

# 70<sup>th</sup> East Jour Fixe<sup>1</sup>

## Forecasting CESEE Growth in Turbulent Times

Compiled by  
Martin Feldkircher  
and Julia Wörz

### Introduction

The 70<sup>th</sup> East Jour Fixe, which was hosted by the OeNB on February 23, 2012, dealt with macroeconomic forecasting for Central, Eastern and Southeastern European (CESEE) economies amid high uncertainty in the international environment. Currently, with stress caused by the sovereign debt crisis in the euro area spilling over to the CESEE region, forecasters seem to be largely ignoring country specifics, competing in a race of continually revising forecasts downward. The behavior of professional forecasters in these times of heightened uncertainty has illustrated the need to thoroughly rethink existing forecasting techniques, which is what was discussed at the OeNB's 70<sup>th</sup> East Jour Fixe.

The keynote session was chaired by *Peter Mooslechner*, Director of the OeNB's Economic Analysis and Research Department. In his opening statement he stressed the importance of economic forecasting as a tool to inform policymakers by timely signaling deviations from the "norm." The global financial and economic crisis in 2008 and 2009 caught macroeconomic forecasters all over the world by surprise. Mooslechner thus raised the question whether forecasting itself was in crisis. He furthermore emphasized the specific challenges of forecasting CESEE growth, e.g. dealing with short time series that are often plagued by low data quality. According to Mooslechner, the region's strong economic ties with the euro area deserve particular attention as they constitute a growth pillar in good times but cause severe vulnerability during bad times. The future approach to forecasting will depend on whether the crisis turns out to be a one-time event or whether we are facing a new regime with changed mechanics and new forces at work.

### Forecasting CESEE Growth during the Crisis: Lessons Learnt, Lessons Forgotten, New Frontiers

In the first keynote address, *Elena Reitano*, Head of Unit responsible for macroeconomic surveillance of the Netherlands, the Czech Republic and Slovakia at the European Commission, provided a stocktaking of the lessons learnt (and the lessons forgotten) from forecasting CESEE growth in the crisis of 2008 and 2009. In 2008, the crisis highlighted the general need to incorporate the financial sector into statistical forecasting models. For the CESEE region, however, stress that originally emanated from the advanced economies was amplified more strongly by the trade channel than by the financial channel. Reitano emphasized that forecasting CESEE growth for 2009 had been particularly difficult, compared to other regions, owing to transition-related structural breaks and short time series. Looking ahead, debt overhang and possible repatriation of capital from foreign-owned banks to meet domestic capital requirements pose the key risks for the region.

### Modeling Strategies in a Variable Environment

The first session, chaired by *Doris Ritzberger-Grünwald*, Head of the OeNB's Foreign Research Division, gave an overview of different approaches to forecasting CESEE growth. Against the backdrop of the ongoing crisis, good forecasting

<sup>1</sup> The presentations and the workshop program are available at <http://ceec.oenb.at/Events>.

models first and foremost have to adapt quickly to changes in the external environment and, second, take into account the possibility of a crisis-related regime shift, as we may currently be witnessing. In this session, individual approaches to forecasting were discussed, with a critical review of their performance in these turbulent times.

In his presentation, *Tibor Hlédik*, Director of the Macroeconomic Forecasting Division at the Czech National Bank (CNB), focused on the experience gained during the global crisis in terms of forecasting developments of the Czech economy. In a backward-looking analysis of forecasting errors made, he disentangled the portion of the errors that were due to overly confident external assumptions from those inherent to the statistical properties of the CNB's forecasting model. He concluded that accurate growth forecasts for the Czech Republic largely depend on correct forecasts of growth and interest rate developments in the euro area. It turned out that financial frictions were not among the drivers of the recession in the Czech Republic, which was mainly caused by a foreign demand shock. As examples of the successful use of expert judgment at the CNB, Hlédik cited adjustments of foreign demand and nominal wage growth.

*Julia Wörz*, expert for business cycle and structural analyses at the OeNB's Foreign Research Division, presented the in-house forecasting model FORCEE. Wörz explained how the country-specific variations of the model are used to forecast key macroeconomic variables for Bulgaria, Croatia, the Czech Republic, Hungary, Poland and Romania. The empirical country models are embedded in a structural co-integration framework and thus combine the merits of economic theory-informed and purely data-driven approaches to forecasting. The final forecast, which is based on the models' output, relies on the judgment of the division's country experts in terms of economic plausibility. In an evaluation exercise, the model turned out to forecast well, and the structural parameters are consistent with economic theory for most of the countries. Wörz stressed the successful use of scenario analysis as a tool to model the rapidly changing external environment.

