



OESTERREICHISCHE NATIONALBANK  
EUROSYSTEM

# FOCUS ON EUROPEAN ECONOMIC INTEGRATION

The OeNB's quarterly *Focus on European Economic Integration (FEEI)* presents peer-reviewed studies on macro-financial and monetary integration in Central, Eastern and Southeastern Europe (CESEE) as well as related country analyses and statistics. This publication reflects a strategic research priority of the OeNB.

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<b>Printing and production</b>	<i>Oesterreichische Nationalbank, 1090 Vienna</i>

**DVR 0031577**

**ISSN 2310-5259 (Print)**

**ISSN 2310-5291 (Online)**

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Printed according to the Austrian Ecolabel guideline for printed matter.



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*Opinions expressed by the authors of studies do not necessarily reflect  
the official viewpoint of the Oesterreichische Nationalbank or of the Eurosystem.*

# Call for Applications: Visiting Research Program

The Oesterreichische Nationalbank (OeNB) invites applications from external researchers for participation in a Visiting Research Program established by the OeNB's Economic Analysis and Research Department. The purpose of this program is to enhance cooperation with members of academic and research institutions (preferably post-doc) who work in the fields of macroeconomics, international economics or financial economics and/or with a regional focus on Central, Eastern and Southeastern Europe.

The OeNB offers a stimulating and professional research environment in close proximity to the policymaking process. Visiting researchers are expected to collaborate with the OeNB's research staff on a prespecified topic and to participate actively in the department's internal seminars and other research activities. They will be provided with accommodation on demand and will, as a rule, have access to the department's computer resources. Their research output may be published in one of the department's publication outlets or as an OeNB Working Paper. Research visits should ideally last between 3 and 6 months, but timing is flexible.

Applications (in English) should include

- a curriculum vitae,
- a research proposal that motivates and clearly describes the envisaged research project,
- an indication of the period envisaged for the research visit, and
- information on previous scientific work.

Applications for 2014 should be e-mailed to [eva.gehringer-wasserbauer@oenb.at](mailto:eva.gehringer-wasserbauer@oenb.at) by May 1, 2014.

Applicants will be notified of the jury's decision by mid-June. The following round of applications will close on November 1, 2014.

# Recent Economic Developments and Outlook

# Developments in Selected CESEE Countries:

## Economic Activity Finally Starting to Recover<sup>1,2,3,4</sup>

Moderate acceleration of economic activity...

### 1 Introduction

Economic activity in Central, Eastern and Southeastern Europe (CESEE) finally started to gain some momentum in the second quarter of 2013 after a protracted period of weakness. Average economic growth in the region amounted to 0.2% in the first and to 0.4% in the second quarter of 2013 (quarter on quarter, see table 1). The regional aggregate, however, was held back by Russia, which slipped into recession in mid-2013. Without Russia, growth would have accelerated from 0% in the fourth quarter of 2012 to 1% in the second quarter of 2013. The momentum was driven especially by a boom in Turkey, which started in the first quarter of 2013. In the other countries, growth rates improved only in the second quarter. A turnaround in the Czech Republic as well as a firming of growth in Poland and Romania played an important role in this respect. It needs to be noted, however, that despite some improvement, economic activity remained comparatively weak in several other CESEE countries. This is especially true for Slovenia but also for Croatia and Bulgaria.

...as domestic demand starts to pick up

In many countries, the improvement was underpinned by a pick-up in domestic demand, especially consumption, which had been a drag on economic activity in the past. Consumption improved noticeably in the second quarter and the component no longer dampened GDP growth in any country under review here but Slovenia (see chart 1).

Table 1

### Real GDP Growth

	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
	Period-on-period change in % (seasonally and working day adjusted)					
Slovakia	0.4	0.3	0.2	0.1	0.2	0.3
Slovenia	-0.5	-1.3	-0.4	-1.0	-0.5	-0.3
Bulgaria	0.3	0.1	0.1	0.1	0.1	-0.1
Czech Republic	-0.4	-0.4	-0.3	-0.3	-1.3	0.6
Hungary	-1.5	-0.5	0.0	-0.5	0.6	0.1
Poland	0.4	0.0	0.3	0.1	0.2	0.4
Romania	-1.0	1.4	-0.5	1.0	0.4	0.5
Croatia	-0.9	-0.5	-0.3	-0.4	0.0	-0.2
Turkey	0.4	1.8	0.2	0.0	1.6	2.1
Russia	-0.3	0.4	1.2	0.5	-0.2	-0.3
CESEE average <sup>1</sup>	-0.1	0.6	0.6	0.3	0.2	0.4
CESEE average (excl. Russia) <sup>1</sup>	0.0	0.7	0.1	0.0	0.6	1.0
Euro area	-0.1	-0.3	-0.1	-0.5	-0.2	0.3

Source: Eurostat, national statistical offices.

<sup>1</sup> Average weighted with GDP at PPP.

<sup>1</sup> Compiled by Josef Schreiner with input from Stephan Barisitz, Markus Eller, Antje Hildebrandt, Mathias Lahnsteiner, Isabella Moder, Thomas Reiningger, Tomáš Slačik, Jarmila Urvová, Zoltan Walko and Julia Wörz.

<sup>2</sup> Cutoff date: October 4, 2013. This report focuses primarily on data releases and developments from April 2013 up to the cutoff date.

<sup>3</sup> This report covers Slovakia, Slovenia, the Czech Republic, Bulgaria, Hungary, Poland and Romania as well as Croatia, Turkey and Russia.

<sup>4</sup> For statistical information on selected economic indicators for CESEE countries not covered in this section (Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro, Serbia and Ukraine), see the Statistical Annex in this issue.

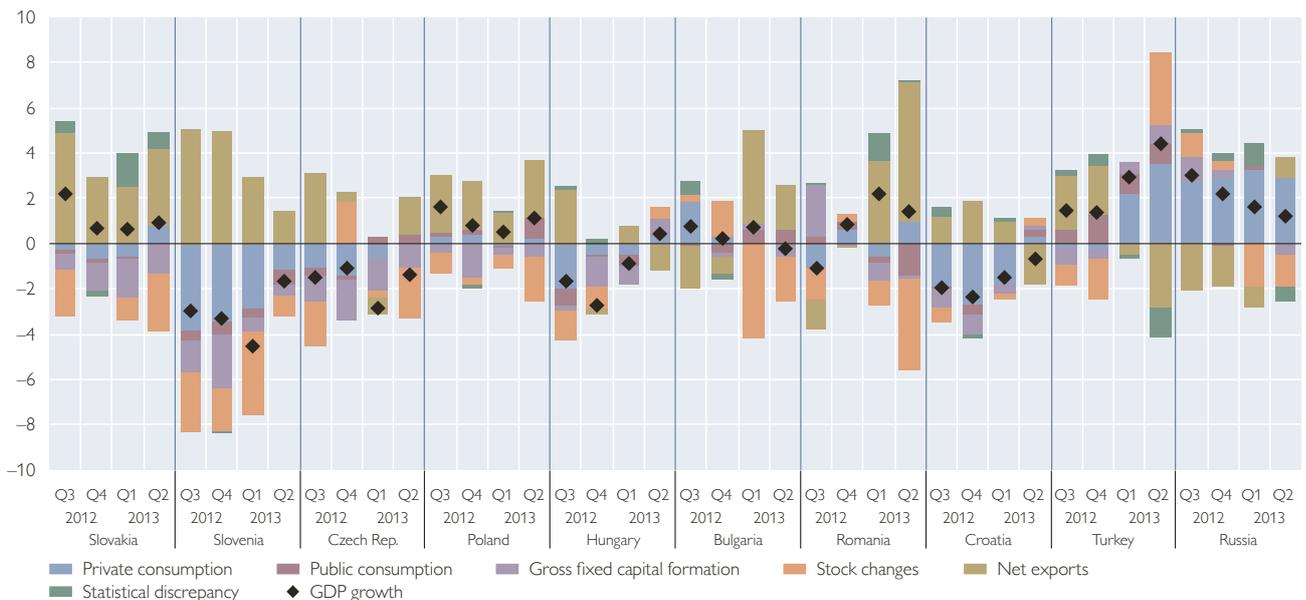
The improvement in consumption went hand in hand with a stabilization of CESEE labor markets: Seasonally adjusted unemployment rates surpassed their peaks in late 2012 or early 2013 and since then have trended downward in many countries. The general employment situation is less benign, though. Still, employment increased slightly in Bulgaria, the Czech Republic and Hungary and more noticeably in Turkey in the first half of 2013. Comparatively strong decreases were reported for Slovenia and Croatia. Furthermore, some signs of a turnaround in wage growth could also be observed in several countries. Real wage growth entered positive territory in Slovakia, the Czech Republic, Hungary and Poland in the first half of 2013 (also against the background of moderating inflation) while stronger wage losses were again observed only in Slovenia and Croatia, which was also related to more pronounced economic adjustment needs. Real wages in Turkey and Russia in turn grew strongly in the first half of 2013.

Sentiment generally brightened during the observation period. The Economic Sentiment Indicator of the European Commission (not available for Russia) for example reached 98 points on average in September, the highest reading since March 2012. Since the beginning of the year, it has been increasing by more than 6 points, and it is now slowly approaching its long-term average (of 100). The improvement was rather broad based among all sectors of the economy, but it was consumer sentiment that impacted most on the index. This general picture is, in principle, also confirmed by manufacturing PMI data (which, however, are not available for all countries). The index has been showing a clear upward trend in Poland, the Czech Republic and Turkey since spring and summer and currently stands clearly above 50, indicating an expansion. Developments have been less

Chart 1

### GDP Growth and Its Main Components

Contribution in percentage points, GDP growth in %



Source: Eurostat, national statistical offices.

positive only in Russia, where the index declined to below 50 in July and remained at this level in August and September.

Brightening sentiment, however, has been reflected so far only to a limited extent in gross fixed capital formation, given the very early stage of the recovery. In the second quarter, gross fixed capital formation contributed positively to growth only in Croatia, Hungary and Turkey. Capacity utilization has been growing only slowly for the past few quarters, with notable excess capacities remaining in place according to historical averages in most countries under review here. This went hand in hand with the rather anemic development of industrial production since late 2012. Output growth of the sector hovered between 0% and 1% on average in the past few months. The region, however, was heterogeneous in this respect. While Hungary, Poland, Romania and Turkey saw accelerating industrial output, other countries (Slovakia, Bulgaria, Croatia, Slovenia, the Czech Republic) reported a deceleration or decline.

Net exports still important source of growth in many, though not all countries

Net exports remained a pillar of growth in many countries (see chart 1). This is especially true for Slovakia and Poland, where foreign demand has been a driving force of growth for several quarters, but also applies to Bulgaria, Romania and Russia. In the latter, this component's growth contribution turned positive in the review period. In some other countries the opposite was observed: Net exports started to dampen GDP growth. This is especially true for Hungary, Croatia and Turkey – countries where domestic demand started to play a more prominent role. Net exports' contribution to growth, however, decelerated strongly also in Slovenia. Looking at exports and imports separately reveals that Romania and Bulgaria recorded particularly vigorous export growth in the first half of 2013, while exports picked up tangibly also in Poland in the second quarter. In turn, export momentum remained weakest in the Czech Republic and Croatia. Imports soared in Turkey, but were much more moderate in the other countries of the region; overall, however, they fared better than in the second half of 2012.

In order to take full advantage of the moderate firming of external demand, safeguarding price competitiveness remains key. Overall, developments in manufacturing unit labor costs (ULC; measured in euro) were relatively favorable in CESEE, albeit heterogeneous across countries. Hungary, Croatia and Turkey but also Russia lost some competitive edge against the euro area despite (moderately) weakening currencies, which was related to weak productivity readings and – especially in Turkey and Russia – also to vivid labor cost increases (above 10% in the second quarter). ULC developments (in manufacturing) in the other countries were more favorable. ULCs even declined somewhat in the Czech Republic, Romania and Slovakia in the second quarter. While Romania and Slovakia benefited from robust productivity growth, declining productivity in the Czech Republic was compensated for by stagnating labor costs and a slight depreciation of the koruna in annual comparison.

Fledgling upturn still rather fragile

While the moderately positive momentum in private consumption, brightening sentiment and an improving external environment bode well for an economic recovery, the upturn is not yet broad based and rather fragile. Investments are not yet on a clear upward path and the signals derived from activity indicators remain mixed. The continuing weakness of credit expansion (see chart 2) fits this picture. The growth of domestic credit to the private sector has remained anemic during the review period throughout most of CESEE, with annual growth rates often

only at around 2% or below and not showing a clear upward trend. Robust growth rates were reported only for Turkey and Russia and to a much lesser extent for Poland. Subdued credit developments are, in general, not untypical of incipient recoveries, during which credit demand is usually low (“creditless recoveries”). However, it is also possible that credit supply bottlenecks are restraining what would otherwise be a stronger recovery of the real economy. While it is notoriously difficult to disentangle credit demand and supply factors, again, the situation in CESEE seems to differ to some extent across countries.<sup>5</sup>

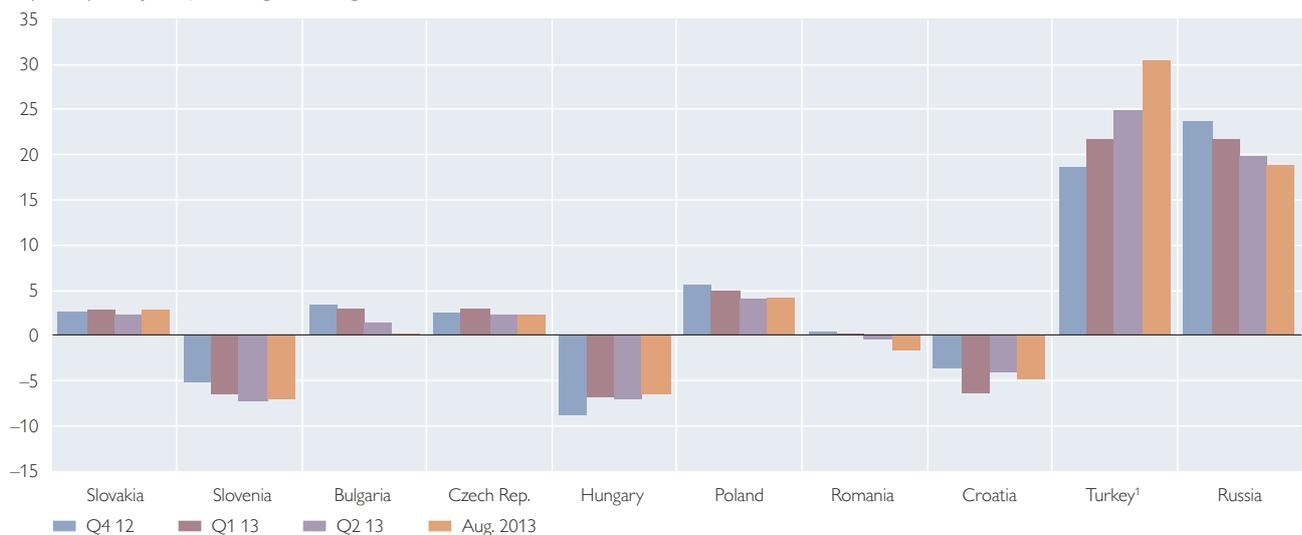
Several countries, particularly Hungary and Slovenia, but also Croatia and as of late (though to a much lesser extent) Romania, have faced a deleveraging of households and/or corporations, which was attributable not only to the weak economy, but also in part to domestic banking sector problems (including sectoral taxes, high NPL burdens, partly due to foreign currency loans going bad, and/or governance problems in a few countries). In several countries, this is also mirrored in lower consolidated exposures of BIS-reporting banks. More specifically, exposures vis-à-vis Hungary, Romania and Slovenia had been declining for several quarters already and continued to do so in the first quarter of 2013 (more recent data have not been available at the time of writing).

For the region as a whole, however, the consolidated exposures of BIS-reporting banks went up in early 2013. The highest increases could be observed in the Czech Republic and Poland, but exposures also grew in Turkey and Russia. Furthermore, surveys like the Emerging Markets Bank Lending Conditions Survey of the Institute of International Finance (IIF) show that lending conditions in emerging Europe eased in the first half of 2013. The improvement was driven by easing

Chart 2

### Growth of Credit to the Private Sector

%, year on year, adjusted for exchange rate changes



Source: National central banks.

<sup>1</sup> Nonadjusted.

<sup>5</sup> For detailed information on financial market and banking sector developments, see the OeNB's Financial Stability Report 26.

credit standards for most credit categories, growing loan demand (for consumer, housing and particularly business loans as manufacturing activity and consumption stayed relatively stable) as well as easing domestic funding conditions. International funding conditions, however, tightened toward the end of the second quarter of 2013 for the first time since the third quarter of 2012, as expectations about a tapering of asset purchases by the U.S. Federal Reserve increased financial market volatility and dampened capital flows to emerging markets (even leading to capital flow reversals in some cases). This development, however, had a notable impact only on the bigger markets of the region, namely Russia (which had been facing rather persistent net capital outflows in the recent past) and Turkey.

Growth is projected to pick up more strongly only in 2014

Against the background described above, recent forecasts expect economic activity to pick up in the course of the year but to remain slack on average in 2013. According to the IMF, annual average growth should come in at 1.7% in the CESEE region, somewhat below the previous year, given negative carryover effects and weakening economic activity in Russia. Growth, however, is set to accelerate in 2014, and the regional GDP should expand by 2.7%. All in all, the recovery will remain comparatively muted in the next two years.<sup>6</sup>

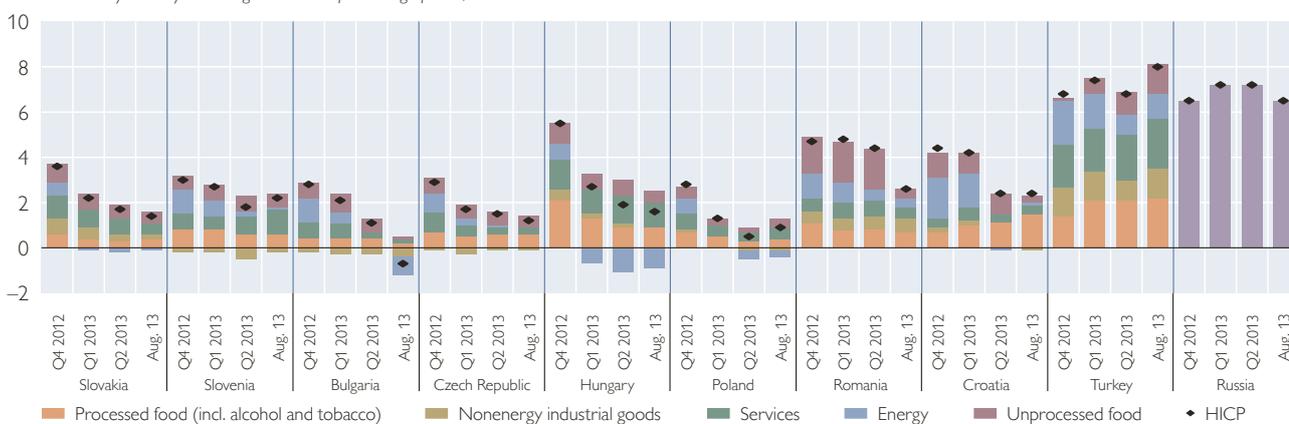
Fading price pressures in most countries

Price pressures moderated substantially throughout most of the region during the review period (see chart 3). Only Turkey reported a rise in the inflation rate. Disinflation was most pronounced in Bulgaria and Romania (more than 2 percentage points from the first quarter of 2013 until August) and also notable in Croatia and Hungary (above 1 percentage point in the same period). The development was driven to a substantial extent by lower contributions to inflation by energy (in part related to downward adjustments of administered prices, e.g. in Hungary and Bulgaria). In some countries, also unprocessed food prices started to exert a dampening impact on inflation given a base effect triggered by a good harvest starting to enter the market (e.g. in Romania, Croatia and Bulgaria).

Chart 3

### HICP Inflation and Its Main Drivers

Contribution to year-on-year change in HICP in percentage points; HICP in %



Source: Eurostat.

Note: Russia: CPI. No breakdown according to COICOP available.

<sup>6</sup> For a detailed forecast, see the OeNB-Bank of Finland Outlook for Selected CESEE Countries on p. 38 of this issue.

Against this background, inflation was strongly driven by volatile prices for fuel and food across the region. Therefore, core inflation rates decreased much less than headline inflation. Nevertheless, core inflation was fairly benign during the review period in most countries. Core inflation rates hovered at around 2% or below in August and displayed a moderate downward trend in many countries. Uncertainty with regard to the employment situation, fiscal austerity, and subdued domestic credit dampened demand. In combination with notable excess capacities, this tempered wage demands and deprived retailers and producers of pricing power.

The main exception to this pattern was Turkey. Core as well as headline inflation rates increased noticeably during the review period and are now the highest among the countries of the region. Booming domestic demand and a depreciating currency (given political turbulences as well as the recent global financial market disruptions) contributed to elevated price pressures. Headline inflation has remained elevated also in Russia, but no disaggregated price data are available.

Disinflation provided room for a continuation of monetary accommodation that many central banks of the region have pursued since roughly mid-2012 (see chart 4). The Hungarian central bank cut its policy rate by a total of 140 basis points to 3.6% from mid-April to early October, the Polish and the Romanian central banks cut their rates by 75 basis points and 100 basis points to 2.5% and 4.25% respectively. The Turkish central bank reduced its one-week repo rate by 50 basis points to 4.5%, while its overnight lending rate was raised by 125 basis points to 7.75% in an effort to fight currency depreciation, which set in after the tapering announcement by the U.S. Federal Reserve in early summer. In the two euro area countries Slovenia and Slovakia, the ECB's interest rate decision of early May was implemented. The Czech Republic's policy rate has been standing at "technically zero" since October 2012.

Combined current and capital account positions improved further (in some cases substantially) in most countries of the region during the observation period and were in surplus or broadly balanced throughout most of CESEE (see chart 5). The improvement was most pronounced in Bulgaria, Romania and Slovenia, where

Further external adjustment in the first half of 2013

Chart 4

### Policy Rate Developments in CESEE



Source: National central banks.

the combined current and capital account gained around 2.5% of GDP from the fourth quarter of 2012 to the second quarter of 2013 (four-quarter moving sums). It was mostly the trade balance that drove the adjustment, as external demand started to recover and imports continued to contract in some countries. In Hungary, higher surpluses in the capital account and in current transfers were a factor too, reflecting in part a refunding by the European Commission due to earlier overpayments by Hungary to the EU. Some deterioration, however, was also observed in Turkey and Russia. While this trend has already lasted for several quarters in Russia, it is of rather recent nature in Turkey. In both countries, the development was driven by a deterioration of the goods and services balances, given vivid consumption growth and weaker currencies. In Russia, a lower oil price was a further factor. It needs to be noted, though, that Russia still reported a notable current account surplus of more than 2% of GDP (four-quarter moving sum) in mid-2013.

