[1]. The indicator climbed over the threshold of 60 from July until September 2006, which indicated in that period a possibility of an economic downturn within the next nine months. However, in October, the leading indicator receded at 59.6. Henceforth and if this provisional figure of "59.6" is confirmed, the growth rate of the euro area should stay in the coming quarters over the trend growth rate estimated at 1.5%. In that case, the "soft patch" in the United States would not translate into a « soft patch » in the euro area.

_____
[1]An economic slowdown occurs when the growth rate decreases under the GDP trend growth rate.

Trough of the growth cycle

■ Possibility of a turning point
■ Strong probability of a turning point

Forecast of the EUREN/CEPREDE High Frequency Model

Last update: 10 November 2006

	GDP (year on year)			
	06Q1	06Q2	06Q3	06Q4
jul-06	[2,0]	2,29	2,29	2,37
aug-06		2,70	2,63	2,48
sep-06	[2,2]	[2,7]	2,54	2,41
oct-06			2,73	2,66
nov-06			2,83	2,81

	GDP (quarter on quarter)				2006
	06Q1	06Q2	06Q3	06Q4	
jul-06	[0,6]	0,69	0,71	0,37	2,24
aug-06		1,10	0,63	0,15	2,48
sep-06	[0,8]	[0,9]	0,64	0,17	2,51
oct-06			0,75	0,26	2,57
noc-06			0,73	0,38	2,64

In brackets: GDP-Data published by EUROSTAT.

The latest estimate of the EUREN/CEPREDE model which was generated early November indicates that the upswing in the Euro Area is likely to continue. The forecast of quarter over quarter GDP growth in 2006Q3 was 0.7% which is slightly above the rate published by EUROSTAT in the meantime. For the final quarter of 2006 the latest forecast is 0.4%. The data released in October once again caused an upward revision of this forecast. For the 2006 as a whole an annual growth rate of 2.6% has become likely and has been confirmed by the indicators released recently.