*Peter Havlik*, Deputy Director and Senior Economist at the Vienna Institute for International Economic Studies (wiiw), provided an overview of the institutions, central banks and private companies that produce forecasts for CESEE economies. In an ex post evaluation, Havlik noted that the growth forecasts these organizations had released for 2009 all turned out to be inaccurate. The wiiw provides expert-informed demand component forecasts for 17 countries in the region. Against the backdrop of the sharp downward revisions of the GDP growth projected for 2012, Havlik argued against statistical models. Focusing on Russia, he noted that, while cuts in imports provided a buffer for the economy during the global crisis in 2008 and 2009, the contribution of net exports is expected to be negative for the years ahead.

### **Nowcasting – Economics in Real Time**

In his keynote address, *Domenico Giannone*, professor at Université Libre de Bruxelles, highlighted the importance of nowcasting. Despite the fact that economic data is almost always published with a considerable publication lag of up to one quarter (e.g. for GDP and its components), the issue of nowcasting has only very recently attracted attention among professional forecasters. Basically,

information about the current state of the economy can be obtained by following two very different approaches. While surveys offer pure judgment-based information, nowcasting provides completely judgment-free estimates. Giannone presented a highly automatized nowcasting tool, which he had developed with a number of co-authors. This flexible econometric tool can deal with ragged-edge data and mixed frequency and provides continuous output on a daily basis. Especially as regards the short horizon, the judgment-free model has proven more accurate than a naive forecast. The speaker recently developed a nowcasting model for Poland consisting of only two indicators (purchasing managers index and industrial production). The question as to which number of indicators should be ideally included in such models came up during the subsequent discussion; there was general consensus that more indicators do not necessarily improve the accuracy of the nowcast. The discussion revealed concerns that an ever higher frequency of available indicators (including the nowcasts) may increase volatility in the markets and trigger additional market reactions. In Giannone's view, the nowcast only summarizes information which is already available and thus cannot introduce additional volatility.

### **Alternative Approaches to Forecasting CESEE Growth**

In the second session, chaired by *Peter Backé*, Deputy Head of the OeNB's Foreign Research Division, alternative approaches to short-term forecasting were explored. Unconventional forecasting methods comprise a broad range of assumption-free models and unconventional leading indicators. Leading indicators are often available at a higher frequency, thus adding further information to national accounts data. Predicting the development of the business cycle can be facilitated by data obtained from surveys containing qualitative questions.

*Roman Horváth*, Deputy Director of the Institute of Economic Studies (IES) at Charles University in Prague, explored the usefulness of consumer and business confidence indicators for predicting economic activity in the Czech Republic. Using a simple vector autoregression (VAR) model for the Czech Republic, he compared the forecasting performance of different models containing alternative indicators, such as consumer confidence, business confidence, the German Ifo business confidence index and a variable for credit growth. His findings showed that, although confidence indicators have a strong contemporaneous correlation with GDP growth, they do not improve forecasting performance as compared to a canonical VAR model, while including a variable for credit growth improves the forecast in a statistically significant way.

*Martin Schneider*, Expert in the OeNB's Economic Analysis Division, demonstrated the use of two alternative leading indicators which are available in real time and not subject to revisions. Instead of combining a range of indicators to produce a single indicator for economic activity as presented in Giannone's keynote address, the approach presented by Schneider consists in identifying exactly one (leading) contemporaneous indicator for one variable of interest. For example, the OeNB has used truck mileage data provided by ASFINAG, the Austrian road toll operator, to predict export growth since 2008 (as summarized in the OeNB's export indicator). The truck mileage indicator led to persistent overestimation of export growth in the 2009 recession, while a bias toward underestimation was observed in the second half of 2010. Schneider explained the forecasting bias with crisis-

related variations in the utilization per truck and outlined the relatively good forecasting performance since late 2011. Recently, another indicator has been established based on electricity consumption data provided by Austrian Power Sales. This firm-level data set includes rather accurate forecasts by individual firms regarding their future electricity use. The performance of a model based on this data for nowcasting industrial production is currently being tested, and first results are looking promising.

*Oksana Kuziakiv*, Chief Executive at the Institute for Economic Research and Policy Consulting (IER) in Kiev, gave a comprehensive overview of the business tendency survey for Ukraine, which has been conducted by IER since 1996. She explained the collection of additional qualitative statistics by the often poor quality of official statistics in Ukraine caused by long publication lags, frequent changes in underlying methodologies and the limited range of available indicators. IER collects quarterly data on managers' opinions and expectations regarding the current and future state of the economy. The enterprise survey is complemented by a bank managers' survey that has been carried out since 2007. Managers' expectations for a range of indicators over a three- and six-month horizon are summarized into an index of industrial confidence. The correlation between this index and actual production data has proven to be very high, also during the 2008 and 2009 crisis. The discussion following Kuziakiv's explanations focused on the presentation of survey results; participants stressed the importance of making raw data available to forecasters.