Capital flows to CESEE decelerated somewhat

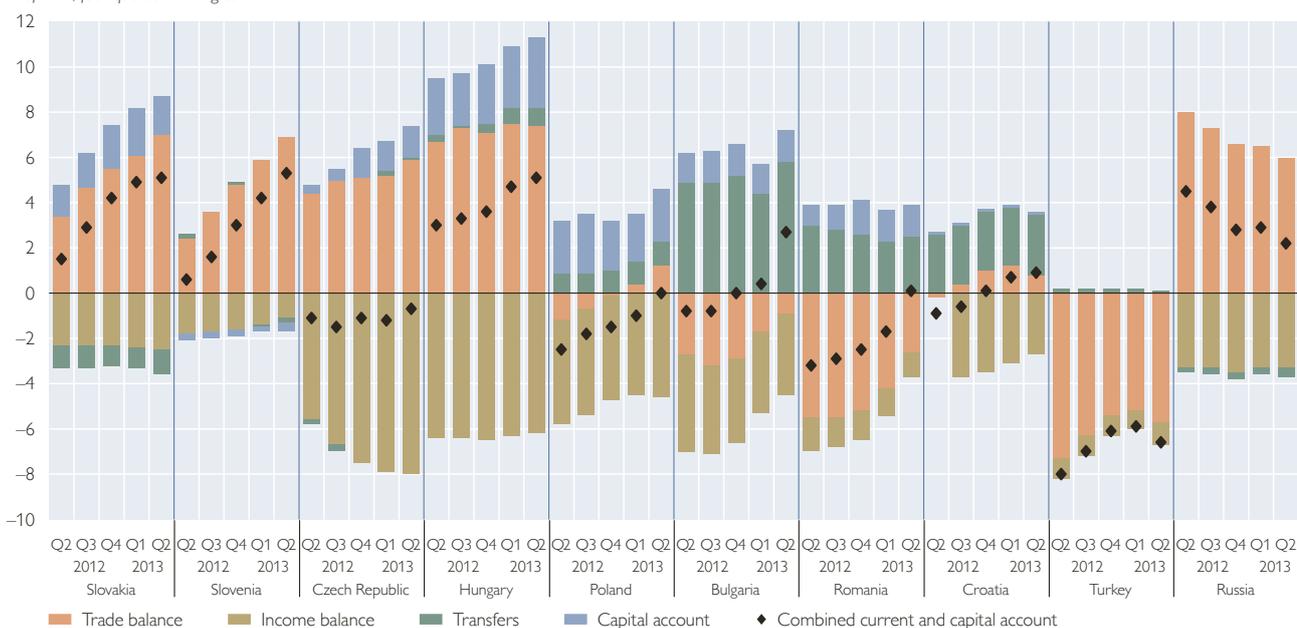
Net capital flows to the ten CESEE countries as a whole decelerated somewhat from 6.1% of GDP in the fourth quarter of 2012 (four-quarter moving sum) to 5.3% of GDP in the second quarter of 2013 (four-quarter moving sum) (see chart 6). However, the deterioration took place mainly in the second quarter and was driven mostly by other investments. In the latter component, it was especially Russia that weighed on the regional aggregate, with 85% of net outflows originating from that country. The other components of the financial account were roughly stable, some (e.g. FDI) even recorded higher inflows during the review period.

At country level, however, developments were heterogeneous. Strong deteriorations in the financial account balance were observed in Slovenia and Bulgaria (related to other investments, which, however, still recorded a small net inflow in

Chart 5

### Combined Current and Capital Account Balance

% of GDP, four-quarter moving sum



Source: Eurostat, IMF, national central banks.

Bulgaria) and to a lesser extent in Poland (related to portfolio flows). The financial account balance, by contrast, improved noticeably in Hungary, Turkey and Slovakia. In the latter two countries this was at least in part related to other investments, while in Hungary it was higher portfolio inflows that had a positive impact (reflecting mostly government bond issues and increased holdings of central bank bills by foreigners). In the other countries of the region, the financial account balances remained roughly stable.

In the Czech Republic and Bulgaria, net FDI inflows made up the largest positive component of the financial account. Net portfolio investment represented the financial account’s largest positive component in the other countries of the region. (Net) other investments – in particular loans – were negative in all countries under observation but Turkey and Bulgaria. As indicated above, net outflows from this category were related to bank deleveraging in some countries, in particular in Hungary, Slovenia, Romania and Croatia.

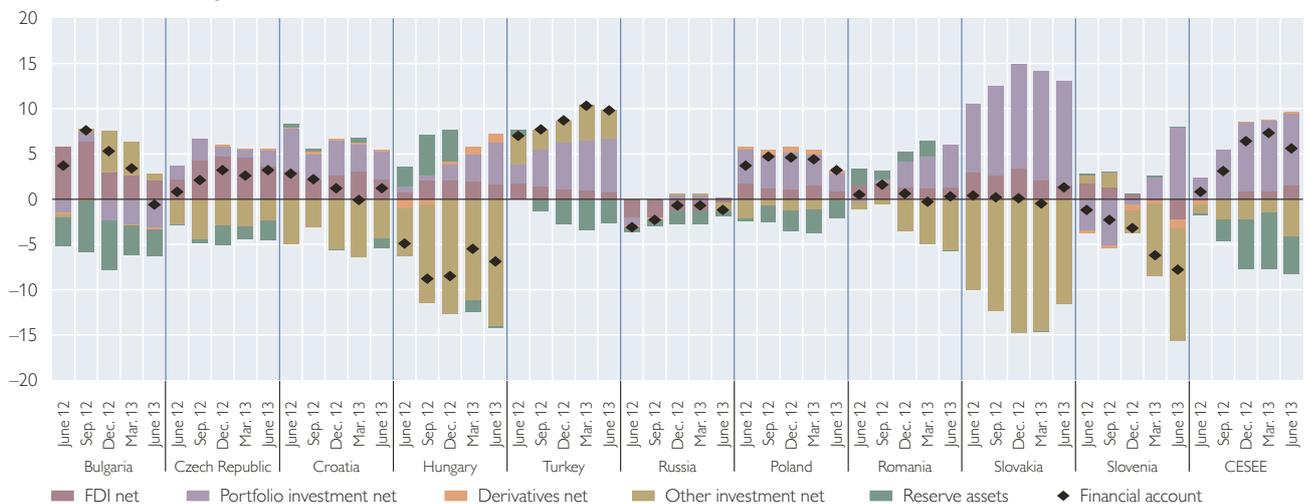
Excessive deficit procedures (EDP) were abrogated for two CESEE countries in the review period. In 2012, Hungary and Romania managed to bring down their public deficits in a sustainable way to below 3% of GDP, according to the EU. Given unfavorable forecasts, however, the EDP in Hungary was put to an end only after the Hungarian government had adopted further corrective measures in May. Poland was originally also required to remove its excessive deficit in 2012. After it had reported a budget deficit of 3.9% of GDP for 2012, however, the deadline was extended by the EU to 2014. According to the European Commission, an achievement of the target by that date would require further consolidation measures amounting to 0.4% of GDP both in 2013 and 2014. Also in Slovenia, the target date had to be extended by two years, from 2013 to 2015, due to unexpected adverse economic developments, including a double-dip recession, weakening labor markets and large macroeconomic imbalances. Furthermore, the European Commission projects public debt in Slovenia to climb above 60% of GDP in 2013 (driven by a high budget

Mixed progress on the fiscal front

Chart 6

### Financial Account Balance

% of GDP, four-quarter moving sum



Source: National central banks.

deficit, partly due to bank recapitalization measures and a further contraction of GDP). In the Czech Republic and in Slovakia, two other EU Member States covered here, excessive deficits are scheduled to be removed by 2013. It is very likely that in the near future, an EDP will be opened against Croatia, which joined the EU in July 2013,<sup>7</sup> given that its budget deficit in 2013 will tangibly exceed 3% of GDP.

Budgetary targets as published in the stability and convergence programs this spring show a mixed picture concerning changes in the fiscal stance in 2013. Substantial consolidation measures are planned in Slovakia and the Czech Republic in an effort to reach EDP targets. In both countries, deficits should decline to slightly below 3% of GDP in the current year. Given the fact that the Czech Republic's 2012 deficit (4.4% of GDP) was strongly affected by one-off factors (amounting to some 1.9% of GDP), meeting the target this year appears to be within reach. Achieving the deficit target could prove more challenging for Slovakia. The latest Slovakian finance ministry forecast, however, still maintains that this target is achievable. Some further consolidation is also envisaged in Romania, Turkey, Poland and Croatia. In the latter two countries, however, the public deficits will remain above 3% of GDP. Budget gaps are planned to widen somewhat in Bulgaria and Hungary (though remaining below 3% of GDP) and – in the light of substantial additional spending on bank recapitalization measures – substantially in Slovenia, despite various spending cuts and tax increases.

Box 1

#### **Ukraine: External Risks on the Rise as Foreign Exchange Reserves Shrink**

*Annual GDP growth remained negative in Ukraine in the first half of 2013 (–1.2%). Annual inflation rates also stayed in negative territory in the first half of 2013, while the current account deficit amounted to 7.3% of GDP (based on the four quarters up to mid-2013) compared to 8.5% in 2012.*

*After stabilizing in the first half of 2013, official foreign exchange reserves shrank again more recently. At end-August, reserves stood at USD 21.7 billion, down 44% from the post-Lehman peak reached in April 2011. The current level corresponds to less than three months of imports. The most recent reduction was caused by the redemption of foreign currency debt, including to a large part repayments of loans to the IMF extended under previous Stand-By Arrangements (SBAs). Outflows were no longer compensated for by eurobond issuances, as had happened earlier this year, due to a deterioration in market conditions. Prospective debt service needs together with the persistent current account deficit indicate further pressure on reserves in the near future. The central bank pointed out that it had not intervened in the recent past on the foreign exchange market to support the hryvnia, which has been broadly stable against the U.S. dollar.*

*No tangible progress has been made as regards a new SBA since negotiations had ended without a final agreement in early 2013. The EU association agreement (including a deep and comprehensive free trade agreement) could be signed at the Eastern Partnership summit in Vilnius in November, if the EU sees tangible progress in all of the benchmarks set out in the December 2012 Council conclusions.*

*In September, Moody's cut Ukraine's government bond rating to Caa1 from B3, citing heightened concerns over Ukraine's external liquidity position, increased downside risk related to future negotiations with the IMF and increased political and economic risks due to deteriorating relations with Russia in the context of a possible signing of the association agreement. Following this step, CDS premia and eurobond spreads increased markedly.*

<sup>7</sup> See 73<sup>rd</sup> East Jour Fixe: Croatia – 28<sup>th</sup> EU Member State. In: Focus on European Economic Integration Q3/13.

### Western Balkans:<sup>1</sup> Modest Recovery Clouded by Fiscal Challenges

After drifting into recession in 2012, the first half of 2013 brought a modest recovery in all Western Balkan countries on the back of either rising net exports (Montenegro and Serbia), investments (FYR Macedonia) or public consumption (Albania). For Bosnia and Herzegovina, no quarterly GDP data are yet available, but other activity indicators also point to positive GDP growth in the first half of 2013. For Kosovo, neither quarterly GDP data nor other activity indicators are available. It is also noteworthy that Montenegro revised 2012 GDP growth down from  $-0.5\%$  to  $-2.5\%$ , experiencing the deepest double-dip recession in the region.

In line with the slow pickup, the labor market situation seems to have stabilized in most countries, except for Bosnia and Herzegovina and Serbia, where participation and employment rates deteriorated further. Unemployment remains very high in the region, especially in Bosnia and Herzegovina, FYR Macedonia and Kosovo.

The external positions of the Western Balkan countries slightly improved during the review period. Increasing exports and either declining or stagnating imports led to reduced trade deficits in all countries. Consequently, the current account gaps narrowed everywhere except in FYR Macedonia and Kosovo, ranging between 3.4% of GDP in FYR Macedonia and 16.1% of GDP in Montenegro (in the second quarter on a four-quarter moving sum basis). On the financing side, net FDI flows increased in the first half of 2013 in all countries but FYR Macedonia and Montenegro and covered between 30% (Serbia) and 90% (Montenegro) of the current account deficits.

Despite a better economic performance, the growth of credit to the nonbank private sector<sup>2</sup> was weaker in the first half of 2013 than in 2012 in almost all countries, ranging between  $-0.1\%$  in Albania and 3.6% in FYR Macedonia at the end of the second quarter of 2013. Especially bank lending to the corporate sector weakened partly due to tightened credit standards. In Montenegro, credit growth turned positive in the first half of 2013 after several years of contraction. In all countries, credit quality deteriorated further in the first half of 2013 compared to 2012, with shares of nonperforming loans in total loans reaching levels between around 7.6%<sup>3</sup> in Kosovo and 24.4% in Albania.

Inflationary pressure was subdued across most of the region during the review period, ranging between 0.5% in Bosnia and Herzegovina and 2.2% in Albania in the second quarter of 2013. Only in Serbia did inflation remain elevated (10.4%) but it has been gradually declining since the end of 2012 and is expected to recede further toward the central bank's inflation target ( $4\% \pm 1.5$  percentage points) over the coming months. In anticipation of declining price pressures, the Serbian central bank cut the key interest rate in two steps by 50 basis points (May) and by 25 basis points (June) to currently 11%. The Bank of Albania reduced its policy rate in July 2013 to 3.5%, and the inflation target of  $3\% \pm 1$  percentage point is currently being met comfortably. FYR Macedonia also lowered its key interest rates in July from 3.50% to 3.25%. Overall, the interest rate cuts were motivated by lower price pressures in a context of continuously weak domestic demand.

Weak revenues, pre-election spending, e.g. in Albania, or unexpected expenditures (bankruptcy of the aluminium plant KAP, where the state guaranteed the debt), like in Montenegro, leave the Western Balkans in a challenging fiscal situation. Regarding public debt, Serbia surpassed the 60%-of-GDP level in the first quarter of 2013, and in Albania, public debt further increased to above 64% of GDP in the second quarter of 2013. In light of the latest developments, Serbia announced the introduction of another austerity package recently,

<sup>1</sup> The Western Balkans comprise the EU candidate countries FYR Macedonia, Montenegro, and Serbia, as well as the potential candidate countries Albania, Bosnia and Herzegovina, and Kosovo. The designation of Kosovo is without prejudice to positions on status and in line with UNSCR 1244 and the opinion of the International Court of Justice on the Kosovo Declaration of Independence.

<sup>2</sup> Data on credit growth are on a foreign exchange-adjusted basis.

<sup>3</sup> In April 2013 according to data of the IMF.

aiming to cut the budget deficit to 2% of GDP by 2017. Noticeably, Montenegro adopted a fiscal rule limiting budget shortfalls at 3% and public debt at 60% of GDP from 2015 onwards.

In the reporting period, preparations of Western Balkans countries for EU accession moved some steps forward: Accession negotiations with Montenegro are proceeding, accession negotiations with Serbia are expected to be opened in the near future, and Albania is heading toward EU candidate country status.

In Bosnia and Herzegovina, the second (May 2013) and third (July 2013) reviews of the two-year SBA of SDR 338.2 million have taken place. So far, a total of SDR 169 million have been disbursed. The program will be completed in September 2014. Regarding Kosovo, a total of SDR 78 million of an approved SBA of SDR 91 million approved in April 2012 has been paid out so far. A tranche of SDR 4.2 million was made available after the third review in April 2013, but the country has not yet drawn upon it. The fourth review successfully took place in July 2013. After completing its financial arrangement with FYR Macedonia, the IMF concluded the first post-program monitoring with the country in June 2013. Currently, Albania, Montenegro and Serbia have no financial arrangements with the IMF.

Box 3

### **A Tribute to a Determined Adjustment Effort: Just Five Years after a Wrenching Fiscal Crisis, Latvia Becomes the 18<sup>th</sup> Member of the Euro Area in 2014<sup>1</sup>**

Following the positive assessment of Latvia's economic convergence in the European Commission's and the ECB's convergence reports of June 5, 2013, and the June 2013 EU Council conclusion to welcome Latvia's entry into the euro area, the Ecofin Council adopted a decision allowing the country to join the euro area on January 1, 2014. The Ecofin Council also irrevocably fixed the conversion rate of the Latvian lats at its central parity within ERM II agreed on in early 2005, which is LVL 0.702804 to EUR 1.

In the meantime, the currency changeover has started: While dual price display both in Latvian lats and in euro is recommended for a period between July 2013 and December 2014, it is mandatory for a quarter before and half a year after euro introduction so that people can get used to the new currency. The dual circulation period of lats and euro (the period during which both currencies are legal tender) will be short, lasting only until January 14, 2014. While Latvian commercial banks will exchange lats coins and banknotes for six months following the introduction of the euro, the Latvian central bank will do so free of charge for an unlimited period of time.

Latvia has taken substantial efforts to meet the criteria for euro area membership in recent years. Wages and prices have been highly flexible, and adjustments took place under a fixed exchange rate regime for almost two decades; this was a particular challenge especially during the crisis, which hit the country particularly hard and initially sparked a debate about the sustainability of the peg. In the wake of the deep downturn in the years 2008–2010, Latvia underwent a radical adjustment and austerity program supported by EU-IMF-led financial assistance. This has helped Latvia to resume robust growth and to fulfill all Maastricht criteria in a sustainable manner. With respect to future inflation developments, however, risks might be tilted to the upside, given that price level convergence is not yet complete.<sup>2</sup> In fact, Latvia turned out to be the fastest-growing economy in the EU in 2012 and is forecast to outperform all other EU countries also in 2013.

Latvia's efforts to join the euro area and the prospect of euro area membership helped build market confidence. A small and very open economy well integrated into the EU, Latvia is expected to benefit strongly from the common currency. Euro area membership will reduce transaction and information costs, leading to increased trade and financial integration.

<sup>1</sup> See also the 74<sup>th</sup> East Jour Fixe summary on p. 90 in this issue.

<sup>2</sup> For details see the ECB's Convergence Report, June 5, 2013.

*Price transparency will support competition. Additionally, euro area membership offers a credible framework for price stability, implying lower risk premia and lower long-term interest rates. Moreover, the euro provides shelter against financial market turbulences in particular in times of crisis. At the same time, smooth participation in the euro area hinges on retaining a strong ability and willingness to adjust to shocks, just like for any other country taking part in the European currency area.*

## 2 Slovakia: Growth Remains Moderate but Positive, Record Current Account Surplus, Incomplete Fiscal Consolidation

Net exports drive GDP even though exports hit bottom ...

The Slovak economy started to pick up slightly in the first half of 2013 in quarter-on-quarter terms. The biggest contribution came from net exports, despite the fact that both exports and imports seem to have hit bottom in early 2013 (both decreasing quarter on quarter). Household consumption turned positive after two years' decline, owing to continuously improving consumer confidence, higher gross disposable income and lower savings. Government consumption increased only slightly, due to continuing consolidation. Gross fixed capital formation decreased substantially year on year but may have reached its turning point, posting quarter-on-quarter growth for the first time in the second quarter of 2013 following five consecutive negative quarters. Investment activity was low both in the public and in the private sectors, due to fiscal consolidation, low capacity utilization and worsened financing conditions attributable to both lower profitability of corporations and tighter credit conditions (as reported in the country's bank lending survey).

...leading to yet another trade balance record

The current account surplus kept growing, reaching a cumulative surplus of 4.8% of GDP in the first half of 2013, mainly owing to the goods and services balance, which reached a record surplus of 9.5% of GDP in the second quarter. The negative income balance resulted from FDI earnings. Despite a relatively strong inflow of FDI, both from reinvested earnings and new equity capital, overall net FDI inflows turned negative due to an outflow of other FDI capital.

Labor market remains the sore spot of the economy

The situation on the labor market still shows no considerable signs of improvement. Employment broadly stagnated in the first half of 2013. The unemployment rate decreased by 0.5 percentage points in the second quarter, however, it remains among the highest in the EU. Moreover, it was the number of part-time workers that increased, while the number of full-time employees has been declining for the past four quarters. On a positive note, real wages increased again, after two years' decline, mainly due to the low inflation rate. Average annual HICP inflation has continued moderating into 2013, standing at 1.4% in August. Its decline has been mainly driven by absent demand pressures, lower global fuel prices, as well as by a decline in regulated electricity prices.

Fiscal consolidation is not yet complete, the debt brake kicks in for the first time

Slovakia is expected to bring its general government deficit down to 2.9% by 2013 under the Excessive Deficit Procedure. According to the latest finance ministry forecast, this seems achievable. Nevertheless, as the economy remains slack and with some of the consolidation measures taken so far being one-offs (e.g. weakening the private pension pillar in favor of the pay-as-you-go pillar), the sustainability of fiscal adjustment remains to some extent in question. The deficit for 2014 is planned to come in again at 2.9% of GDP. A public administration reform, entailing expenditure cuts, was launched in 2013, but some of its details are still unclear; for instance, cutting public sector employment is not part of the plan. Another area offering room for improving the fiscal position is fighting tax evasion (according to the European Commission, Slovakia has one of the largest VAT gaps in the EU). As part of this effort, in September 2013, the finance ministry has started a VAT receipts lottery. A breach of the lowest limit of the constitutional debt brake (50% of GDP) was recorded in 2012, and consequently, the finance minister had to explain this situation to parliament and present corrective measures, which, however, the Slovak fiscal council found to be insufficiently specified.

Table 2

## Main Economic Indicators: Slovakia

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	4.4	3.2	2.0	2.9	2.6	2.1	0.7	0.6	0.9
Private consumption	-0.7	-0.5	-0.6	-0.1	-0.3	-0.6	-1.2	-1.0	1.5
Public consumption	1.0	-4.3	-0.6	0.5	-2.1	-0.4	-0.3	-0.6	-0.1
Gross fixed capital formation	6.5	14.2	-3.7	-3.3	-2.5	-3.7	-5.0	-8.4	-6.4
Exports of goods and services	16.0	12.7	8.6	5.0	10.8	11.6	7.1	4.2	4.7
Imports of goods and services	14.9	10.1	2.8	-0.2	1.6	5.7	4.2	1.6	1.3
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	3.6	1.2	-2.9	-0.8	-5.5	-3.3	-1.9	-3.3	-3.1
Net exports of goods and services	0.7	2.0	5.2	4.9	8.3	4.9	2.8	2.5	3.4
Exports of goods and services	11.3	10.2	7.7	4.7	9.8	9.7	6.6	4.0	4.6
Imports of goods and services	-10.6	-8.1	-2.5	0.2	-1.4	-4.8	-3.7	-1.5	-1.2
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	-1.4	-0.4	0.1	-1.7	0.5	-0.2	1.9	2.8	-0.4
Unit labor costs in manufacturing (nominal, per hour)	-8.8	2.6	-7.1	-4.7	-7.5	-11.4	-4.4	2.8	
Labor productivity in manufacturing (real, per hour)	9.0	2.7	13.1	11.0	14.6	15.5	11.3	6.1	6.6
Labor costs in manufacturing (nominal, per hour)	0.0	5.4	5.1	5.8	6.0	2.3	6.4	9.0	5.6
Producer price index (PPI) in industry	0.4	4.5	1.9	2.3	1.5	1.8	2.0	0.5	-0.7
Consumer price index (here: HICP)	0.7	4.1	3.7	4.0	3.6	3.8	3.6	2.2	1.7
EUR per 1 SKK, + = SKK appreciation	..	..	..	..	..	..	..	..	..
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	14.4	13.7	14.0	14.1	13.7	13.7	14.5	14.6	14.1
Employment rate (%, 15–64 years)	58.8	59.3	59.7	59.6	59.8	60.1	59.4	59.8	59.8
Key interest rate per annum (%)	..	..	..	..	..	..	..	..	..
SKK per 1 EUR	..	..	..	..	..	..	..	..	..
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	4.4	0.7	6.6	3.0	1.9	1.9	6.6	5.5	6.1
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	1.3	-3.8	-3.1	-7.2	-6.7	2.7	-3.1	0.4	-5.9
Domestic credit of the banking system	9.2	9.4	-7.1	9.8	2.4	-4.5	-7.1	-10.9	-7.0
<i>of which: claims on the private sector</i>	3.2	6.9	-0.1	4.3	1.4	0.5	-0.1	1.8	2.8
<i>claims on households</i>	4.2	3.9	3.9	3.9	3.5	3.7	3.9	3.9	4.1
<i>claims on enterprises</i>	-1.0	2.9	-4.0	0.4	-2.1	-3.2	-4.0	-2.1	-1.3
<i>claims on the public sector (net)</i>	6.0	2.5	-6.9	5.4	1.0	-5.1	-6.9	-12.7	-9.8
Other assets (net) of the banking system	-6.1	-4.9	16.7	0.4	6.2	3.8	16.7	16.0	19.0
<i>% of GDP, ESA 95</i>									
General government revenues	32.3	33.3	33.1	..	..	..	..	..	..
General government expenditures	40.0	38.4	37.4	..	..	..	..	..	..
General government balance	-7.7	-5.1	-4.3	..	..	..	..	..	..
Primary balance	-6.3	-3.5	-2.5	..	..	..	..	..	..
Gross public debt	41.0	43.3	52.1	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	21.5	18.0	10.2	9.0	10.5	13.6	7.7	2.9	5.1
Merchandise imports	22.5	17.9	5.6	6.2	3.6	8.4	4.3	-0.8	0.5
<i>% of GDP (based on EUR), period total</i>									
Trade balance	1.2	1.4	5.1	4.6	5.4	4.8	5.5	7.7	9.3
Services balance	-1.1	-0.5	0.4	0.4	0.4	0.5	0.3	-0.2	0.2
Income balance (factor services balance)	-3.1	-2.4	-2.3	-2.3	-2.2	-2.4	-2.3	-2.6	-2.6
Current transfers	-0.6	-0.5	-0.9	-0.4	-0.9	-1.2	-1.1	-0.6	-1.6
Current account balance	-3.7	-2.1	2.3	2.3	2.7	1.7	2.5	4.3	5.3
Capital account balance	1.5	1.3	1.9	0.2	2.9	1.5	3.0	1.0	1.2
Foreign direct investment (net)	0.9	1.7	3.4	4.7	0.7	-0.2	8.4	-0.9	-1.4
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	74.8	76.6	75.2	77.7	76.4	73.0	75.2	80.3	83.9
Gross official reserves (excluding gold) <sup>1</sup>	0.8	1.0	0.9	0.9	0.9	0.9	0.9	1.0	1.2
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold) <sup>1</sup>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
<i>EUR million, period total</i>									
GDP at current prices	65,870	69,108	71,463	16,550	17,822	18,879	18,212	16,811	18,255

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

<sup>1</sup> Given Slovakia's adoption of the euro, the concept of the calculation of international reserves has changed as of the beginning of 2009. In particular, reserves no longer include foreign assets in euro and claims on euro area residents.

### 3 Slovenia: Stabilization of Banking Sector Pending, Economy Stuck in Recession

Delay in banking sector consolidation

While the government originally intended to transfer the first tranche of bad loans from banks to a bank asset management company by mid-2013, the transaction was repeatedly delayed, partly due to the need for compliance with EU regulations on state aid. Following extended discussions with the ECB and the European Commission, in August 2013 Banka Slovenije commissioned a system-wide asset quality review and a bottom-up stress testing exercise for the ten largest Slovene banks. The results of these tests are expected for November, and the bad loan transfer is set to take place by end-2013. The transfer will be accompanied by capital injections for banks to help them meet minimum capital requirements. The central bank governor has already suggested that these exercises could result in an upward revision of the total value of bad assets (currently EUR 3.3 billion) and of the total costs for the 2013 budget (currently around EUR 1.5 billion). While the government had repeatedly denied speculation about Slovenia applying for EU aid, in late September the prime minister admitted the possibility that the results of the stress tests could be worse than expected and indicated that new steps would have to be decided on this basis. The urgency of the matter became clear at the beginning of September when the central bank initiated the liquidation of two smaller banks, while the government assumed guarantees worth around EUR 1 billion to cover the liabilities of the two banks.

Economy still in the doldrums

Slovenia remained stuck in recession into the first half of 2013, although the pace of decline moderated somewhat in the second quarter. Net exports remained the sole element supporting economic activity. However, the expansion of exports was modest while imports ceased to contract and the size of these components' contribution to growth decreased sharply. Household consumption continued to decline, although less than previously, mirroring declining real wages and employment, weak confidence and continued deleveraging. So did government consumption as a result of continued efforts to stem the widening of the budget deficit. Investment growth also remained negative, though much less than in 2012. This reflected cuts in public investment as part of the mid-year budget correction, negative credit growth, low levels of capacity utilization, and muted sentiment.

Banking sector recapitalization to push up 2013 budget deficit

At the beginning of July, parliament passed a revision to the 2013 budget in line with the 2013 Stability Programme update. The revision, which led to a minor increase (and reshuffle) in expenditures and a substantial decrease in revenues, was necessary to take into account a weaker macroeconomic environment, higher debt servicing costs, bank recapitalization needs and higher expenditures for public sector wages and pensions. In order to limit the increase in the deficit, investments were cut, the standard VAT rate raised (from 20% to 22%), a new lottery tax was introduced and judicial taxes and motorway registration fees were adjusted upward. The draft revision of the 2014 budget (originally passed in 2012) submitted to parliament at end-September foresees a deficit target of 3.2% of GDP (after 4% in 2013), excluding the costs of ongoing bank consolidation. A new property tax, measures against the grey economy, the suspension of previously planned cuts in the corporate income tax and the VAT hike of mid-2013 support the revenue side. On the expenditure side, expenditure for goods and services will be reduced, transfers to households roughly stabilized, investment expenditure (better utilization of EU funds) and interest expenses (due to higher government debt) increased.

Table 3

## Main Economic Indicators: Slovenia

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	1.3	0.7	-2.5	-0.2	-3.5	-3.0	-3.3	-4.6	-1.7
Private consumption	1.5	0.8	-4.8	-1.2	-5.1	-6.8	-5.8	-5.2	-2.1
Public consumption	1.3	-1.6	-1.3	-0.2	-0.6	-1.8	-2.4	-1.8	-3.1
Gross fixed capital formation	-15.2	-5.5	-8.2	-6.2	-6.5	-7.3	-12.3	-3.3	-3.0
Exports of goods and services	10.2	7.0	0.6	1.7	-0.3	0.1	0.8	1.7	2.0
Imports of goods and services	7.4	5.6	-4.7	-1.4	-4.1	-7.1	-6.0	-2.3	0.0
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-0.5	-0.3	-6.3	-2.5	-6.2	-8.2	-8.3	-7.6	-3.2
Net exports of goods and services	1.8	1.0	3.8	2.3	2.7	5.1	5.0	2.9	1.5
Exports of goods and services	6.0	4.7	0.4	1.3	-0.2	0.1	0.6	1.3	1.5
Imports of goods and services	-4.3	-3.6	3.4	1.0	2.9	5.0	4.4	1.7	0.0
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	-0.3	-0.9	1.0	1.4	1.1	0.3	1.0	-0.4	0.6
Unit labor costs in manufacturing (nominal, per hour)	-1.5	0.3	4.8	-0.7	11.2	4.0	5.1	6.8	-3.7
Labor productivity in manufacturing (real, per hour)	4.9	1.5	-1.8	-1.6	-1.3	-1.2	-3.2	-2.2	-2.1
Labor costs in manufacturing (nominal, per hour)	3.2	1.9	2.9	-2.3	9.7	2.8	1.7	4.4	-5.7
Producer price index (PPI) in industry	2.0	4.6	0.9	1.3	0.8	0.6	0.6	0.7	0.2
Consumer price index (here: HICP)	2.1	2.1	2.8	2.5	2.5	3.2	3.0	2.7	1.8
EUR per 1 SIT, + = SIT appreciation	..	..	..	..	..	..	..	..	..
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	7.4	8.4	9.0	8.7	8.3	9.3	9.7	11.2	10.5
Employment rate (%, 15–64 years)	66.2	64.4	64.1	64.0	63.8	64.3	64.2	62.4	63.0
Key interest rate per annum (%)	..	..	..	..	..	..	..	..	..
SIT per 1 EUR	..	..	..	..	..	..	..	..	..
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	1.6	3.0	-0.7	4.3	3.3	0.4	-0.7	0.6	-0.8
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	-4.0	6.5	3.9	-6.8	-4.9	-5.4	3.9	10.5	19.0
Domestic credit of the banking system	6.7	-3.1	-2.7	10.8	6.8	7.5	-2.7	-8.1	-15.9
<i>of which: claims on the private sector</i>	2.8	-3.8	-7.2	-3.4	-5.0	-5.2	-7.2	-9.9	-10.3
<i>claims on households</i>	3.9	0.8	-0.8	0.6	-0.3	-0.6	-0.8	-1.1	-1.1
<i>claims on enterprises</i>	-1.1	-4.6	-6.4	-4.0	-4.7	-4.6	-6.4	-8.9	-9.1
<i>claims on the public sector (net)</i>	3.9	0.7	4.5	14.2	11.7	12.7	4.5	1.8	-5.6
Other assets (net) of the banking system	-1.2	-0.4	-2.0	0.4	1.4	-1.7	-2.0	-1.7	-3.9
<i>% of GDP, ESA 95</i>									
General government revenues	44.7	44.4	45.2	..	..	..	..	..	..
General government expenditures	50.6	50.8	49.2	..	..	..	..	..	..
General government balance	-5.9	-6.4	-4.0	..	..	..	..	..	..
Primary balance	-4.3	-4.4	-1.9	..	..	..	..	..	..
Gross public debt	38.6	46.9	54.1	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	14.4	13.1	0.8	2.7	0.4	0.0	0.4	0.5	1.5
Merchandise imports	16.3	13.1	-3.0	1.3	-2.2	-4.7	-6.2	-4.7	-3.6
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-2.3	-2.6	-0.3	-1.8	-0.5	0.7	0.3	1.7	2.7
Services balance	3.6	4.1	5.1	4.9	4.9	5.8	4.7	6.1	5.8
Income balance (factor services balance)	-1.7	-1.4	-1.6	-1.7	-1.9	-2.2	-0.5	-0.9	-0.9
Current transfers	0.2	0.4	0.1	-0.3	0.3	-0.8	1.0	-1.0	0.0
Current account balance	-0.1	0.4	3.3	1.1	2.9	3.5	5.5	5.9	7.6
Capital account balance	0.2	-0.2	-0.3	-0.3	0.1	-0.3	-0.6	-0.1	-0.4
Foreign direct investment (net)	1.2	1.8	0.5	1.7	1.1	0.9	-1.9	-0.7	-7.1
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	114.8	110.9	115.7	116.9	115.9	114.2	115.7	115.9	115.8
Gross official reserves (excluding gold) <sup>1</sup>	2.0	1.8	1.7	1.6	1.7	1.7	1.7	1.5	1.6
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold) <sup>1</sup>	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
<i>EUR million, period total</i>									
GDP at current prices	35,485	36,150	35,319	8,519	9,034	9,049	8,717	8,127	9,029

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

<sup>1</sup> Given Slovenia's adoption of the euro, the concept of the calculation of international reserves has changed as of the beginning of 2007. In particular, reserves no longer include foreign assets in euro and claims on euro area residents.

#### 4 Bulgaria: Suppressed Domestic Demand Prolongs Economic Stagnation

Modest economic contraction in the second quarter of 2013 amid tight credit market and weak labor market conditions

For the first time since the 2009–2010 recession, annual GDP growth turned (modestly) negative in the second quarter of 2013. This was mainly driven by sluggish domestic demand (destocking, decline in gross fixed capital formation, stagnating private consumption), while net exports contributed, in contrast to 2012, positively to GDP growth. Exports grew quite strongly in the first half of 2013 (significantly more strongly than imports), which can – at least partly – be traced to favorable base effects from weather-related disruptions in early 2012. A production-side view reveals that the slowdown in output growth can basically be explained by a negative contribution of construction and industry; the only significant positive growth contribution came from agriculture.

In line with sluggish economic activity, lending is still suppressed. Credit to nonbank corporates expanded in the first half of 2013 (with an average annual real growth rate of 2%) only half as much as a year before, and lending to households continued to shrink. The prolonged economic stagnation has also left its footprint on the labor market. The unemployment rate climbed to more than 13% in the first half of 2013; long-term unemployment accounts for more than half of this figure.

Current account turns into surplus in the first half of 2013

The current account balance turned into surplus in the first half of 2013 (a modest surplus of 1.7% of GDP, compared to a deficit of 5.45% of GDP a year before). This improvement can basically be traced to a strong upward shift in net current transfers in the second quarter of 2013 (mostly reflecting an extra absorption of EU funds), but also to vivid export growth in the first half of 2013 and less dynamic import growth as a consequence of weak domestic demand.

Rollback of electricity tariffs leads to a significant deceleration of inflation

Increases in electricity prices in the summer of 2012 contributed to mass protests, which also led to a change in government in February 2013. The new administration undertook a rollback of electricity tariffs, which contributed – together with relenting food price pressures and receding costs of healthcare, transport and communications – to a continuous disinflation process that eventually led to moderate deflation in August 2013 (for the first time since ten years, annual HICP inflation turned negative).

Unit labor costs increased quite strongly in the first half of 2013 in the whole economy, which can be traced back to a pronounced expansion of employees' compensation, coupled with meager labor productivity gains. The latter also holds true for manufacturing. However, the rise in labor costs in manufacturing lost momentum in the first half of 2013 so that the country's price competitiveness against the euro area stayed about unchanged in this sector.

Loosened fiscal stance in 2013, some fiscal tightening planned for 2014

Against the background of sluggish economic activity and underperforming tax receipts, the government revised upward this year's target for the general government budget deficit (from 1.3%) to 2% of GDP, expecting that output will not grow by more than 0.6% this year (compared to 1.9%, assumed in the original budget plan). As a consequence, the maximum amount of new government debt which can be issued in 2013 was increased. According to the budget proposal for 2014, currently being negotiated, the fiscal deficit is to be reduced to below 2% of GDP, assuming a 2014 GDP growth rate of 1.8%.

Table 4

**Main Economic Indicators: Bulgaria**

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	0.4	1.8	0.8	1.0	1.1	0.8	0.3	0.8	-0.2
Private consumption	0.1	1.5	2.6	2.7	4.3	3.2	0.4	0.0	0.0
Public consumption	1.9	1.6	-1.3	-1.3	-1.5	-0.4	-2.0	3.3	3.6
Gross fixed capital formation	-18.3	-6.5	0.8	3.6	1.2	0.7	-1.0	1.8	-2.6
Exports of goods and services	14.7	12.3	-0.4	-3.0	3.3	-0.5	-1.7	11.3	5.3
Imports of goods and services	2.4	8.8	3.7	3.4	9.8	2.6	-0.5	4.6	2.2
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-5.2	0.0	3.5	5.8	5.5	2.2	1.3	-3.2	-2.1
Net exports of goods and services	5.6	1.8	-2.7	-4.6	-4.4	-1.9	-0.7	4.1	2.0
Exports of goods and services	7.0	7.1	-0.2	-2.1	2.2	-0.3	-1.0	7.7	3.6
Imports of goods and services	-1.4	-5.2	-2.5	-2.5	-6.5	-1.6	0.3	-3.6	-1.6
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	5.8	2.2	-0.5	-0.7	-1.7	0.1	0.4	12.9	13.1
Unit labor costs in manufacturing (nominal, per hour)	-1.3	-1.2	3.4	5.7	0.6	3.3	3.8	-0.2	4.1
Labor productivity in manufacturing (real, per hour)	9.3	4.4	2.3	1.3	4.5	1.5	1.9	5.2	-0.1
Labor costs in manufacturing (nominal, per hour)	7.8	3.5	5.7	7.1	5.1	4.8	5.8	5.0	4.0
Producer price index (PPI) in industry	8.4	9.3	4.4	3.8	3.0	5.0	5.8	1.7	-0.9
Consumer price index (here: HICP)	3.0	3.4	2.4	1.9	1.8	3.0	2.8	2.1	1.1
EUR per 1 BGN, + = BGN appreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	10.3	11.4	12.4	13.0	12.4	11.6	12.5	13.8	13.0
Employment rate (%, 15–64 years)	59.7	58.4	58.8	56.9	58.3	60.6	59.4	57.7	59.5
Key interest rate per annum (%) <sup>1</sup>	..	..	..	..	..	..	..	..	..
BGN per 1 EUR	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	6.4	12.2	8.4	10.7	10.1	8.7	8.4	8.9	7.7
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	5.0	7.9	7.5	9.2	8.2	10.1	7.5	5.7	6.2
Domestic credit of the banking system	5.1	7.3	2.4	5.4	5.4	1.7	2.4	3.9	1.2
<i>of which: claims on the private sector</i>	1.5	3.9	2.6	3.6	4.2	3.7	2.6	2.0	0.6
<i>claims on households</i>	-0.3	-0.2	-0.3	-0.4	-0.4	-0.5	-0.3	-0.4	-0.3
<i>claims on enterprises</i>	1.8	4.1	3.0	3.9	4.6	4.2	3.0	2.4	0.8
<i>claims on the public sector (net)</i>	3.7	3.4	-0.2	1.8	1.2	-2.0	-0.2	1.9	0.7
Other assets (net) of the banking system	-3.7	-3.0	-1.4	-3.9	-3.5	-3.1	-1.4	-0.8	0.3
<i>% of GDP, ESA 95</i>									
General government revenues	34.3	33.6	34.9	..	..	..	..	..	..
General government expenditures	37.4	35.6	35.7	..	..	..	..	..	..
General government balance	-3.1	-2.0	-0.8	..	..	..	..	..	..
Primary balance	-2.4	-1.2	0.1	..	..	..	..	..	..
Gross public debt	16.2	16.3	18.5	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	33.0	30.2	2.5	-2.9	6.2	3.0	3.5	13.0	3.3
Merchandise imports	15.4	22.3	8.1	9.2	16.0	5.7	2.1	2.9	-3.8
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-7.7	-5.6	-8.7	-11.0	-12.3	-4.8	-7.8	-5.2	-8.0
Services balance	5.2	6.0	5.9	0.9	5.6	13.5	2.1	1.0	4.4
Income balance (factor services balance)	-3.1	-4.7	-3.7	-4.1	-3.1	-4.1	-3.4	-3.9	-3.0
Current transfers	4.2	4.4	5.2	7.5	6.0	3.5	4.5	3.4	11.8
Current account balance	-1.5	0.1	-1.3	-6.8	-3.8	8.1	-4.6	-4.6	5.2
Capital account balance	0.8	1.3	1.4	0.1	0.4	1.5	3.0	-0.1	0.8
Foreign direct investment (net)	2.7	3.1	3.0	8.1	3.6	4.7	-2.9	5.5	1.8
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	102.7	94.3	94.9	95.5	96.5	96.4	94.9	93.8	92.9
Gross official reserves (excluding gold)	32.2	30.6	35.1	30.2	31.8	35.3	35.1	32.2	33.4
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	6.5	5.6	6.0	5.3	5.4	6.0	6.0	5.6	5.8
<i>EUR million, period total</i>									
GDP at current prices	36,052	38,505	39,668	8,053	9,822	11,012	10,781	8,476	9,918

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

<sup>1</sup> Not available in a currency board regime.

## 5 Croatia: Waiting for the Upswing

Domestic demand may have reached a turning point, picking up somewhat in the second quarter

Following its prolonged contraction in 2012, Croatia's GDP continued to shrink in the first quarter of 2013 (by 1.5% year on year). The only positive contributions came from net exports (due to a stronger contraction of imports than exports) and – to a much lesser extent – public consumption. In the second quarter, however, economic activity gathered some momentum as domestic demand started to improve. The economy still remained in recession, though. Private consumption picked up on the back of increasing consumer confidence due to EU accession on July 1, 2013, and a good tourism season, which also showed in a growing number of tourist arrivals in July and August. Investment improved as well and contributed positively to growth for the first time since 2008. In contrast to strong domestic demand, net exports contributed negatively to growth, mainly due to base effects on the import side. Unemployment remained elevated but decreased slightly in the second quarter to 17%.

Current account in surplus but external position remains vulnerable due to high external debt

In the first half of 2013 the current account improved further. The four-quarter moving sum of the current account surplus reached 0.9% of GDP at the end of June (compared to 0.1% of GDP in 2012). The improvement was mainly driven by a narrowing of the deficit of the income balance. Exports decreased by 1.6% and imports by 0.6% compared to the previous year. Thus, the goods and services balance worsened somewhat and amounted to 0.8% of GDP (four-quarter moving sum). In the first half of 2013, the decrease of exports was completely driven by the decline in the exports of goods, whereas services exports rose by 2.7% year on year.

On the financing side, net FDI as well as net portfolio investment were positive but decreased by around 30% year on year in the first half of 2013. With external debt amounting to 104.9% of GDP in June 2013, Croatia's external position remains fragile. Foreign debt came to EUR 11.5 billion by the end of August, which is a slight increase compared to the end of 2012. The kuna traded marginally weaker against the euro but within its long-standing range.

Rising NPLs and further contraction of credit

In the financial sector, the share of NPLs grew further and amounted to 15.1% of total loans in June 2013. The deteriorating asset quality weighs on profitability, with the average return on assets dropping from 0.7% in 2012 to 0.5% in the first half of 2013. Growth of credit to the private sector remained negative in the first two quarters of 2013 (–4.2% and –3.2% year on year, respectively).

Fiscal situation remains strained, opening of EDP probable

The fiscal situation worsened in the first half of 2013, as the budget deficit reached 3.4% of annual GDP by July, going beyond the 3%-of-GDP target for the whole year. Gross public debt, which has been rising markedly since 2008, stood at 54% of GDP at end-2012 and is projected to come close to 60% of GDP at the end of 2013. It is very likely that the EU will soon open an Excessive Deficit Procedure (EDP) for Croatia. Meanwhile, all three major rating agencies have downgraded Croatia's sovereign rating to non-investment grade. Following the downgrade by S&P at the end of 2012 and Moody's downgrade in February 2013, Fitch lowered Croatia's sovereign rating from BBB- to BB+ in September. Additionally, S&P revised its outlook from "neutral" to "negative" recently.

Table 5

## Main Economic Indicators: Croatia

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	-2.3	0.0	-2.0	-1.1	-2.5	-1.9	-2.3	-1.5	-0.7
Private consumption	-1.3	0.2	-2.9	-0.9	-3.1	-3.4	-4.2	-2.9	0.5
Public consumption	-2.1	-0.6	-0.8	-1.1	0.3	-0.4	-2.0	0.3	1.3
Gross fixed capital formation	-15.0	-6.4	-4.6	-3.9	-5.1	-4.4	-4.9	-2.3	0.9
Exports of goods and services	4.8	2.0	0.4	3.9	-4.1	0.1	3.2	-4.9	0.8
Imports of goods and services	-2.8	1.3	-2.1	0.1	-4.0	-2.8	-1.6	-5.6	4.9
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-5.2	-0.3	-3.1	-1.8	-2.5	-3.8	-4.0	-2.4	1.1
Net exports of goods and services	2.9	0.3	1.1	1.2	0.1	1.2	1.9	0.9	-1.8
Exports of goods and services	1.8	0.8	0.2	1.2	-1.6	0.0	1.2	-1.6	0.3
Imports of goods and services	1.1	-0.5	0.9	-0.1	1.8	1.1	0.7	2.5	-2.1
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	..	..	..	..	..	..	..	..	..
Unit wage costs in manufacturing (nominal, per hour)	2.2	1.4	7.8	9.7	7.2	5.1	9.0	0.3	9.0
Labor productivity in manufacturing (real, per hour)	-3.4	1.5	1.8	-3.3	3.6	5.0	1.3	6.9	-3.1
Gross wages in manufacturing (nominal, per hour)	-1.1	2.7	9.5	6.0	11.1	10.4	10.5	7.2	5.6
Producer price index (PPI) in industry	4.3	6.4	7.0	6.1	6.8	7.9	7.3	4.1	1.1
Consumer price index (here: CPI)	1.0	2.3	3.4	1.5	3.4	4.1	4.6	4.6	2.3
EUR per 1 HRK, + = HRK appreciation	0.7	-2.0	-1.1	-2.0	-1.8	-0.1	-0.4	-0.4	-0.4
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	12.1	13.9	16.3	16.8	14.9	15.0	18.5	18.4	17.0
Employment rate (%, 15–64 years)	54.0	52.4	50.7	49.8	51.7	52.5	48.7	47.5	49.8
Key interest rate per annum (%)	6.0	6.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
HRK per 1 EUR	7.3	7.4	7.5	7.6	7.5	7.5	7.5	7.6	7.6
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	3.0	1.6	3.2	2.6	3.3	2.1	3.2	4.4	3.4
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	-0.2	-4.2	6.3	-3.9	1.5	1.7	6.3	7.8	4.8
Domestic credit of the banking system	8.1	8.8	-0.8	9.5	6.0	3.7	-0.8	-0.5	-1.5
<i>of which: claims on the private sector</i>	5.5	4.9	-4.1	5.8	2.7	-0.5	-4.1	-4.2	-3.2
<i>claims on households</i>	1.7	0.5	-0.7	1.0	0.1	-1.0	-0.7	-0.6	-1.4
<i>claims on enterprises</i>	3.7	4.4	-3.4	4.7	2.6	0.5	-3.4	-3.6	-1.8
<i>claims on the public sector (net)</i>	2.6	3.9	3.3	3.8	3.3	4.3	3.3	3.7	1.6
Other assets (net) of the banking system	-4.9	-3.0	-2.4	-3.1	-4.2	-3.3	-2.4	-2.9	0.2
<i>% of GDP, ESA 95</i>									
General government revenues	40.1	40.4	36.8	..	..	..	..	..	..
General government expenditures	45.3	46.1	40.6	..	..	..	..	..	..
General government balance	-5.2	-5.7	-3.8	..	..	..	..	..	..
Primary balance	-3.1	-3.5	-1.1	..	..	..	..	..	..
Gross public debt	42.2	46.7	53.7	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	18.1	7.8	0.4	2.3	-7.9	0.3	7.4	-7.7	-1.2
Merchandise imports	-0.5	7.5	-0.4	4.3	-2.7	-2.8	0.0	-6.4	5.4
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-12.9	-13.9	-13.8	-16.0	-15.6	-12.3	-11.5	-15.2	-17.8
Services balance	13.0	14.0	14.7	1.7	14.3	35.8	4.0	2.0	14.9
Income balance (factor services balance)	-3.5	-3.6	-3.5	-5.3	-4.3	-3.6	-1.0	-3.5	-2.6
Current transfers	2.4	2.6	2.6	2.7	2.8	2.2	2.7	2.7	3.1
Current account balance	-1.0	-0.9	0.1	-16.9	-2.8	22.1	-5.8	-14.1	-2.3
Capital account balance	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.1
Foreign direct investment (net)	1.0	2.4	2.6	3.0	2.7	1.4	3.4	5.3	-1.1
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	104.7	103.4	102.1	104.1	106.5	104.1	102.1	102.3	104.9
Gross official reserves (excluding gold)	24.0	25.2	25.6	25.7	26.5	25.9	25.6	25.7	27.3
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	7.2	7.2	7.2	7.2	7.4	7.3	7.2	7.3	7.7
<i>EUR million, period total</i>									
GDP at current prices	44,432	44,379	43,915	9,972	10,920	11,995	11,028	10,016	10,977

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

## 6 Czech Republic: Recession is Over, Lower Inflation despite Indirect Tax Hikes

Positive second quarter growth after two years of recession

The Czech economy seems to have hit bottom in early 2013: Following a strong decline in the first quarter of 2013, GDP rose in the second quarter in quarter-on-quarter terms. Net exports delivered a negative growth contribution in the first quarter. Given strong demand, however, the situation improved in the second quarter. Gross fixed capital formation has fallen further into negative territory, owing to a continued decline in construction output, further cutbacks in public investment and still wary expectations combined with relatively low capacity utilization. Stock changes also contributed negatively to growth, partly due to the pre-stocking of tobacco products at the end of 2012, which had been triggered by an excise tax hike scheduled for 2013. The decline of household consumption has been leveling off, subtracting only 0.1 percentage points from GDP in the first half of 2013.

The average employment rate increased slightly to 67.3% in the first half of 2013, while the number of full-time equivalent employees declined. The unemployment rate decreased to 6.8% in the second quarter after rising to 7.5% in the first quarter. The participation rate hit a long-time high of 72.8% in mid-2013.

Solid current account

Notwithstanding negative export growth in the first half of 2013, the trade balance continued to record historical surpluses (of about 6% of GDP) as imports contracted even more strongly than exports. This contraction, in turn, was the result of a drop in import-intensive exports, declining domestic demand and lower energy input prices. The negative income balance mainly resulted from FDI and portfolio investment earnings. Overall, the cumulative current account balance posted a surplus of 0.5% of GDP in the first half of 2013. FDI flows in the first half were driven by two major equity capital investments in the energy sector. Overall, net FDI inflows amounted to 2% of GDP.

Considerable disinflation despite increases in indirect taxes

The HICP inflation rate halved to 1.6% in the first half of 2013. The decline was partly due to a base effect following a hike in the lower VAT rate of 4 percentage points in 2012. Both VAT rates were raised yet again in January 2013 by 1 percentage point each (to 15% and 21%, respectively); however, their contribution to inflation was not as big this time. Declining fuel and telecommunication prices, a reduction in the retail price of gas in July and still absent domestic demand pressures dragged down inflation even further. Rising food prices and higher final consumer product import prices due to a weaker currency were not able to compensate for these downward pressures. As a result, the monetary policy-relevant inflation rate (CPI adjusted for first-round effects of changes to indirect taxes) has remained way under the lower bound of the Česká národní banka's (CNB) inflation target of 2%  $\pm$  1 percentage point (at 0.2% in September) and the policy rate has remained at its "technical zero" (0.05%) since November 2012. The koruna has depreciated, trading 4% lower on average in September 2013 than a year earlier.

New government and a new budget underway

Under the EDP, the Czech Republic has to remove its excessive budget deficit by end-2013, targeting a general government deficit of 2.8% for this year. Early parliamentary elections are scheduled for the end of October. In the meantime a caretaker government has approved a budget proposal envisaging a general government deficit of 2.9% of GDP both for 2014 and 2015. Whether these fiscal goals are endorsed by the new parliament and what policy measures will be launched to achieve the target, depends on the election outcome.

Table 6

## Main Economic Indicators: Czech Republic

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	2.5	1.8	-1.0	0.1	-1.5	-1.5	-1.1	-2.9	-1.3
Private consumption	0.9	0.5	-2.1	-1.3	-2.3	-2.2	-2.8	-1.5	0.1
Public consumption	0.2	-2.7	-1.9	-2.8	-2.5	-1.5	-1.0	1.3	1.8
Gross fixed capital formation	1.0	0.4	-4.5	-1.7	-3.8	-5.0	-6.9	-6.4	-5.0
Exports of goods and services	15.4	9.5	4.5	7.8	2.6	3.9	3.6	-5.3	0.5
Imports of goods and services	15.4	7.0	2.3	5.0	1.4	-0.4	3.1	-4.8	-1.7
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	1.8	-0.1	-2.7	-2.4	-2.4	-4.6	-1.5	-2.2	-3.0
Net exports of goods and services	0.6	1.9	1.7	2.4	0.9	3.1	0.4	-0.7	1.6
Exports of goods and services	9.1	6.4	3.3	6.0	1.9	2.8	2.6	-4.4	0.4
Imports of goods and services	-8.4	-4.4	-1.6	-3.5	-1.0	0.3	-2.1	3.6	1.2
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	-0.5	0.1	2.0	3.3	2.2	1.1	1.5	-0.2	-0.4
Unit labor costs in manufacturing (nominal, per hour)	-8.6	-3.3	2.5	1.7	2.6	3.0	2.9	1.3	0.8
Labor productivity in manufacturing (real, per hour)	9.9	6.6	-0.6	2.4	1.7	-0.6	-5.5	0.3	-1.6
Labor costs in manufacturing (nominal, per hour)	0.5	3.2	2.0	4.1	4.4	2.3	-2.8	1.6	-0.9
Producer price index (PPI) in industry	0.1	3.7	2.4	3.8	2.6	2.2	0.9	0.8	0.2
Consumer price index (here: HICP)	1.2	2.1	3.5	4.0	3.8	3.4	2.9	1.7	1.5
EUR per 1 CZK, + = CZK appreciation	4.6	2.9	-2.2	-2.8	-3.7	-2.7	0.4	-1.9	-2.2
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	7.4	6.8	7.1	7.2	6.8	7.0	7.2	7.5	6.8
Employment rate (%, 15–64 years)	65.0	65.7	66.6	65.6	66.5	67.1	67.0	66.8	67.8
Key interest rate per annum (%)	0.8	0.8	0.5	0.8	0.7	0.5	0.1	0.1	0.1
CZK per 1 EUR	25.3	24.6	25.1	25.1	25.3	25.1	25.2	25.6	25.8
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	1.9	2.8	4.8	4.8	5.4	4.0	4.8	5.1	4.6
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	0.4	-0.8	5.4	3.0	6.0	5.1	5.4	6.1	3.7
Domestic credit of the banking system	4.0	7.9	1.5	5.3	5.5	3.0	1.5	2.7	1.7
<i>of which: claims on the private sector</i>	2.1	4.1	1.9	3.8	3.3	2.4	1.9	2.5	1.8
<i>claims on households</i>	2.7	2.2	1.6	2.1	2.0	1.7	1.6	1.5	1.5
<i>claims on enterprises</i>	-0.6	1.9	0.3	1.7	1.3	0.7	0.3	1.0	0.3
<i>claims on the public sector (net)</i>	1.9	3.7	-0.4	1.5	2.2	0.7	-0.4	0.2	-0.1
Other assets (net) of the banking system	-2.6	-4.3	-2.1	-3.6	-6.0	-4.1	-2.1	-3.7	-0.9
<i>% of GDP, ESA 95</i>									
General government revenues	39.1	40.0	40.3	..	..	..	..	..	..
General government expenditures	43.9	43.3	44.7	..	..	..	..	..	..
General government balance	-4.8	-3.3	-4.4	..	..	..	..	..	..
Primary balance	-3.4	-1.9	-2.9	..	..	..	..	..	..
Gross public debt	37.8	40.8	45.8	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	21.3	13.8	4.6	8.4	3.2	4.1	2.9	-6.3	0.1
Merchandise imports	24.1	12.2	2.6	5.9	2.4	-0.5	2.6	-7.0	-3.5
<i>% of GDP (based on EUR), period total</i>									
Trade balance	1.4	2.4	3.8	5.7	3.5	3.5	2.6	6.0	5.9
Services balance	2.0	1.5	1.3	1.6	1.2	1.4	1.0	1.8	1.8
Income balance (factor services balance)	-7.5	-6.7	-7.5	-5.6	-7.0	-9.5	-7.8	-7.2	-7.6
Current transfers	0.2	0.1	0.0	0.1	-0.4	-0.5	0.6	0.9	-0.6
Current account balance	-3.9	-2.7	-2.4	1.9	-2.7	-5.0	-3.6	1.5	-0.5
Capital account balance	0.9	0.4	1.3	0.1	0.0	0.7	4.4	0.0	0.0
Foreign direct investment (net)	2.5	1.2	4.7	3.4	5.0	4.5	5.8	2.9	1.1
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	47.0	46.8	50.5	50.0	48.8	49.7	50.5	50.7	51.7
Gross official reserves (excluding gold)	20.9	19.7	21.9	20.4	20.0	20.3	21.9	22.5	21.9
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	3.9	3.4	3.6	3.5	3.3	3.4	3.6	3.7	3.6
<i>EUR million, period total</i>									
GDP at current prices	150,021	155,452	152,911	36,170	38,286	38,605	39,849	35,080	37,525

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiiv, OeNB.

## 7 Hungary: Out of Excessive Deficit Procedure, MNB Supports Bank Lending

GDP back in positive territory

GDP growth came back to modestly positive territory in the second quarter of 2013. On the production side, growth was driven by agriculture and construction, which rebounded from a weak base in 2012. On the demand side, household consumption bounced back on the back of rising real incomes, improving consumer confidence and, presumably, some beneficial effect of the measures aimed at reducing households' foreign currency debt servicing burden. Investments also posted solid growth mainly due to public investment activity, while manufacturing investments declined. By contrast, net real exports dampened overall growth, as export growth lagged behind the acceleration of imports.

Excessive deficit abrogated in June 2013

Given a deficit well below 3% of GDP in 2012 and expectations that the deficit would stay below this threshold in 2013 and 2014, the EU Council closed the EDP in June 2013. The draft budget for 2014, submitted to parliament in September 2013, targets a deficit of 2.9% of GDP and – with 2014 being an election year – accommodates a considerable increase in government spending (e.g. wage hikes for teachers, further cuts in household utility and energy prices, more generous family support). According to the Hungarian Fiscal Council, the deficit target could be achieved, but there are substantial risks both on the revenue and the expenditure sides.

Also in line with the government's rhetoric about regaining economic autonomy, in August 2013 the government and the Magyar Nemzeti Bank (MNB) repaid their outstanding IMF loans (combined EUR 2.9 billion), taken out in 2008–2009, ahead of schedule. In order to beef up the MNB's foreign exchange reserves and to pre-finance eurobond maturities in January 2014, the government is considering issuing a eurobond in late 2013.

Official measures to ease credit squeeze

The MNB continued reducing its policy rate in monthly steps from 5% in March 2013 to 3.6% in September given low medium-term inflationary pressures, sufficient spare capacities and the disinflationary effect of weak domestic demand. Despite this policy and the broadening of the government's housing loan subsidies in late 2012 and early 2013, the stock of credit to the private sector continued to contract into the third quarter of 2013. Lending conditions remained tight in the second quarter of 2013, given bleak economic prospects and industry-specific risks, and despite some easing of banks' liquidity constraints. In order to ease SMEs' access to credit, the MNB started a "Funding for Growth Scheme" in June 2013. Under the scheme, the MNB provides banks with long-term refinancing at an interest rate of 0%, which banks can lend on to SMEs with a maximum all-in margin of 2.5% either for the financing of investment and working capital or for converting foreign currency loans into forint loans. Another pillar of the scheme aims at reducing Hungary's gross external debt and the outstanding stock of the MNB's two-week bills. As for households, in addition to the measures that have already been taken (early repayment of foreign currency housing loans at beneficial exchange rates, temporary exchange rate fixation, interest rate subsidies), the government in July 2013 started negotiations with banks to phase out outstanding foreign currency housing loans altogether. In early September 2013, however, the government set banks a deadline until November 1, 2013, for taking action to alleviate households' repayment burden and for assuming the resulting costs. These costs, combined with the bank levy, the transaction tax and a new one-off tax for 2013 to compensate for below-plan revenues from the financial transaction tax, are likely to push banks back into the red in 2013.

Table 7

**Main Economic Indicators: Hungary**

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	1.3	1.6	-1.7	-0.6	-1.7	-1.7	-2.7	-0.9	0.5
Private consumption	-3.0	0.5	-1.4	-0.2	-0.5	-3.7	-0.9	-0.9	0.6
Public consumption	-0.7	-0.3	-2.5	-2.8	-3.1	-3.3	-0.7	-2.2	-0.2
Gross fixed capital formation	-9.5	-3.6	-3.8	-4.5	-3.0	-1.7	-5.7	-6.0	4.9
Exports of goods and services	14.2	6.3	2.0	2.2	4.6	2.4	-1.1	1.1	3.0
Imports of goods and services	12.7	5.0	0.1	0.2	1.7	-0.3	-1.0	0.4	4.7
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-0.4	0.1	-3.5	-2.6	-4.5	-4.1	-2.6	-1.6	1.6
Net exports of goods and services	1.8	1.5	1.7	2.0	2.8	2.4	-0.2	0.7	-1.2
Exports of goods and services	11.0	5.5	1.8	2.2	4.2	2.2	-1.0	1.1	2.9
Imports of goods and services	-9.2	-4.0	-0.1	-0.1	-1.4	0.3	0.8	-0.4	-4.1
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	-1.2	1.6	5.2	5.0	6.1	5.1	4.6	1.8	..
Unit labor costs in manufacturing (nominal, per hour)	-9.7	4.4	6.4	5.5	5.4	4.7	10.1	6.2	2.9
Labor productivity in manufacturing (real, per hour)	10.3	1.5	0.8	-0.5	3.5	2.9	-2.2	-1.2	1.2
Labor costs in manufacturing (nominal, per hour)	0.0	6.0	7.4	5.0	9.1	7.8	7.7	5.0	4.1
Producer price index (PPI) in industry	4.0	4.2	4.2	6.8	7.2	4.5	-1.5	0.6	-0.1
Consumer price index (here: HICP)	4.7	3.9	5.7	5.6	5.5	6.0	5.5	2.7	1.9
EUR per 1 HUF, + = HUF appreciation	1.9	-1.4	-3.5	-8.2	-9.4	-2.9	7.1	0.1	-0.5
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	11.2	11.0	11.0	11.8	10.9	10.5	10.8	11.8	10.3
Employment rate (%, 15–64 years)	55.4	55.8	57.2	55.7	57.2	58.2	57.8	56.6	58.3
Key interest rate per annum (%)	5.5	6.0	6.8	7.0	7.0	6.9	6.2	5.5	4.7
HUF per 1 EUR	275.4	279.3	289.3	296.8	294.0	283.1	283.4	296.6	295.6
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	3.0	5.9	-3.3	1.5	0.1	-4.1	-3.3	5.5	4.5
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	4.2	17.8	5.1	10.0	10.1	3.9	5.1	14.4	10.1
Domestic credit of the banking system	6.4	-3.1	-11.8	0.4	-3.5	-8.8	-11.8	-5.2	-4.2
of which: claims on the private sector	3.7	-0.6	-13.7	-1.8	-6.4	-13.6	-13.7	-6.0	-6.5
claims on households	4.6	-0.5	-7.3	-2.0	-4.9	-8.2	-7.3	-2.0	-2.7
claims on enterprises	-0.9	0.4	-6.3	0.7	-0.9	-5.3	-6.3	-3.9	-3.7
claims on the public sector (net)	2.7	-2.6	1.8	2.3	2.9	4.8	1.8	0.8	2.3
Other assets (net) of the banking system	-7.7	-8.7	3.4	-9.0	-6.5	0.7	3.4	-3.7	-1.4
<i>% of GDP, ESA 95</i>									
General government revenues	45.6	54.3	46.6	..	..	..	..	..	..
General government expenditures	49.9	50.0	48.6	..	..	..	..	..	..
General government balance	-4.3	4.3	-2.0	..	..	..	..	..	..
Primary balance	-0.2	8.5	2.2	..	..	..	..	..	..
Gross public debt	82.2	82.1	79.8	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	16.7	11.3	1.6	-0.2	3.1	2.9	0.6	1.7	2.0
Merchandise imports	17.2	10.7	1.0	1.7	0.8	0.6	1.0	0.0	3.0
<i>% of GDP (based on EUR), period total</i>									
Trade balance	2.5	3.1	3.6	3.7	5.2	4.0	1.9	5.0	4.4
Services balance	3.0	3.2	3.5	3.2	3.8	4.6	2.4	3.7	3.8
Income balance (factor services balance)	-5.7	-6.4	-6.5	-6.5	-7.0	-6.0	-6.6	-5.6	-6.6
Current transfers	0.4	0.6	0.4	-1.2	0.2	0.1	2.3	-0.1	0.9
Current account balance	0.2	0.4	1.0	-0.9	2.2	2.7	0.0	3.1	2.5
Capital account balance	1.8	2.3	2.6	1.9	2.0	2.3	3.8	2.8	3.6
Foreign direct investment (net)	0.8	0.7	2.1	2.1	-2.0	3.0	4.8	1.6	-3.5
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	143.3	133.0	126.9	133.6	136.7	133.7	126.9	125.5	124.3
Gross official reserves (excluding gold)	34.8	37.7	34.5	35.1	36.7	35.8	34.5	36.0	34.5
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	5.3	5.4	4.8	4.9	5.0	4.9	4.8	5.0	4.8
<i>EUR million, period total</i>									
GDP at current prices	96,562	99,763	97,837	21,390	23,694	25,515	27,238	21,824	24,590

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiiw, OeNB.

## 8 Poland: Pension Reform to Reduce Deficit and Debt

Export growth accelerates and domestic slowdown appears to be bottoming out

In the first half of 2013, annual GDP growth amounted to 0.9%, with exports contributing 1.7 percentage points and domestic demand subtracting 1.4. Weak total final demand caused imports to decline, lifting GDP growth by 0.6 percentage points and implying a contribution of net export of 2.3 percentage points. In parallel, the current account deficit fell to only 1% of GDP in this period, from 4% in the first half of 2012. The effects of previously shrinking and uncertain euro area imports, the end of a public nonresidential construction boom and tighter lending standards still showed in the first half of 2013 in destocking, contracting fixed investment and private consumption restraint. By contrast, exports have accelerated since the fourth quarter of 2012, even before euro area imports started to rise. Supported by the stimulating impact of exports, there are signs of domestic demand contraction fading out. Disinflation has helped achieve real annual growth of wages and pensions since the first quarter. The seasonally adjusted unemployment rate declined continuously to 10.3% in August from a peak of 10.6% in April, and employment indices have shown month-on-month increases.

Złoty only moderately affected by quantitative easing tapering fears

The złoty had been roughly stable against the euro from end-January to mid-May, before falling by 4.5% until end-June after the U.S. Federal Reserve's quantitative easing tapering remarks, but gaining 2.5% afterwards until end-September. In August 2013, inflation was 0.9% (HICP) and 1.1% (national CPI), while core inflation amounted to 0.9% (HICP) and 1.4% (CPI). Headline inflation had fallen from 2.2% (2.4%) in December to a low of 0.2% in June, dragged down by lower energy prices, but then rose, because unprocessed food prices fell less than in July and August 2012. The Polish Monetary Policy Council, pursuing an inflation target of 2.5% (CPI), cut the reference rate in six steps from 4.25% in December to 2.5% in July.

Weak growth and disinflation lead to higher deficit in 2013

The 2012 deadline for correcting the excessive deficit was missed, with the general government deficit standing at 3.9% of GDP. As the annual improvement of the structural balance by 1.5% of GDP over 2010–2012 was above the required level of 1.25% and the deterioration of the Polish economy was worse than expected, the Ecofin on June 21, 2013, extended the deadline for removing the excessive deficit to 2014. At the same time, it required Poland to take corrective action by October 1, 2013, and called on the government to reduce its deficit to 3.6% of GDP in 2013 and 3.0% in 2014. The government's convergence program of April 2013 had envisaged a deficit of 3.5% of GDP in 2013 and 3.3% in 2014. However, weaker economic growth and steeper disinflation than anticipated caused the revenue-to-GDP ratio to be 1.5 percentage points lower at mid-2013 than in the first half of 2012. As a result, the budget was amended by cutting expenditures by one-third of the revenue shortfall and raising the 2013 target for the general government deficit. In early September, the government approved the draft budget for 2014 and plans to change the pension system. Accordingly, general government debt would be cut by at least 8 percentage points, and the 2014 general government deficit would be cut by 0.5 percentage points. The envisaged pension reform involves the transfer of about 50% of private pension funds (OFEs) assets and liabilities to the public pay-as-you-go social insurance fund (ZUS). The obligatory contributions of 2.8% of gross salary, which currently has to be paid to OFEs, will be raised to 2.92%, and every participant will be able to decide whether future contributions continue to go to OFEs or to the notional individual pension account in ZUS, with the latter being the default choice.

Table 8

## Main Economic Indicators: Poland

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	3.9	4.5	1.9	3.6	2.0	1.6	0.8	0.5	1.2
Private consumption	3.1	2.6	1.2	2.2	1.7	0.4	0.7	-0.1	0.3
Public consumption	4.1	-1.7	0.2	-1.7	-0.2	1.3	1.2	-0.3	4.8
Gross fixed capital formation	-0.4	8.5	-1.7	5.2	0.7	-2.3	-5.1	-2.7	-3.3
Exports of goods and services	12.1	7.7	3.9	5.4	3.5	2.6	4.1	1.3	3.4
Imports of goods and services	13.9	5.5	-0.7	2.8	-1.5	-2.6	-1.2	-1.6	-2.1
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	4.6	3.6	-0.1	2.4	-0.3	-0.8	-1.4	-0.9	-1.5
Net exports of goods and services	-0.7	0.9	2.1	1.2	2.3	2.5	2.2	1.4	2.6
Exports of goods and services	4.8	3.3	1.8	2.5	1.6	1.2	1.7	0.6	1.6
Imports of goods and services	-5.5	-2.4	0.3	-1.3	0.7	1.3	0.5	0.8	1.0
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	1.0	1.3	1.1	1.3	1.2	1.1	0.9	2.3	..
Unit labor costs in manufacturing (nominal, per hour)	-9.1	0.3	1.3	-0.4	0.2	1.0	4.6	2.0	1.0
Labor productivity in manufacturing (real, per hour)	11.3	4.3	3.1	5.0	4.1	5.4	-1.7	2.1	0.7
Labor costs in manufacturing (nominal, per hour)	1.3	4.6	4.5	4.6	4.3	6.4	2.8	4.1	1.7
Producer price index (PPI) in industry	1.8	7.3	3.3	5.8	4.6	2.8	0.1	-0.5	-1.9
Consumer price index (here: HICP)	2.7	3.9	3.7	4.2	4.0	3.9	2.8	1.3	0.5
EUR per 1 PLN, + = PLN appreciation	8.4	-3.0	-1.6	-6.8	-7.0	0.3	7.5	1.8	1.3
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	9.7	9.8	10.2	10.6	10.0	10.0	10.2	11.4	10.6
Employment rate (%, 15–64 years)	59.0	59.3	59.7	58.8	59.7	60.2	60.0	58.7	59.8
Key interest rate per annum (%)	3.5	4.2	4.6	4.5	4.6	4.8	4.5	3.7	3.0
PLN per 1 EUR	4.0	4.1	4.2	4.2	4.3	4.1	4.1	4.2	4.2
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	8.8	12.5	4.5	9.1	11.0	7.6	4.5	6.6	7.0
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	3.0	6.4	3.3	1.9	8.6	4.7	3.3	6.2	0.9
Domestic credit of the banking system	10.3	14.0	1.0	13.1	10.5	4.3	1.0	4.0	6.6
<i>of which: claims on the private sector</i>	8.0	13.1	2.3	11.6	10.1	5.0	2.3	3.5	3.6
<i>claims on households</i>	8.3	7.4	0.2	6.0	4.8	0.9	0.2	1.6	1.5
<i>claims on enterprises</i>	-0.2	5.7	2.1	5.6	5.3	4.1	2.1	1.8	2.1
<i>claims on the public sector (net)</i>	2.3	0.9	-1.3	1.5	0.4	-0.7	-1.3	0.5	3.0
Other assets (net) of the banking system	-4.5	-7.9	0.2	-5.9	-8.1	-1.4	0.2	-3.6	-0.5
<i>% of GDP, ESA 95</i>									
General government revenues	37.5	38.4	38.3	..	..	..	..	..	..
General government expenditures	45.4	43.4	42.2	..	..	..	..	..	..
General government balance	-7.9	-5.0	-3.9	..	..	..	..	..	..
Primary balance	-5.2	-2.3	-1.1	..	..	..	..	..	..
Gross public debt	54.9	56.2	55.6	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	22.8	12.1	5.9	5.3	2.1	6.0	10.3	3.2	5.5
Merchandise imports	24.9	12.2	2.3	5.4	-2.0	0.5	5.5	-2.0	-2.2
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-2.5	-2.7	-1.4	-2.4	-1.8	-0.4	-1.0	-0.2	1.3
Services balance	0.7	1.1	1.2	1.1	1.7	1.1	1.0	1.4	1.8
Income balance (factor services balance)	-4.1	-4.6	-4.6	-4.6	-4.7	-5.3	-4.0	-4.2	-4.9
Current transfers	0.8	1.2	1.0	0.5	2.0	0.8	0.9	0.4	2.3
Current account balance	-5.1	-5.0	-3.7	-5.3	-2.8	-3.8	-3.1	-2.5	0.4
Capital account balance	1.8	2.0	2.2	1.5	2.5	2.6	2.3	0.9	3.5
Foreign direct investment (net)	1.4	2.4	1.1	-0.6	2.4	0.9	1.6	1.2	-0.2
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	66.9	67.5	72.7	70.8	72.3	73.7	72.7	72.5	70.9
Gross official reserves (excluding gold)	18.7	19.4	20.6	19.1	20.8	20.8	20.6	21.0	20.3
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	5.1	5.0	5.3	4.8	5.2	5.3	5.3	5.5	5.3
<i>EUR million, period total</i>									
GDP at current prices	354,693	370,414	381,518	87,432	91,383	95,181	107,523	90,939	94,244

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

## 9 Romania: Net Exports Drive Growth, Current Account Turns into Surplus

Pickup in exports keeps economy growing

In the first half of 2013, GDP grew by 1.8%. Despite a fairly unfavorable external environment, Romanian exports grew swiftly. Net exports delivered an extraordinarily positive growth contribution, as remarkable export growth coincided with shrinking domestic demand for imports. Private consumption growth came to a standstill, as slightly positive real wage growth was insufficient to compensate for the effects of rising unemployment, declining remittances from abroad and further tightening credit conditions. Gross fixed capital formation took a hit amid decreasing public capital expenditures, which also led to a drop in construction output. Meanwhile, private sector credit growth turned negative even in nominal terms.

Current account balance turns around

Fast export growth together with muted import demand entailed a notable improvement in the trade and services balance and enabled a shift from a current account deficit to a surplus. Export performance has been supported by additional production capacities, increasing demand from non-EU countries and a favorable development of manufacturing unit labor costs, as productivity improved and the rise in labor costs moderated. While the current account reversed, net FDI inflows declined from already low levels. Mainly as a result of foreign investments in government bonds, net portfolio inflows were positive and particularly high in the first quarter. At the same time, other investments showed considerable outflows mainly reflecting repayments to the IMF and cross-border deleveraging of foreign banks, which so far proceeded in an orderly manner.

Recent and prospective disinflation allows for interest rate cuts

Consumer price inflation (CPI) peaked in early 2013 at about 5% and has trended downward since. Also, the Banca Națională a României's (BNR) preferred core inflation rate (adjusted CORE2 inflation) went down gradually as well. In August, headline inflation fell to 3.7% mainly due to lower food prices reflecting an outstandingly good agricultural year. After a weak harvest in 2012, annual inflation rates are subject to a favorable base effect in the second half of 2013. The BNR, which has also pointed out the negative output gap, expects disinflation to continue, with inflation falling below the target of 2.5% in the first quarter of 2014. Accordingly, it cut its key policy rate by 25 basis points in July, by 50 basis points in August and by an additional 25 basis points at end-September to 4.25%.

New EU/IMF precautionary program as a policy anchor and a safeguard against external shocks

In July, the Romanian authorities reached staff-level agreement on a new precautionary support program with the IMF (already approved by the IMF Executive Board) and the European Commission, under which access would total EUR 4 billion, equally split between the IMF and the EU. After Romania managed to exit the excessive deficit procedure this year, it will proceed with gradual fiscal consolidation under the program, targeting a deficit of 2.4% of GDP in 2013 and achieving a structural deficit of not more than 1% of GDP by 2015. Moreover, the new program focuses on institutional and structural reforms, in particular in those areas where insufficient progress had been made under previous multilateral support frameworks (e.g. reforming inefficient state-owned enterprises, health-care system reform). The program also aims to address the banking sector's sizeable and still growing nonperforming loans by speeding up NPL resolution in order to revive credit growth.

Table 9

**Main Economic Indicators: Romania**

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	-0.9	2.3	0.4	-0.1	1.9	-1.1	0.9	2.2	1.5
Private consumption	-0.3	1.2	1.0	1.3	2.5	-1.0	1.5	-0.3	0.3
Public consumption	-4.6	1.1	1.5	3.0	1.8	2.2	0.0	-0.2	-0.5
Gross fixed capital formation	-2.3	7.3	5.2	11.3	5.4	7.4	-0.6	-5.4	-3.8
Exports of goods and services	14.2	10.9	-3.1	-2.1	-0.4	-5.1	-4.9	8.5	11.9
Imports of goods and services	12.5	10.3	-0.8	0.9	1.1	-1.7	-3.8	0.0	-1.7
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-1.1	2.6	1.5	2.1	3.1	0.1	0.4	-3.5	-6.8
Net exports of goods and services	0.0	-0.5	-0.8	-1.8	-1.0	-1.0	0.1	4.6	6.6
Exports of goods and services	4.0	3.7	-1.2	-1.1	-0.2	-1.9	-1.7	4.6	5.4
Imports of goods and services	-4.1	-4.1	0.4	-0.6	-0.8	0.9	1.8	0.0	1.2
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	-1.9	-2.7	6.8	6.0	5.8	9.0	6.7	1.2	3.6
Unit labor costs in manufacturing (nominal, per hour)	-7.8	1.8	6.4	8.7	7.7	6.8	2.8	1.9	-1.3
Labor productivity in manufacturing (real, per hour)	15.1	5.1	0.6	-1.4	0.6	0.3	2.8	5.0	6.7
Labor costs in manufacturing (nominal, per hour)	6.7	7.2	7.0	7.1	8.3	7.1	5.6	7.0	5.3
Producer price index (PPI) in industry	4.3	7.1	5.3	4.8	5.1	5.6	5.5	5.2	2.8
Consumer price index (here: HICP)	6.1	5.8	3.4	2.7	2.1	4.2	4.7	4.8	4.4
EUR per 1 RON, + = RON appreciation	0.7	-0.7	-4.9	-3.0	-6.6	-5.9	-4.2	-0.8	0.7
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	7.6	7.7	7.3	7.9	7.2	7.0	7.2	7.8	7.8
Employment rate (%, 15–64 years)	58.8	58.5	59.5	58.0	60.0	60.8	59.3	58.1	60.2
Key interest rate per annum (%)	6.5	6.2	5.3	5.6	5.3	5.3	5.3	5.3	5.3
RON per 1 EUR	4.2	4.2	4.5	4.4	4.4	4.5	4.5	4.4	4.4
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	6.9	6.6	2.7	10.2	8.5	5.7	2.7	4.2	5.0
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	0.9	-1.6	6.7	5.7	-1.3	1.4	6.7	9.2	11.2
Domestic credit of the banking system	13.8	11.4	0.1	13.3	15.6	8.7	0.1	-2.1	-7.4
<i>of which: claims on the private sector</i>	5.2	6.8	1.5	10.4	6.7	4.4	1.5	-0.1	-1.2
<i>claims on households</i>	1.0	1.1	0.1	3.3	1.7	0.9	0.1	-0.4	-0.6
<i>claims on enterprises</i>	4.2	5.7	1.4	7.1	5.0	3.6	1.4	0.3	-0.6
<i>claims on the public sector (net)</i>	8.6	4.7	-1.4	2.9	8.9	4.3	-1.4	-2.0	-6.2
Other assets (net) of the banking system	-7.8	-3.2	-4.1	-8.9	-5.8	-4.4	-4.1	-2.9	1.3
<i>% of GDP, ESA 95</i>									
General government revenues	33.3	33.8	33.5	..	..	..	..	..	..
General government expenditures	40.1	39.4	36.4	..	..	..	..	..	..
General government balance	-6.8	-5.6	-2.9	..	..	..	..	..	..
Primary balance	-5.3	-3.9	-1.1	..	..	..	..	..	..
Gross public debt	30.5	34.7	37.8	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	28.5	21.2	-0.5	0.0	2.0	-3.3	-0.5	4.6	7.2
Merchandise imports	25.0	17.2	-0.5	1.9	0.6	-1.3	-2.9	-1.1	-4.2
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-6.1	-5.6	-5.6	-4.6	-7.4	-5.6	-4.9	-2.0	-2.8
Services balance	0.3	0.3	0.4	-0.3	0.2	0.5	1.0	2.1	1.9
Income balance (factor services balance)	-1.5	-1.7	-1.3	-2.6	-1.9	-0.3	-0.8	-2.0	-1.6
Current transfers	2.9	2.5	2.6	4.4	2.7	1.6	2.0	2.9	3.5
Current account balance	-4.4	-4.5	-3.9	-3.1	-6.4	-3.7	-2.7	1.1	1.1
Capital account balance	0.2	0.5	1.5	1.5	1.8	0.7	1.8	1.1	1.9
Foreign direct investment (net)	1.8	1.4	1.3	1.2	1.5	1.8	0.7	0.7	1.9
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	74.5	75.3	75.3	76.0	75.9	75.9	75.3	76.0	73.2
Gross official reserves (excluding gold)	26.1	25.3	23.7	26.3	25.1	24.7	23.7	24.2	23.9
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	7.6	6.7	6.3	6.9	6.6	6.5	6.3	6.5	6.6
<i>EUR million, period total</i>									
GDP at current prices	124,084	131,139	131,439	25,916	31,111	36,410	38,003	27,561	33,133

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

## 10 Turkey: Domestic Demand Revives, Demand for Lira Plummets

Upswing in domestic demand in the first half of 2013

The Turkish economy showed a strong rebound in the first half of 2013 (GDP expanded by 3.7% year on year), fueled by reviving domestic demand. The strongest demand components were household consumption and public gross fixed capital investment, the latter resulting from large state-financed investment programs related to infrastructure projects. By contrast, private gross fixed capital formation was steady in the first half of 2013 (and even contracted in the second quarter) given ample production capacity and a rise in political uncertainty both at home and in some neighboring countries. The contribution of net exports to growth turned negative in the first half of the year. On the production side, construction and wholesale as well as retail trade accounted for the largest growth contributions along with financial intermediation and agriculture. Manufacturing value added expanded only moderately. Capacity utilization is broadly steady at 74%, likewise the business confidence index has been leveling off while July industrial production increased and the August PMI moved beyond the 50 benchmark again. Private sector credit growth has continually increased since the beginning of 2013, reaching almost 30% in July (double the central bank's indicative target of 15%).

External imbalances widen again

Vivid domestic demand fostered import growth while exports faltered as a result of continued weak demand from Europe and a tightening of restrictions on gold exports to Iran. At the same time, gold imports jumped due to lower gold prices and the replenishment of stocks by Turkish companies. Consequently, the current account deficit widened considerably to 8.9% of GDP in the first half of 2013. This severely aggravated Turkey's vulnerability to capital flow volatility as became evident first in June, when the emergence of domestic political unrest coincided with a global worsening of investor sentiment toward emerging markets following the U.S. Federal Reserve's tapering announcement. Due to sizable capital outflows, the Turkish lira depreciated by 15% against the euro (and by 11.5% against the U.S. dollar) between the beginning of May and the beginning of October. On September 5, the lira reached a record level of TRY 2.07 against the U.S. dollar and remained at around TRY/USD 2 ever since.

Monetary policy relies on foreign exchange intervention and liquidity management with some corridor widening

In fighting capital outflows and stabilizing the currency, the Central Bank of the Republic of Turkey (CBRT) was reluctant to raise interest rates and relied mainly on direct interventions and liquidity instruments. Following the build-up of foreign currency stocks until early 2013 the CBRT sold foreign exchange reserves in several interventions, starting on June 11. Still, foreign exchange reserves remained above the level of end-2012. Despite some initial success this policy was not sufficient by far to halt the sharp depreciation of the lira. Eventually, the upper bound of the interest corridor was raised in two steps in July and August to 7.75% (by 125 basis points in total, not yet offsetting previous lending rate reductions between January and May), while the one-week repo and borrowing rates have been held constant at 4.5% and 3.5%, respectively.

Weak lira gives rise to inflation pressures

The strong lira depreciation in the second quarter is likely to have put upward pressure on domestic prices even though overall inflation moderated again in August, led by lower food prices. However, given the increase in the CBRT's preferred core inflation measures in August in year-on-year terms compared to July, the central bank raised its end-year inflation projection from 5.3% to 6.2% (and thus above the target rate of 5.5%).

Table 10

**Main Economic Indicators: Turkey**

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	9.0	8.5	2.6	4.2	3.4	1.5	1.4	2.9	4.4
Private consumption	6.7	7.9	-0.8	-0.4	-2.2	-0.3	-0.4	3.1	5.3
Public consumption	2.0	4.4	6.4	5.7	5.4	5.5	8.5	7.6	7.4
Gross fixed capital formation	29.9	17.6	-1.9	2.2	-4.4	-3.3	-1.7	2.3	3.7
Exports of goods and services	3.4	6.5	18.2	16.1	26.1	14.4	16.7	5.6	1.2
Imports of goods and services	20.7	9.6	0.7	-4.7	-1.7	3.0	6.6	7.1	11.7
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	13.7	9.1	-1.8	-1.6	-3.2	-1.2	-1.2	3.6	8.5
Net exports of goods and services	-4.0	-1.0	3.7	4.6	5.9	2.4	2.1	-0.5	-2.8
Exports of goods and services	0.8	1.4	3.8	3.3	5.4	3.1	3.7	1.3	0.3
Imports of goods and services	-4.8	-2.4	-0.2	1.3	0.5	-0.7	-1.6	-1.8	-3.1
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	..	..	..	..	..	..	..	..	..
Unit wage costs in manufacturing (nominal, per hour)	2.4	5.9	13.6	16.0	12.4	13.7	12.2	8.6	11.5
Labor productivity in manufacturing (real, per hour)	8.7	3.4	-1.4	-2.2	-0.1	-1.5	-1.8	-0.2	0.4
Gross wages in manufacturing (nominal, per hour)	11.9	9.7	11.9	13.5	12.3	12.0	10.1	8.4	11.8
Producer price index (PPI) in industry	6.2	12.3	6.1	9.9	8.0	3.6	3.3	3.9	4.2
Consumer price index (here: HICP)	8.6	6.5	9.0	10.5	9.6	9.1	6.8	7.4	6.8
EUR per 1 TRY, + = TRY appreciation	8.3	-14.5	0.9	-8.4	-2.7	8.5	6.4	-0.1	-3.7
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	10.9	9.0	8.4	9.6	7.5	7.9	8.5	9.6	8.1
Employment rate (%, 15–64 years)	46.3	48.4	48.9	46.3	49.9	49.9	49.5	47.9	50.8
Key interest rate per annum (%) <sup>1</sup>	6.8	6.1	5.7	5.8	5.8	5.8	5.7	5.5	4.8
TRY per 1 EUR	2.0	2.3	2.3	2.4	2.3	2.3	2.3	2.4	2.4
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	18.6	15.2	10.5	10.3	9.3	8.8	10.5	13.6	15.4
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	-7.5	0.6	1.4	-2.7	-3.2	0.1	1.4	1.1	-1.0
Domestic credit of the banking system	30.2	19.0	16.9	18.9	17.5	14.4	16.9	18.5	22.0
<i>of which: claims on the private sector</i>	27.9	25.0	18.7	21.6	18.0	15.2	18.7	21.0	27.0
<i>claims on households</i>	8.4	8.4	5.9	7.1	5.5	5.3	5.9	7.0	8.1
<i>claims on enterprises</i>	19.5	16.6	12.7	14.5	12.5	9.9	12.7	14.0	18.9
<i>claims on the public sector (net)</i>	2.4	-6.0	-1.8	-2.7	-0.5	-0.8	-1.8	-2.5	-5.0
Other assets (net) of the banking system	-4.2	-4.4	-7.7	-5.9	-5.1	-5.7	-7.7	-6.0	-5.5
<i>% of GDP, ESA 95</i>									
General government revenues	36.7	34.1	32.5	..	..	..	..	..	..
General government expenditures	39.4	36.3	34.8	..	..	..	..	..	..
General government balance	-2.6	-2.2	-2.3	..	..	..	..	..	..
Primary balance	1.6	1.8	1.7	..	..	..	..	..	..
Gross public debt	42.4	39.8	37.9	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	16.1	12.9	23.3	17.7	30.3	26.6	18.7	5.4	-2.2
Merchandise imports	39.4	24.6	6.6	5.2	8.1	8.0	4.8	4.5	6.9
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-7.7	-11.5	-8.3	-9.2	-9.3	-7.8	-7.1	-8.7	-11.2
Services balance	2.3	2.6	2.9	1.1	2.9	4.7	2.8	1.4	3.0
Income balance (factor services balance)	-1.0	-1.0	-0.9	-1.1	-0.9	-0.8	-0.7	-1.0	-1.6
Current transfers	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1
Current account balance	-6.2	-9.7	-6.0	-9.0	-7.1	-3.8	-4.8	-8.2	-9.6
Capital account balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign direct investment (net)	1.0	1.8	1.1	1.2	1.8	0.7	0.7	1.0	0.7
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	39.6	42.4	41.7	42.4	44.8	42.4	41.7	43.7	44.3
Gross official reserves (excluding gold)	11.0	10.9	12.4	10.7	11.6	12.4	12.4	13.2	12.7
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	4.9	4.0	4.7	3.9	4.2	4.6	4.7	5.0	4.8
<i>EUR million, period total</i>									
GDP at current prices	551,485	554,990	612,280	138,066	150,893	166,896	156,425	150,573	160,079

Source: Bloomberg, European Commission, Eurostat, national statistical offices, national central banks, wiw, OeNB.

<sup>1</sup> Until April 2010: overnight borrowing rate; from May 2010: one-week repo (lending) rate.

## 11 Russia: Growth Continues to Sag

Plummeting investment dampens GDP expansion further

After reaching a growth rate for the entire year of 3.4% in 2012, Russian economic growth declined to 1.6% in the first quarter 2013 and further to 1.2% in the second quarter. Quarter-on-quarter readings were negative throughout the first half of 2013. Industrial production and manufacturing were flat over the first eight months. The slowdown of economic activity in the first half-year was largely triggered by plummeting investment (−10%, notably large-scale destocking, while gross fixed capital formation contracted 1.5%). While this certainly reflected heightened caution in the private corporate sector, it is also the result of shrinking state infrastructure investment. Net exports, however, started to contribute positively to growth in the second quarter.

Private consumption remains sole driving force of growth

Due to relatively tight fiscal policy, government consumption hardly increased in the first half of 2013. The only remaining driving force of growth was private consumption (+5.7%), buoyed by rapid increases of wages and pensions and by the continuing, if decelerating, retail credit boom. Unemployment continues to hover at near post-Soviet record lows (5.3% in July). Low joblessness, elevated inflation and shrinking current account surpluses also support the view that the economy is reaching full capacity.

Inflation elevated because of administered price adjustments and the ruble's recent depreciation

CPI inflation declined slightly to 6.5% at end-August 2013, which is still clearly above the Bank of Russia's (CBR) annual target of 5% to 6%. The persistence of relatively high inflation is due to the ruble's depreciation of over 6% against the U.S. dollar and of over 7% against the euro from end-April to end-August 2013 in connection with recent global financial market turbulences. The adjustment of administered prices at the beginning of 2013 also contributed to inflation. Therefore, notwithstanding the marked slowdown of economic growth, the CBR has held its key interest rates stable. However, it cut some longer-term refinancing rates that allow nonmarketable securities as collateral. Under the framework of transition to inflation targeting, the CBR in mid-September 2013 declared that the rate on one-week open market operations (5.5% in early October) would be its new key interest rate replacing the refinancing rate (8.25%) as the main policy tool.

Retail credit boom slightly decelerates

Over the first nine months of 2013, the total outflow of private capital came to EUR 36.4 billion, which is about the same amount recorded in the corresponding period of 2012. As at end-August 2013, total credit growth remained strong (+11% in real terms, year on year), with the retail lending boom slightly decelerating (+24%). Regulatory tightening by the CBR may be starting to rein in the consumer credit boom. Despite the economic slowdown the federal budget was slightly in surplus (0.9% of GDP) between January and August 2013, inter alia due to a new oil price-based fiscal rule, which places limits on spending levels. Given faltering growth, fiscal stimulus measures are being prepared, though. For instance, assets are to be borrowed from the National Welfare Fund (which as at end-August amounted to EUR 65.6 billion) to finance transportation projects.

Current account surplus shrinks

Given the sluggish state of the global economy and the lower oil price, Russia's current account surplus shrank to 3.2% of GDP between January and June 2013 (first half of 2012: 6.1%). While it has been rising lately, Russia's gross external debt remains at a relatively low level (33.7% of GDP at mid-2013), which, however, now considerably exceeds the amount of its foreign exchange reserves (excluding gold) of 22.7% of GDP.

Table 11

**Main Economic Indicators: Russia**

	2010	2011	2012	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	4.5	4.3	3.4	4.8	4.3	3.0	2.1	1.6	1.2
Private consumption	5.5	6.3	6.7	9.0	6.9	5.5	5.7	6.0	5.4
Public consumption	-1.5	0.8	-0.2	0.4	-0.1	-0.2	-0.8	0.5	-0.2
Gross fixed capital formation	5.9	10.2	6.0	15.5	9.7	4.6	1.4	0.1	-2.5
Exports of goods and services	7.0	0.3	1.4	4.2	-2.0	1.8	1.4	0.4	4.1
Imports of goods and services	25.8	20.3	9.5	13.0	5.6	10.5	9.2	4.9	1.4
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	7.1	7.9	5.0	5.9	5.8	4.9	3.6	1.5	1.0
Net exports of goods and services	-2.0	-4.0	-1.8	-1.2	-1.9	-2.1	-1.8	-0.9	0.9
Exports of goods and services	2.3	0.1	0.4	1.5	-0.7	0.5	0.4	0.2	1.3
Imports of goods and services	-4.3	-4.1	-2.2	-2.7	-1.3	-2.6	-2.2	-1.1	-0.3
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	..	..	..	..	..	..	..	..	..
Unit labor costs in industry (nominal, per person)	2.2	9.3	5.6	9.3	8.7	7.3	-2.4	8.2	9.0
Labor productivity in industry (real, per person)	11.8	4.1	4.0	5.5	3.8	3.9	2.9	1.7	1.8
Average gross earnings in industry (nominal, per person)	14.7	13.8	9.6	15.3	12.8	11.4	0.2	9.9	11.0
Producer price index (PPI) in industry	12.3	17.8	6.8	8.0	4.5	7.9	6.8	4.3	2.5
Consumer price index (here: CPI)	6.9	8.5	5.1	3.9	3.9	6.1	6.5	7.2	7.2
EUR per 1 RUB, + = RUB appreciation	9.6	-1.5	2.4	1.2	1.1	2.9	4.4	-1.5	-3.7
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	7.5	6.6	5.5	6.3	5.3	5.1	5.2	5.8	5.4
Employment rate (%, 15–64 years)	..	..	..	..	..	..	..	..	..
Key interest rate per annum (%)	5.3	5.3	5.3	5.3	5.3	5.3	5.5	5.5	5.5
RUB per 1 EUR	40.3	40.9	39.9	39.5	39.8	40.0	40.3	40.2	41.4
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	24.6	20.9	12.1	20.1	20.1	15.0	12.1	15.1	16.3
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	5.8	9.9	-0.3	6.7	10.5	0.8	-0.3	4.5	1.8
Domestic credit of the banking system	22.1	19.7	15.4	21.1	22.4	19.5	15.4	17.0	18.1
<i>of which: claims on the private sector</i>	12.4	24.5	17.9	24.8	26.9	21.5	17.9	19.9	18.2
<i>claims on households</i>	3.1	6.4	8.2	7.8	8.9	8.8	8.2	8.4	8.2
<i>claims on enterprises</i>	9.3	18.1	9.7	17.1	18.0	12.7	9.7	11.5	10.1
<i>claims on the public sector (net)</i>	9.7	-4.8	-2.6	-3.7	-4.5	-2.0	-2.6	-2.9	-0.1
Other assets (net) of the banking system	-3.3	-8.7	-3.0	-7.8	-12.9	-5.3	-3.0	-6.4	-3.6
<i>% of GDP, ESA 95</i>									
General government revenues	33.9	37.4	36.9	..	..	..	..	..	..
General government expenditures	37.4	35.9	36.5	..	..	..	..	..	..
General government balance	-3.4	1.5	0.4	..	..	..	..	..	..
Primary balance	..	..	..	..	..	..	..	..	..
Gross public debt	8.4	9.0	9.6	..	..	..	..	..	..
<i>Year-on-year change of the period total (based on EUR) in %</i>									
Merchandise exports	39.9	24.1	8.3	15.4	10.2	8.8	0.6	-0.7	-4.8
Merchandise imports	37.4	23.8	13.9	23.3	10.8	15.4	8.7	-0.7	1.8
<i>% of GDP (based on EUR), period total</i>									
Trade balance	9.9	10.5	9.0	10.6	10.2	7.5	8.1	9.8	8.3
Services balance	-1.9	-1.9	-2.4	-2.3	-2.1	-3.0	-2.3	-2.1	-2.6
Income balance (factor services balance)	-3.2	-3.2	-3.5	-2.5	-4.7	-2.8	-3.7	-2.3	-4.8
Current transfers	-0.2	-0.2	-0.3	-0.3	-0.1	-0.5	-0.4	-0.3	-0.3
Current account balance	4.6	5.2	2.8	5.5	3.3	1.1	1.8	5.1	0.7
Capital account balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign direct investment (net)	-0.6	-0.8	-1.2	-5.6	-1.5	0.4	1.1	-5.2	1.9
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	31.8	30.6	30.8	29.5	31.1	30.6	30.8	33.9	33.7
Gross official reserves (excluding gold)	28.9	25.7	23.5	24.7	25.5	24.4	23.5	23.4	22.7
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	16.3	14.2	12.5	13.3	13.7	12.9	12.5	12.7	12.2
<i>EUR million, period total</i>									
GDP at current prices	1,150,057	1,362,744	1,567,113	348,992	376,767	408,804	432,550	373,285	389,360

Source: Bloomberg, national statistical offices, national central banks, wiw, OeNB.

# Outlook for Selected CESEE Countries:

## Recovery to Gain Traction Gradually – Downside Risks Still Prevail

### 1 CESEE-7<sup>1</sup>: A Feeble but Possibly Sustained Recovery

GDP growth will remain below 1% in 2013 for the second consecutive year in the CESEE-7 region, influenced by a weak carryover from 2012. Domestic and external demand has been gradually strengthening in the course of 2013 and will cause growth to accelerate over the projection horizon. The region's GDP growth rate will rise from 0.8% in 2013 to 2.3% in 2014 and 2.8% in 2015. Import demand will pick up more strongly from 1.6% in 2013 to 4.8% in 2014 and 5.8% in 2015.

A turnaround in the business cycle in the region apparently occurred in the second quarter of 2013, with growth firming but not reaching its potential during our forecasting period. Sentiment indicators have improved over the course of 2013, especially consumer sentiment. Likewise, private consumption gained traction in the first half of 2013, while industrial production showed mixed results throughout the region; the expansion was stronger than for the region as a whole in Hungary, Poland and Romania while Croatia, the Czech Republic and Bulgaria showed below-average (or even negative) growth.

For the remainder of 2013, we expect a further improvement triggered by a gradual rise in both domestic and external demand, even though GDP growth is expected to remain very modest. The growth momentum will be most pronounced in the Czech Republic, Poland and Romania. However, for the Czech Republic, it will not be strong enough to outweigh the extremely weak first quarter outcome. Thus, the Czech Republic's annual GDP growth will remain negative in 2013. For Hungary, we expect a moderate expansion of GDP, comparable to developments in the first half of the year. Bulgaria and Croatia will perform much like in the first half of 2013 and will not show a notable expansion. Thus, developments remain mixed throughout the region, with two countries (Croatia and the Czech Republic) still posting a decline in annual GDP in 2013. 2014 and 2015 will be characterized by a further strengthening in domestic demand, reflecting increases

Growth rests on  
reviving domestic  
and external  
demand

in gross fixed capital formation and private consumption. In all countries but Poland, the revival of investment activity will show by far the strongest growth contribution in those years. In Poland, reascent private consumption will add most to GDP growth.

The growth differential to the euro area will be 1.1 percentage points in 2013 and slightly higher in the next two years (1.4 percentage points in 2014 and 1.3 percentage points in 2015). As such, the growth differential will remain at less than half of its precrisis value, implying a fairly slow catching-up process.

Table 1

#### GDP and Import Projections for 2013 to 2015

	GDP				Imports			
	2012	2013	2014	2015	2012	2013	2014	2015
	Annual growth in %							
CESEE-7	0.7	0.8	2.3	2.8	0.2	1.6	4.8	5.8
Bulgaria	0.8	0.8	2.1	3.1	3.5	3.6	3.7	5.6
Croatia	-1.9	-0.4	1.0	1.5	-2.5	-0.5	1.7	2.4
Czech Republic	-0.9	-1.0	1.6	2.0	2.5	0.4	5.3	6.1
Hungary	-1.8	0.5	1.4	1.9	0.1	5.2	5.2	5.4
Poland	2.1	1.1	2.8	3.5	-1.9	0.4	4.5	6.0
Romania	0.5	2.1	2.1	2.4	-0.9	1.1	5.0	6.3
Russia	3.4	1.8	3.3	3.2	9.0	4.0	5.0	6.0

Source: OeNB, BOFIT, Eurostat, Rosstat.

Note: Seasonally adjusted data for 2012.

<sup>1</sup> CESEE-7: Bulgaria, Croatia, the Czech Republic, Hungary, Lithuania, Poland, Romania.

Going forward, the factors which support economic growth should strengthen gradually over the projection horizon. The labor market shows some signs of stabilization: Unemployment rates reached peak levels already at the end of 2012, and employment has risen in Bulgaria, the Czech Republic and Poland and has stabilized in Hungary and Romania. Nevertheless, labor market conditions will continue to restrain a more vivid recovery in the near term. First, unemployment rates remain high and persistent in all countries; only Poland shows a decline in unemployment. Second, rising employment is related to very specific factors in each country. In Hungary, the rise in employment is strongly influenced by public work and may therefore not be fully sustained. In the Czech Republic, part-time work has increased sharply and the participation rate has gone up at the same time, eroding a positive effect on the unemployment rate.

Based on the announcements of September 2013 by the Federal Reserve System, we do not expect external financing conditions for CESEE-7 to tighten in the very near future. In addition, domestic funding conditions show some signs of improvement. While deposits exceed loans by a margin in the Czech Republic, the funding gap<sup>2</sup> has narrowed in the most recent quarters in Bulgaria, Hungary, and Romania. In Croatia, the funding gap has stayed constant; it has deteriorated slightly only in Poland. The central banks of those countries in the region that have flexible exchange rates are likely to maintain their accommodative stance, given current price developments.

Nevertheless, deleveraging of the private nonbank sector is an issue in some countries, and we do not expect credit growth in the region to increase strongly. While it is unclear whether this lack of credit growth will restrain economic growth, it is well in line with our expectation of a very gradual recovery. The picture is, however, heterogeneous across the region. Any supply bottlenecks are most likely to be seen in Hungary and Croatia. Even though in Hungary, the central bank's Lending for Growth program is likely to show some increase in demand for loans (the first deadline for loan applications has just passed), recent lending surveys suggest that credit supply is on a downward trend in this country. In Bulgaria, overall loan aggregates are moving sideways, with rising corporate loans being offset by falling household loans. The good liquidity situation of Polish corporates prevails, reducing the need for new loans in this country. We may also begin to see a new trend of substituting loans by corporate bonds in the region, a development whose outcome and implications are highly unclear from the current viewpoint but which is in line with developments in the euro area.

In all countries, growth in gross capital formation is going to be one of the main drivers of the recovery over the projection horizon (see chart 2). After years of disinvestment, especially Croatia and Hungary will post rising and positive growth rates in all three years (2013 to 2015). But the remaining countries have also accumulated an investment backlog related first to the obsolescence of some of the capital stock despite underutilization and second to the end of destocking in all countries in the course of this or the coming year. In Bulgaria, public investment will dominate gross fixed capital formation in all years, partly because of an enhanced absorption of EU funds. High capacity utilization in the Croatian tourism sector will necessitate some new investments, further supported by an increasing

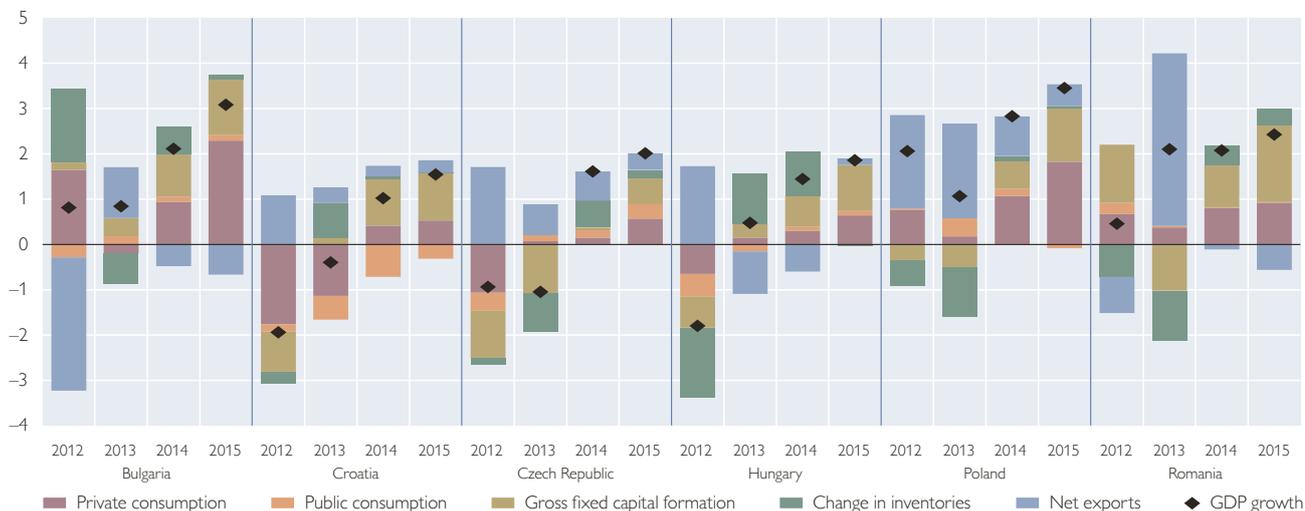
Destocking comes to an end, investments will back growth

<sup>2</sup> The funding gap is measured here as claims of the private sector minus deposits in percent of GDP.

Chart 1

### GDP and GDP Components: Projections for 2013 to 2015

Contribution of GDP components in percentage points; annual GDP growth in %



Source: OeNB.

absorption of EU funds in 2014 and 2015. In contrast, the weak performance of the Czech construction sector, low capacity utilization and uncertainty about public projects will further curb gross fixed capital formation in 2013 and will dampen a rebound in investment activity in 2014. In Poland, base effects from public investments related to the European soccer championship in 2012 are kicking in, lowering investment growth rates in 2013. However, we expect a notable revival for 2014 and 2015. Overall, the need to meet rising external demand in 2014 and 2015 will support gross fixed capital formation in those years in all countries.

Despite an overall tight fiscal stance, we do not expect the region to further step up consolidation. Hence, while public consumption will not yield a worthwhile growth impulse yet, fiscal consolidation will not restrict growth further. Public consumption growth remains strongly related to election cycles in individual countries. In Bulgaria, the softer fiscal stance up to the elections in early 2013 is expected to be followed by some tightening. Hungary will maintain its softer fiscal stance up until the elections in April 2014. Croatia will show some tightening in 2014 and 2015, also as it will become subject to the excessive deficit procedure (EDP).

The low inflation environment has fueled positive real income growth in most countries and thus supports private consumption. Even if growth rates remain modest by historical standards, private consumption growth will accelerate over the forecast horizon and by 2015, the growth dynamics will be the highest again in all countries since the 2008–2009 crisis but will not yet draw level with the precrisis growth rates.

Overall, gradually and slowly firming domestic demand is also triggering an increase in import demand. While we expect to see an increase in both external and domestic demand over the forecast horizon, the stronger growth momentum of domestic demand implies that the growth contribution of net exports will fall to close to zero in all countries in 2015 (and even turn negative in Bulgaria and

Recovering domestic demand implies diminishing contribution of net exports

Romania already in 2014). Again, Hungary is an exception to this development, with net exports set to make a marginally negative contribution in 2013 and 2014 but to move into marginally positive territory in 2015. Romania is the only country where export growth will recede somewhat, yet after having seen high growth in 2013; hence, export growth will remain strong in 2015 and well comparable with the rates in all other countries.

Import growth will accelerate strongly in all countries. In 2015, annual growth rates will range between 5.4% in Hungary and 6.3% in Romania, except in Croatia, where we expect weaker growth rates (2.4%, up from marginally negative import growth in 2013).

Much like in our previous projection round, we assume that downside risks will dominate; however, they have become more diversified. Again, downside risks emanate primarily from the external environment. In the short run, they are related to developments in the U.S.A. If the U.S. fiscal situation cannot be settled before February 2014 – when the temporary increase in the public debt ceiling expires –, the ensuing global repercussions will cause turbulence in global financial markets. This, in turn, will lower euro area growth below the assumption underlying our baseline scenario. Hence, the CESEE-7 region would suffer directly through deteriorating external financing conditions – in particular those countries with large external refinancing needs – and indirectly through lower external demand from the euro area. Another downside risk arises from a possible tapering by the Fed, which would also impact negatively through higher refinancing costs and again affect primarily countries with large external refinancing needs. Clearly, this risk would only occur in the event of a viable long-term solution of the fiscal situation in the U.S.A. For 2014 and 2015, we see additional downside risks in case of a relapse in the euro area debt crisis, which would also add volatility to financial markets. Furthermore, this would reduce demand for CESEE-7 exports and hence cause a negative spillover via the trade channel. The forthcoming asset quality review of euro area banks also implies the risk of a transient intensification of deleveraging by euro area parent banks in the region. Another external risk is related to developments in the Middle East. If political turmoil and civil unrest intensify, thus destabilizing the whole region, oil prices could rise, which would raise the costs of imports and would worsen external balances in the CESEE-7 region.

Upside risks relate to better-than-expected growth developments in advanced economies, in particular in the euro area. Furthermore, a continued period of low inflation in the CESEE-7 countries could stimulate private consumption more than projected in our baseline, at least in the near term. However, for the Czech Republic, there may be a risk of deflationary tendencies in such an event.

## 2 Developments in Bulgaria, Croatia, the Czech Republic, Hungary, Poland and Romania

Weaker-than-expected domestic demand is the main reason for a downward revision of the 2013 real GDP growth rate to 0.8%. In 2013, domestic demand will contribute negatively to growth; the moderate expansion will be driven by net exports. For 2014 and 2015, we forecast a moderate acceleration of economic growth to 2.1% and 3.1%, respectively.

Downside risks  
continue to prevail

Bulgaria: Subdued  
growth in 2013,  
cautious gain in  
momentum in 2014  
to 2015

Despite a loosened fiscal stance and pronounced disinflation, private consumption is expected to shrink modestly this year on the back of adverse labor market conditions and ongoing deleveraging in the household sector. Destocking and the poor performance of gross fixed capital formation are putting an additional strain on GDP growth. On the positive side, exports are set to perform better than expected, which can be traced back to abundant harvest and favorable base effects from weather-related disruptions in early 2012.

Going forward, we forecast Bulgarian GDP to pick up gradually in 2014 and 2015, with the growth impetus coming mainly from private consumption and investment. In particular, we expect the impact of the 2013 changes in social legislation (increase of minimum wages and pensions) to materialize only in the subsequent years on the back of reduced household uncertainty. Moreover, the expiration of labor market restrictions in other EU countries as of the beginning of 2014 ought to be beneficial for the recovery of the Bulgarian labor market. The improving external conditions are set to stimulate exports and new fixed capital formation. However, as the expansion of domestic demand will keep imports at comparatively high levels, net exports will put a certain strain on GDP growth in 2014 and 2015. In addition, the public sector will implement some fiscal tightening in 2014 to keep the fiscal deficit below 2% of GDP.

Croatia: Mild  
recovery with  
substantial  
downside risks

Recession dynamics faded considerably in the second quarter of 2013, and domestic demand turned positive for the first time since 2008. Therefore, we slightly revise our forecast for 2013 upward by 0.1 percentage points to –0.4%. These favorable developments are expected to continue for the rest of the year, given a further improvement in consumer sentiment in the light of the EU accession and a very positive tourism season in the summer of 2013. Additionally, lower inflation due to decreasing energy and food prices should support consumption. As the second quarter also brought a turnaround in investments, investments will make a slightly positive contribution to growth in our projection for 2013. On the other hand, we expect the worsening fiscal situation to put a strain on public consumption. In spite of the positive tourism season, exports will remain about the same because of export losses to the CEFTA<sup>3</sup> countries. However, we expect imports to decrease slightly and thus expect the external sector to make a positive contribution to growth.

For 2014, we expect GDP to grow by 1%, whereby growth will rest on strengthening investments, provided that EU funds are increasingly exploited, positive consumer sentiment prevails and the labor market situation improves. Public consumption will affect growth negatively, as we expect further cost-cutting measures in spending areas like health care, welfare and pensions. Due to the expected recovery of the euro area and the positive developments in the tourism industry, exports will have a positive effect on growth. However, as imports will also rise because of increasing domestic demand, the overall contribution of net exports is expected to remain low.

Economic growth is forecast to rise to 1.5% in 2015. We have revised our previous forecast downward, mainly because of ongoing heavy consolidation

<sup>3</sup> CEFTA stands for Central European Free Trade Agreement; the member countries are: Albania, Bosnia and Herzegovina, FYR Macedonia, Moldova, Montenegro, Serbia, and the United Nations Interim Administration Mission in Kosovo.

measures. Growth continues to be supported primarily by private consumption and investment, with a slightly positive contribution of net exports resting on a stronger rise of exports compared to imports.

A downward risk to this forecast lies in a weaker pick-up of investments related to the actual utilization of EU funds and a worse-than-expected business climate following EU accession. Furthermore, the development of private consumption depends heavily on necessary reforms in the labor market and the extent to which consolidation measures will entail tax increases.

We forecast the Czech economy to contract again in 2013, with GDP shrinking by 1%. GDP growth will resume in 2014 to 1.6% and will accelerate further to 2% in 2015.

Signs of the frail recovery already emerged in the first half of 2013 and are mainly due to the slow recovery in the euro area, most notably in Germany and Slovakia, the main trading partner countries. External demand will continue to pull the economy out of the recession gradually throughout the remainder of 2013 and 2014. Nevertheless, given the dip in early 2013, the overall growth rates of both exports and imports for the whole year will be marginal. Only from 2014 onward will exports and imports start growing at the more usual annual pace of around 5% and more.

Fiscal restriction also eased somewhat in 2013 and is expected not to strengthen again in 2014 and 2015, even though early elections are planned for October 2013. Thus, unlike in the previous two years, public consumption will contribute positively, albeit marginally, to GDP growth over the whole forecast period.

Private consumption has also begun to show some cautious signs of recovery. Given the conservative behavior of Czech households, this expectation is grounded in the turnaround in the prospects of the euro area, combined with the domestic prospect of an end to further fiscal restriction after the elections. However, Czech households' behavior will remain cautious and the recovery of their demand will remain weak and fragile into 2014. Demand will only start to contribute to Czech GDP growth significantly in 2015.

Gross fixed capital investment will continue to contract substantially in 2013. In 2014, only the resumption of public investment will prevent it from shrinking further. However, the heavily paralyzed construction sector as well as still meager domestic demand and only slowly recovering external demand – both could be met by raising the currently relatively weak capacity utilization – point to the fact that a full recovery of gross fixed capital investment growth will only take place in 2015.

All in all, even though GDP growth should turn positive in 2014, the full recovery, supported by revived domestic demand, is only expected to take place in 2015. Apart from the downside risk from developments in the external environment, the impact of the actions of the next government on these projections is also difficult to gauge.

We expect Hungarian GDP to expand by a meager 0.5% year on year in 2013, to be followed by a further acceleration to around 1.4% in 2014 and to 1.9% in 2015.

After contracting for several years (apart from 2011), household consumption will likely post a modest expansion in 2013, predominantly drawing on an increase in real net wages (mostly due to the stronger than expected fall in inflation) and some beneficial impact of the various schemes to reduce households' foreign

Czech Republic:  
Fragile recovery  
underway

Hungary: Less  
stringent fiscal  
policy and monetary  
impetus to support  
growth in 2014 to  
2015

currency debt servicing burden. Further wage hikes (e.g. the wage hike for teachers from September 2013), utility price cuts, additional measures to reduce debt servicing costs, the widening of family tax benefits and some improvement in employment (albeit mostly thanks to public works) will likely support private consumption further in 2014. Government consumption will decrease again in 2013, but is expected to expand modestly in the election year 2014 (election-related costs, full effect of the wage hike for teachers) and in 2015.

The investment cycle will finally turn in 2013, with growth of gross fixed capital formation coming to nearly 2% in 2013 and strengthening further in the next two years. On the one hand, relatively low levels of capacity utilization, weak profitability, uncertain business and income prospects and tight lending conditions still hinder investments of corporates and households, though to a decreasing extent. On the other hand, public investments pushed investment growth well into positive territory already in the second quarter of 2013, and the trend is likely to continue thanks to increasing utilization of EU funds. Moreover, substantial cuts in the policy rate of the Hungarian central bank MNB (these cuts have been mirrored by the decline in interest rates for corporate loans) and the MNB's Lending for Growth program are expected to support corporate investments in the coming period, while housing investments may benefit from the broadening of various housing subsidy schemes. Foreign direct investments are unlikely to play a strong role, given a weakening of FDI inflows in the last three quarters which coincided with domestic policy measures affecting banks and nonfinancial corporations negatively (such as additional burdens on the banking sector and utility price cuts). Stock changes are likely to make a positive contribution to the GDP growth rate in 2013 and 2014, first of all simply because destocking will come to an end, but also because agricultural output will improve in 2013 and industrial output will recover in both 2013 and 2014.

Having contributed strongly to growth in recent years, net real exports will likely be a minor drag on the overall GDP growth rate in 2013, as the acceleration of export growth will lag behind the strengthening of imports. Net real exports may perform better in 2014 and 2015, given a recovery in Hungary's main trading partner countries.

In addition to the region-wide risks, we also see a downward risk for Hungary emanating from the implementation of foreign exchange conversion schemes intended to reduce households' debt burdens. If such schemes are introduced in an extreme way, the financial markets might lose confidence and external refinancing costs could surge sharply.

In Poland, annual average growth figures in 2013 are marked by the economic slowdown, even though this slowdown already bottomed out in the first quarter of 2013. For the whole year 2013, we expect GDP growth to abate to 1.1% as a result of a negative contribution of domestic demand of about 1 percentage point counteracted by a positive contribution of net exports of about 2 percentage points. As euro area imports are poised to rise further in the second half of the year, Polish exports will continue to be the engine of growth, also in the second half of the year. Moreover, knock-on effects of the export performance on domestic demand will materialize, as heralded already by industrial and consumer confidence indicators. First of all, the process of destocking will come to a halt, reducing the negative contribution of inventory changes to growth. Second, already achieved

Poland: Domestic  
demand gains  
traction

advances of total wages and increases of retirement pensions in real terms will translate into stronger effective private consumption demand, while monthly increases of employment will not lift annual employment growth into positive territory before the end of the year. Third, public consumption will continue to provide a positive contribution to growth, continuing the first-half trend. By contrast, fixed investment will continue to contract, albeit to a lesser extent. Overall, in the second half of the year, domestic demand will stabilize, which will render the positive contribution of net exports about equal to GDP growth.

In 2014 and 2015, we expect GDP growth to accelerate to about 2.8% and 3.5%, respectively. Thus, Poland will again show the highest GDP growth rates in the region. The acceleration of euro area imports will further lift Polish export growth moderately, and the translation of the external stimulus into domestic growth dynamics will be completed. Thus, the contribution of domestic demand will be positive and will outpace the contribution of net exports, which will remain positive but will decline as a result of stronger import growth reflecting both the export-import link and reviving domestic demand. Domestic demand will benefit in particular from the onset of investment growth, given brighter external and domestic selling opportunities, decreased levels of inventories and sufficiently available liquidity of enterprises (as signaled by the growth of enterprises' deposits). Stronger export growth and beginning investment growth will strengthen the labor market. This, together with improved sentiment and low interest rates, will be beneficial for reviving mortgage lending to households, which will support fixed-investment growth additionally. Rising employment and wages will underpin private consumption growth, which, however, will still be clearly below GDP growth. By contrast, public consumption growth will be lower than in 2013, but we do not expect a severe retrenchment of fiscal policy yet, in order not to endanger the incipient domestic recovery.

An outstanding harvest together with better-than-expected exports are the main reason we have revised our forecast for 2013 upward to 2.1%. Yet it should be noted that the year's growth is partly the result of temporary factors (new production capacities, favorable weather conditions for agriculture). On top of this, growth is not broadly based, as private consumption is stagnating and gross fixed capital formation is contracting.

While export growth will remain robust due to the euro area recovery, we expect domestic demand to strengthen only slowly and gradually. The projected mild recovery of private consumption is based on various factors: increased domestic consumption of agricultural products; the positive impact of disinflation on real wage growth in the short term; the likely short- to medium-term positive labor market impact of the remarkable export performance; rising remittances; and, finally, a brightening external environment. Given sizeable and still growing nonperforming loans and cross-border deleveraging of foreign banks, a pick-up of credit growth is not yet in sight, preventing private consumption from firming faster. Adverse private sector credit dynamics also act as a drag on gross fixed capital formation. Raising the absorption of EU funds is still an issue under the IMF/EU support program, which will hopefully bear fruit in the next two years. Euro area recovery will help to lift FDI inflows, which have been very low in recent years. Thus, assuming that efforts to increase the absorption of EU funds ultimately prove successful and that the external environment improves, we expect

Romania: Only slow and gradual strengthening of domestic demand on the horizon

positive and increasing growth contributions to come from gross fixed capital formation in 2014 and 2015.

Though we expect domestic demand to strengthen and export growth to remain strong, we do not forecast growth to accelerate next year, as imports will bounce back and as 2013 agricultural output might be difficult to top. Resurging import demand will push the contribution of net exports into slightly negative territory. GDP growth will accelerate moderately in 2015, as external conditions are expected to improve further and as the credit cycle might turn around.

### **3 Russia: Modest Recovery Expected**

Due to the unexpectedly sharp slowdown of economic activity in Russia in the first half of 2013, we have adjusted our GDP growth forecast for the whole year to below 2%. Russian growth is seen to recover to above 3% in 2014 and 2015 as the global economic recovery proceeds. Accordingly, Russian import expansion will rise slightly to 6% in 2015.

We expect Russian GDP growth (which had declined to below 1.5% in the January to June 2013 period) to pick up in the second half of 2013 as global business activity revives, resulting in an annual growth rate of 1.8%. This acceleration is supported by an anticipated bountiful 2013 grain harvest. The continuing global recovery should help lift Russian annual GDP growth to above 3% in 2014 and 2015. As world trade regains momentum, Russia's export volume should gradually increase and the weak patch in fixed capital investment should come to an end. However, Russian growth should be restrained somewhat by a slight decline in the oil price over the forecast period. The Russian import expansion should pick up a bit from 4% in 2013 to 6% in 2015 on the back of the revival of the economy. Another factor supporting a modest pick-up of import growth is the expected limited appreciation of the REER (real effective exchange rate) of the ruble, given that Russia's inflation rate should remain higher than the inflation rates of its main trading partners, although the difference may narrow.

Although export growth will revive, it will remain modest due to oil extraction constraints and a slight deterioration in the outlook for energy exports, given the challenges posed by the shale gas boom in some countries and the expansion of liquefied natural gas deliveries. Growth in private consumption should remain fairly brisk, even if the rise of household incomes will likely lose some momentum, as the room for granting wage hikes has narrowed, taking into account the downward slope in corporate profitability and the government's plans to curb public-sector wage and pension increases in the coming years. On the other hand, the expected gradual decline of inflation should slightly boost household purchasing power. Retail credit expansion, while remaining robust in 2014, may decelerate.

Growth of gross fixed capital formation should recover because production capacity utilization remains close to its precrisis levels and because the state plans to launch a number of large-scale transportation infrastructure projects that may start to have an impact in 2014. The increase in overall state spending will slow down, though, as growth in state revenues has decreased and the goal, in accordance with the new oil price-oriented fiscal rule, is to keep the budget deficit small.

Over time, Russia's economic expansion will gradually head toward its long-term trend if the oil price does not rise. Our calculated long-term trend has moved to a distinctly lower level since the 2009 recession. The trend growth rate is now

assessed at around 2% unless Russia steps up its efforts to improve its business climate and draw in more investment.

Risks to the Russia forecast are also tilted predominantly to the downside on account of both domestic and international factors. A delay – or rather an interruption – of the global recovery would have a severely negative impact on the Russian economy. Likewise, a fall in the oil price due to intensified shale gas exploitation and higher liquefied natural gas deliveries would constrain growth in Russia. Domestic risks arise from a slowdown in the growth of household incomes and state expenditure exceeding our predictions.



Studies

# Economic Spillovers from the Euro Area to the CESEE Region via the Financial Channel: A GVAR Approach

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*In this paper we examine the spillovers of a shock to real output in the euro area to Central, Eastern and Southeastern Europe (CESEE) and its subregions Central Europe, Southeastern Europe, Russia, and the other members of the Commonwealth of Independent States (CIS). To this effect, we apply a global vector autoregressive (GVAR) model and go beyond existing work by examining the relative importance of the financial channel compared with the trade channel. Moreover, we assume that shocks spill over from the euro area to the CESEE region via the financial channel whereas financial spillovers within CESEE are negligible (except for spillovers between Russia and the other CESEE countries, which we do capture). Our results are as follows: We find spillovers transmitted via the trade channel to be larger than spillovers via the financial channel for Southeastern Europe, but smaller for Russia and the other CIS countries. For Central Europe, the two channels have a broadly similar impact. When we assess the relative importance of the two channels based on how well they explain historical movements in the data we see that spillovers via the two channels have indeed been of equal importance for Central Europe. However, the financial channel has traditionally dominated the trade channel in Southeastern Europe, whereas the trade channel has traditionally played a stronger role for the CIS region. Overall spillovers reflecting both transmission channels are comparatively more moderate for Central Europe and Russia, while they are a bit larger for Southeastern Europe and considerably higher for the CIS region excluding Russia: The long-run effect of a +1% euro area output shock ranges from 0.3% in Central Europe and Russia to 0.7% in the other CIS countries.*

*JEL classification: C32, F44, E32, O54*

*Keywords: Financial shocks, international shock transmission, GVAR, CESEE*

Central, Eastern and Southeastern Europe is strongly integrated with the euro area. Reaping the benefits of comparative advantages in production and in capital allocation, both trade links and financial ties have intensified over the past two decades. At the same time, the global financial crisis of 2007–2009 and the ensuing sovereign debt crisis in Europe have demonstrated the downside of the region's strong exposure to the euro area. After the collapse of Lehman, the crisis spilled over to emerging Europe, which had remained largely unaffected during the early stages of the financial crisis. A thorough understanding of how the CESEE region is exposed to fluctuations in euro area output and how the resulting spillovers are likely to work is thus very important for an adequate assessment of the region's economic prospects.

Shocks in one market can propagate to other markets through a number of channels. Pritsker (2001) identifies and categorizes five channels through which real shocks spread from one country to another: (i) real linkages, (ii) a common lender, (iii) financial markets, (iv) financial institutions and (v) the interaction of financial institutions and markets. As Pritsker stresses, it is perfectly rational that shocks would spread through any of these channels. While shocks can proliferate on the back of financial market irrationality, Pritsker hence interprets economists'

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limited success in explaining crisis propagation as evidence that more channels for propagation need to be theoretically modeled and empirically tested. However, empirical tests in particular are quite a challenge due to the very limited availability of data on channels other than real economy linkages.

It is thus not surprising that the empirical literature on economic spillovers to the CESEE region is rather limited. Two recent additions to the literature are EBRD and IMF policy notes assessing the dependence of Eastern Europe on fluctuations in real output in the euro area. In its latest Transition Report, the EBRD (2012) finds the business cycle of various CESEE economies plus Russia and Ukraine to be strongly correlated with that of the euro area. Country-by-country vector autoregressions (VARs) estimated by the EBRD to assess the response of individual CESEE economies to a shock to real GDP in the euro area revealed the Baltic states, Ukraine, Armenia and Romania to be particularly closely linked to GDP growth dynamics in the euro area.

The aggregate vulnerability of the CESEE region to shocks emanating from Western Europe<sup>1</sup> has been assessed in a Spillover Report produced by the IMF (2012). While distinguishing spillovers transmitted via the trade channel from spillovers through the financial channel, the IMF points out that the two channels typically interact; after all, a tightening in credit, for example, is likely to cut demand for imports and thus is soon felt in trade flows. The IMF's trade channel analysis is based on elasticities of import demand of CESEE countries to output shocks emanating from Western Europe. In a next step, the IMF uses historical trade shares to calculate the impact of the output shock on trading partners' exports. The results imply that a 1% decrease in GDP in Western Europe translates into a 0.4% drag on real output in the CESEE region on average. Analyzing the potential outcome of smaller cross-border credit flows from Western Europe to the CESEE region, the IMF finds a 1% decrease in cross-border credit to dampen real output by 0.3%. As this shock is assumed to originate in the financial sector rather than the real economy, it can be interpreted as a financial shock rather than a real shock transmitted via the financial channel. Finally, the analysis is complemented by an econometric investigation based on a VAR model, which is unable to distinguish between different transmission channels. The results indicate that a shock to Western European GDP fully feeds through to the economies of the CESEE region. That is, the impact is generally felt one to one.

While assessing spillovers from the West to the East, both the EBRD and the IMF only regard first-round effects given the model framework they use. In other words, knock-on effects resulting from first-round outcomes in other countries are implicitly assumed to be zero, and therefore the role of economies that may function as "gatekeepers" passing on stress from the global economy to the CESEE region is not adequately captured. Feldkircher (2013) overcomes these problems by putting forward a global VAR (GVAR) model for the CESEE region. In general, one of the primary objectives of GVAR approaches is to model the transmission of external shocks, taking into account bilateral economic linkages within the global economy. Feldkircher covers the first channel discussed in Pritsker (2001) – contagion via real linkages – and models the transmission of shocks by means of

<sup>1</sup> The IMF takes a broad definition of Western Europe that extends the euro area by six Western European advanced economies.

bilateral trade flows. According to his results, the CESEE region shows a positive and qualitatively similar response to an economic expansion in the euro area and the U.S. economy. An increase in euro area short-term interest rates dampens real output throughout the region. The same holds true for a positive oil price shock, except for Russia and – to some extent – the other countries of the CIS region.

While Feldkircher (2013) focuses on spillovers transmitted via the trade channel and Galesi and Sgherri (2009) model the financial channel using bilateral bank lending exposures, in this paper we contribute to the existing literature by considering the financial channel jointly with the trade channel. We collect bilateral financial data that comprise at least three countries/regions that are potentially important sources or transmitters (“gatekeepers”) of shocks for the CESEE region: the euro area, the United States and Russia. In particular, we assess the consequences of a positive output shock in the euro area to the real economy of the CESEE region. To put our results into context, we contrast them with the traditionally employed spillovers via the trade channel. Furthermore, we assess for each country in the region the relative importance of the two channels based on how well they can explain historical movements in the data. Finally, we calculate an “overall” effect that comprises financial and trade spillovers and present the results for the region.

The paper is structured as follows: Section 1 outlines the econometric framework and section 2 introduces the data. Section 3 examines the transmission of a euro area output shock to the focus region, and section 4 concludes.

## 1 Empirical Approach – The GVAR Model

The global vector autoregressive (GVAR) model is an empirical model that captures economic and financial interdependencies in the global economy. The GVAR model has been successfully employed to study the propagation of macroeconomic shocks (see e.g. Dees et al., 2007; Pesaran et al., 2004 and 2007) and financial stress (Chudik and Fratzscher, 2011; Galesi and Sgherri, 2009). The remainder of this section sets out the key elements of the GVAR framework; a more detailed account of the model can be found in Feldkircher (2013).

The model comprises *two layers* that account for cross-sectional linkages among the economies. First, there are  $N$  country-specific submodels, each of which comprises domestic ( $y_t$ ), foreign ( $x_t$ ) and global/deterministic ( $d_t$ ) variables that are not determined within the model. Since macroeconomic time series predominantly share common stochastic trends, these country models are typically specified in vector error correction form. For a particular country  $j$ , and  $z_t=(y_t, x_t)$  comprising the data, the following system of equations is estimated:

$$\Delta z_t = c_0 + c_1 t + \Pi z_{t-1} + \sum_{i=1}^{p-1} \Gamma_{y,i} \Delta y_{t-i} + \sum_{i=0}^{q-1} \Gamma_{x,i} \Delta x_{t-i} + \sum_{i=0}^{lex-1} \Psi_i \Delta d_{t-i} + u_t \quad (1)$$

with  $u_t \sim N(0, \Sigma_u)$ . For each country  $i$ , foreign (weakly exogenous) variables are constructed as a cross-country weighted average:  $x_t^i = \sum_{j \neq i} w_{ij} y_t^j$ , with  $w_{ij} \geq 0$ ;  $w_{ii} = 0$ ;  $\sum_{j=1}^N w_{ij} = 1$ . The weights  $w_{ij} \in W_b$  represent economic ties between countries. The coefficients attached to the set of foreign variables indicate how the economy depends on movements of variables related to macroeconomic developments abroad. Note that both weakly exogenous and exogenous variables enter equation (1)

both contemporaneously and in lagged form for  $q, lex > 1$ . Finally, each country model contains a trend and/or intercept term.

In the *second layer* of the GVAR framework, the  $N$  single-country models are re-written into their VAR representation and then linked to yield a global macro model. For that purpose we have to introduce a spillover/link matrix that need not necessarily contain the same weights as  $W_b$  above. More specifically,  $W_{global}^i$  is a  $K_i \times K$  matrix, with  $K_i$  being the sum of endogenous and weakly exogenous variables in country model  $i$  and  $K = \sum_{i=1}^N K_i$  being the total number of endogenous and weakly exogenous variables in the system. We can now link the models by making use of the fact that

$$z_t^i = \begin{pmatrix} y_t^i \\ x_t^i \end{pmatrix} = W_{global}^i \begin{pmatrix} y_t^1 \\ \vdots \\ y_t^N \end{pmatrix} = W_{global}^i y_t.$$

Consequently, the stacked model is given by:

$$Gy_t = c_0 + c_1 t + \sum_{k=1}^P H_k y_{t-k} + \sum_{k=1}^L Y_k d_{t-k} + u_t \quad (2)$$

with  $H$  and  $\square$  containing the stacked coefficient matrices from the single countries,  $P = \max(p_i, q_i)$ ,  $L = \max(lex_i)$  and  $G$  containing the stacked weighted coefficients, i.e.  $G^i = (I, -A_x) z^i W_{global}^i$ . Since the square matrix  $G$  is nonsingular, equation (2) can be left-multiplied by  $G^{-1}$  to finally yield the GVAR model:

$$y_t = \tilde{c}_0 + \tilde{c}_1 t + \sum_{k=1}^r \tilde{H}_k y_{t-k} + \sum_{k=0}^p \tilde{Y}_k \Delta d_{t-k} + \tilde{u}_t \quad (3)$$

The GVAR framework requires weights to be specified at two instances, as outlined above:  $W_b$  is used to construct the set of foreign variables, which in turn yields coefficients that reflect how the domestic economy reacts to movements in foreign variables. By contrast,  $W_{global}$  governs the propagation or distribution of external shocks through the system. This is in line with the recent GVAR literature (e.g. Cesa-Bianchi et al., 2012) which explicitly distinguishes between  $W_{global}$  and  $W_b$ . The particular settings we employ will be described in more detail in the next section.

## 2 The Dataset and the Challenge of Capturing Financial Linkages

We have collected data on  $N=39$  economies, including the euro area (EA)<sup>2</sup> as a regional aggregate. The country coverage and the country groups are displayed in table 1 below:

The inclusion of European emerging economies limits the time span of the analysis to the period following the initial phase of transition to market-based economies. We thus have quarterly data from the first quarter of 1995 to the fourth quarter of 2011, or 68 quarterly observations per variable. We include the

<sup>2</sup> Note that the country composition on which data for the euro area are based changes over time. That is, while historical time series are based on data for the 11 original Member States, the most recent data are based on 17 countries. We nevertheless report separate results for Slovenia and Slovakia since we are also interested in emerging Europe. Our results are qualitatively unchanged if we use a consistent set of 14 euro area states rather than the rolling country composition of the euro area throughout the sample period, as the relative economic size of the three excluded countries (Slovenia, Slovakia and Estonia) is quite small.

Table 1

### Country Coverage and Regional Groupings

- 1) CZ, HU, PL, SK, SI (CEE)
- 2) BG, RO, HR (SEE)
- 3) RU
- 4) UA, BY, KG, MN, GE (other CIS and Mongolia)
- 5) JP\*, IN\*, KR\*, PH, SG, TH, ID, CN (Asia)
- 6) BR\*, AR, CL\*, MX\*, PE (Latin America)
- 7) EA\*, US, UK\*, CA\*, AU\*, NZ, CH\*, NO, SE\*, DK\*, IS, TR\* (RoW)

Source: Authors' compilation.

Note: \* BIS reporting countries.

following five domestic variables: real GDP ( $y$ ), inflation ( $Dp$ ), the nominal exchange rate vis-à-vis the U.S. dollar deflated by national price levels ( $rer$ ), short-term interest rates ( $stir$ ) and long-term interest rates ( $ltir$ ). Among the variables, only real GDP, inflation and the real exchange rate are available for all 39 economies. In particular, long-term interest rates are often not available for emerging economies. The set of domestic variables is complemented by oil prices.<sup>3</sup>

Given the regional focus of our study and considering that our empirical approach requires data on bilateral linkages, i.e. data for country pairs, the locational international banking statistics compiled and published by the Bank for International Settlements (BIS) appear to be the most suitable dataset available to capture the financial contagion channel. We therefore use these data to construct the spillover matrix. The locational statistics capture information about the currency, sectoral and geographical composition of banks' balance sheets (see BIS, 2013). They display outstanding assets and liabilities of banking offices located in BIS reporting countries, including positions between related offices (for a list of BIS reporting banks see BIS, 2013).<sup>4</sup> The statistics are reported to the BIS at a country rather than individual bank level. Central banks collect data from the banks in their jurisdiction and compile national aggregates on the basis of which the BIS calculates global aggregates. The BIS aggregates are published on a quarterly basis with a lag of close to four months.

While the BIS locational statistics are, in our view, the best choice for capturing financial interlinkages across countries in our sample, they are still not a perfect data source for our purpose. In fact, they pose a couple of challenges. First, with a view to modeling the financial contagion channel we are interested primarily in the mutual exposure of the banking sectors. However, the locational statistics provide information only about outstanding positions of banks in reporting country  $A$  vis-à-vis all sectors in country  $B$  as well as vis-à-vis the nonbanking sector in country  $B$ . In other words, there are no direct statistics indicating the positions of country  $A$  outstanding vis-à-vis the banking sector in country  $B$ . We therefore approximate these data implicitly by subtracting the positions vis-à-vis the nonbanking sector from the total figures for the whole economy.

The second challenge relates to the fact that out of the 39 economies in our sample only 15 are BIS reporting countries (marked with an asterisk in table 1). Hence, in our 39 by 39 matrix capturing bilateral financial interlinkages we are able to fill only some 40% of the cells with primary BIS data. As this would not be

<sup>3</sup> To keep the model small we excluded foreign inflation as a further control variable. This can be further argued by the fact that the empirical cross-country correlation of inflation is much smaller than for the other variables employed.

<sup>4</sup> This is in contrast to the other BIS banking statistics concept, the so-called consolidated banking statistics capturing the worldwide consolidated claims of banks headquartered in the BIS reporting countries, including claims of their own foreign affiliates but excluding positions between related offices.

enough to conduct a meaningful contagion analysis we apply two gimmicks to close major gaps in our connectivity matrix. First, we make the assumption that the liabilities (assets) of the banking sector in a reporting country  $A$  vis-à-vis the banking sector in a nonreporting country  $B$  correspond to the assets (liabilities) of  $B$ 's banking sector toward  $A$ 's banking sector. To give a concrete example, the liabilities of Australian banks toward the banking sector in the Czech Republic are assumed to correspond to the assets that the Czech banking sector holds in Australia. We are aware that this is not a perfect approximation for various reasons.<sup>5</sup> However, for the BIS reporting countries the correlation between these series ranges from 60% to 95%, which makes us sufficiently confident that this is a justifiable approach also for the nonreporting countries.

By applying this assumption we can fill up to 62% of the cells in our interlinkages matrix. More importantly though, this gives us a fairly good picture of banking sector exposures between countries in Central Europe (CEE), Southeastern Europe (SEE) and the CIS region on the one hand and all major economies on the other as well as among major global economies (i.e. the BIS reporting countries).

This leaves us with the problem that there is one country not covered by the BIS data which plays an important role for financial markets in several emerging European economies, namely Russia. Hence, a meaningful contagion analysis needs to take into account also financial interdependencies with this important financial hub. Fortunately, the Central Bank of the Russian Federation (CBR) collects data on foreign assets and liabilities of the Russian banking sector which are comparable with the locational statistics of the BIS (even if the CBR does not report these data to the BIS). Hence, we use these data for Russia in our interlinkages matrix and again apply the symmetry assumption laid out above so that we end up with about two-thirds of the cells of the matrix capturing financial linkages across our country set filled. The remaining gaps are set to 0, which seems a plausible approach for the remaining country pairs. This allows us to trace the propagation of shocks from BIS reporting countries (e.g. the euro area) to Eastern Europe, assuming that financial linkages within CESEE (apart from links between Russia and the other countries of the region) are negligible.<sup>6</sup>

The quarterly data compiled by the CBR are available from 2007 onward. We decided to exclude data relating to the financial crisis and its aftermath to construct the matrix  $W_{global}$  which governs the propagation of external shocks through the system. Hence, we compute a normalized matrix of bilateral financial exposures defined as the sum of assets and liabilities of country  $A$  toward country  $B$  for 2007 and 2008. Subsequently we take the average over both years to reduce the volatility of the financial exposures and use these constant values of the entire period from 1995 to 2011. As a robustness check we add the data for the crisis year 2009 to our analysis (i.e. we average both BIS and CBR bank exposure data over 2007–2009).

To construct the foreign variables using the matrix  $W_b$  we follow Eickmeier and Ng (2011) and use trade weights for foreign variables related to the real economy ( $y^*$ ) and financial weights for foreign variables related to the financial side ( $stir^*$ ,  $ltir^*$ ).

<sup>5</sup> For example, while in a reporting country not all banks report to the BIS, their exposure in the locational statistics comprises the entire banking sector (including small banks and the central bank) in the counterparty country.

<sup>6</sup> We are not aware of any evidence that would conflict with this assumption. In particular, banks headquartered in other CESEE countries than Russia usually do not use major funding from banks of other CESEE countries, and also ownership links among these banks are rather the exception (OTP Bank) than the rule.

While the trade weights, which are available on an annual basis, are time-varying to keep track with the shift of power in the global economy induced by the steady rise of emerging economies (see e.g. Feldkircher and Korhonen, 2014), we use the average financial flows in 2007 and 2008 to construct the foreign financial variables for data availability reasons. To benchmark our results, we use the standard model that employs trade flows to construct the foreign variables ( $W_b$ ) as well as to govern the propagation of shocks ( $W_{global}$ ).

### 3 Spillovers to the CESEE Region – Empirical Results

Both trade and financial interlinkages between the CESEE region and the euro area have significantly intensified over the last two decades: During the timespan of our analysis from 1995 to 2011, trade with the euro area almost doubled in CEE, relative to output in CEE countries, rising from 35% to 63% of the combined GDP of CEE economies. For SEE, the respective share increased from 29% to almost 40% during the same time period. Russia and Ukraine reported comparatively smaller increases, to about 15% and 16%, respectively, in 2011. As for financial linkages, the exposure of BIS reporting banks from the euro area to CEE (on a locational basis) rose from about 6% to almost 25% of the combined GDP of CEE countries, and that to SEE from about 6% to more than 35% of their combined GDP. For Ukraine, in turn, it increased from about 3% to almost 10% of GDP. Russia is an outlier; while its exposure doubled in nominal euro terms during the same time period, it fell relative to Russian GDP due to the strong rise in Russian GDP (measured in EUR at market exchange rates). The exposure of BIS reporting banks from the euro area to CEE on a consolidated basis rose even more strongly over the same time period, from about 5% to almost 50% of GDP in CEE, and from about 6% to around 75% of GDP in SEE. For Ukraine, in turn, it increased from about 3% to almost 19% of GDP. The exposure vis-à-vis Russia tripled in nominal euro terms during the same time period, but fell as a share of Russian GDP. The increase in exposure went hand in hand with euro area banks acquiring large parts of banking sectors in CESEE: From 1995 to 2011, the share of foreign-owned banks in the banking sectors (total assets) rose from about 15% in CEE and SEE to around two-thirds and four-fifths, respectively. Most of the foreign owners (on average above 80%) are financial institutions from the euro area. In Russia, this share increased from 3% to 17%, in Ukraine from 8% to 38%.

Given increasing economic linkages between the euro area and the CESEE region, we are interested in the response of the real economy in the CESEE region to shocks in the euro area. Specifically, we analyze the impact of a +1% shock to euro area real GDP on CEE, SEE, CIS, and Russia as depicted in table 1. We follow the bulk of the literature in employing the generalized impulse response function (GIRF, see Pesaran and Shin, 1998), which is not sensitive to the ordering of the variables in the country models – in contrast to the standard VAR analysis. This benefit comes at the cost of having non-orthogonalized impulse responses, i.e. the shocks cannot be interpreted in a structural way. Yet our focus is on the *propagation* of a foreign shock through different channels, *not on the structural identification* of the original cause of the shock. Finally, the econometric framework we use implies linear and symmetric impulse response functions. That is, the results for a –1% shock are simply the mirror image of the results presented in the remainder of this study.

The impact of the +1% euro area output shock on CESEE and – for comparison – the impact on the euro area itself as well as on the U.S.A. and the U.K. is shown in charts 1 and 2. Each graph displays the response of real output to a shock that was transmitted (a) through the trade channel and (b) through the financial channel. Depending on the country, the effect might vary considerably.<sup>7</sup> Advanced economies, such as the U.S.A, the U.K. and the euro area, react more strongly if the shock is assumed to spread via the trade channel. The difference between the two channels is more pronounced for the U.S.A. and the U.K. than for the euro area, with the long-run impact on real output transmitted through the trade channel amounting to 0.6% (U.S.A.) and 0.7% (U.K.), compared with a more moderate impact of 0.2% and 0.3%, respectively, attributable to the financial channel. For the euro area, the response to shocks transmitted through the financial channel (0.5%) and through the trade channel (0.7%) is more balanced.

To present our results in an easily accessible way, we aggregated the country-specific responses of the smaller and middle-sized countries provided by the GVAR analysis for CEE, SEE and CIS using purchasing power parity-based GDP weights. The results for Russia are displayed separately, since this country would otherwise clearly dominate the aggregated results of the CIS subregion on account of its size. Ukraine is a borderline case, given that it has a considerable weight in the CIS grouping. We opted to keep Ukraine within this grouping to avoid an excess of detail in exhibiting our findings.

Let us first focus on the results for the two channels displayed by the triangles and crosses in charts 1 and 2. As regards the CEE region, we see that both channels result in a long-run response of about 0.3% to a 1% output shock in the euro area. This is contrasted by results for countries in the SEE region, which are more heavily affected on average by spillovers spreading through the trade channel (0.5%) than by spillovers spreading through the financial channel (0.3%). A different picture arises for the CIS region and Russia, with long-run responses through the financial channel of, respectively, 0.8% and 0.9%. For the CIS aggregate, the response via trade spillovers amounts to 0.6%, and for Russia it amounts to 0.1%.

When comparing these results it should be noted that countries are not solely linked via the connectivity matrix but also through elasticities to foreign variables featuring in the country models. That is, notwithstanding the strong financial ties between the euro area and the CEE region, these ties do not warrant the conclusion that the spillovers to the CEE region should be larger than the spillovers to other parts of the world. Indeed, the countries in the CIS region show a stronger response to the financial channel than the CEE region. This finding can, at least partially, be explained by historically larger interest rate elasticities for CIS countries, which amplify the effect for the financial channel through the calculation of financially weighted foreign short-term interest rates.

Finally, we assess the overall transmission of a shock emanating from the euro area to the focus regions, as reflected by the solid dots in charts 1 and 2. While the previous analysis separated the two channels, they (and possibly others, not operationalized here) are likely to be at work simultaneously and mutually

<sup>7</sup> We also calculated bootstrapped confidence bounds. These are – owing to the short data span – quite large, which is not uncommon in GVAR applications (see, e.g., Galesi and Lombardi, 2009, Galesi and Sgherri, 2011). Nevertheless, the 68% bounds revealed significant impulse response functions for the trade model, while this was, though only marginally, not the case for the financial model.

reinforcing (see the IMF's Spillover Report, 2012). Ideally one would therefore want to endogenize the channels (i.e. to have them determined within the model). Such an approach would, however, be beyond the scope of this paper. To broadly indicate the total effect of the two channels, we thus opted for another, more straightforward strategy: We calculated the country models' AIC criterion, which is a measure of fit including a penalty for model size under both the benchmark model, which is solely based on trade flows, and the one which allows for financial spillovers. Following Wagenmakers and Farrell (2004) we are then able to construct AIC-based weights for the two channels resembling their country-specific relative importance.

In line with our expectations, country specifics seem to play an important role: spillovers via the trade channel clearly outplay those of the financial channel for the U.S.A., while the opposite is the case for the U.K., which is, after all, known for its large financial industry. By contrast, the results for the euro area are more balanced. The same applies for the CEE region, although, as mentioned above, the difference between the two transmission channels for the region is only marginal. For the CIS region and Russia, our model indicates a predominance of the trade channel over the financial channel. That is, although the magnitudes for the financial spillovers are larger than those for trade spillovers, historical movements in the country variables can be better explained by the model that solely relies on trade flows to approximate economic ties between the countries. This finding can be explained with the fact that some of the countries in the region are large commodity exporters (e.g. Russia and Ukraine) and thus more dependent on foreign shocks emanating from their trading partners. In the SEE region, the financial channel dominates the trade channel, which could be due to the comparatively smaller export base of SEE countries (relative to that of the CEE countries).

Financial data tend to be volatile. However, as mentioned, our assumption is that the relative exposure between countries is more stable, given that it is a (typically slowly moving) stock variable. To examine this assumption in more detail, we added data for the crisis year 2009 to carry out a robustness check. More specifically, the financial weights reflect averages over the period from 2007 to 2009. We find the correlation between the impulse responses computed using weights based on 2007–2008 data and the impulse responses computed using weights based on 2007–2009 data to be very high ( $>0.98$ ) for all countries. This implies that the shape of the response is virtually independent from the weights chosen to proxy financial ties. On top of that, the responses are also very similar in size. The mean of the average deviation of the responses between weights based on 2007–2008 averages versus 2007–2009 averages is 0.007 (in absolute terms) and the standard deviation thereof is 0.04. Our results are thus qualitatively unchanged when we approximate financial ties computed over this alternative time horizon.

#### 4 Conclusions

In this paper we examine how GDP in the CESEE region (Central Europe, South-eastern Europe, Turkey, Russia, other CIS countries) reacts to an output shock emanating from the euro area. We contrast the standard empirical spillover literature that focuses on trade-related contagion by assessing spillovers via the financial

channel. Our interest is primarily in spillovers from the euro area to emerging Europe. We use locational international banking statistics from the BIS (as well as comparable data from the Central Bank of Russia) to capture financial interlinkages, while assuming that financial linkages within CESEE (apart from links between Russia and the other countries of the region) are negligible. Finally we propose a way to examine the likely overall impact of the foreign shock, assuming that both channels are at work, and examine their relative importance.

Our results are as follows: First, the *overall effect* of the euro area expansion translates into a long-run increase in real output in the euro area itself, the U.S.A. and the U.K. While the responses are broadly similar in size in the euro area and the U.S.A., they are about half as large in the U.K. Second, the results for emerging Europe reveal that overall spillovers are stronger for countries in the CIS region (excluding Russia), while they are smaller for SEE, for CEE and for Russia. The pronounced response of the CIS region, however, is to a good extent driven by the strong reaction of the Ukrainian economy, a finding that is well in line with EBRD (2012).

In addition, we assess the relative importance of the trade and the financial channel in transmitting shocks to the region. In the euro area itself we find the response to the 1% GDP shock to be nearly equally spread between both transmission channels. The same holds true for the CEE region, which can be taken as evidence for the strong (trade and financial) integration of the two regions. In the U.S.A., where the response is broadly similar in size, the trade channel outplays the financial channel, while the opposite applies for the U.K. given its traditionally strong financial sector. In turn, the trade channel also dominates the financial channel in the CIS region and Russia, reflecting the fact that the majority of the CIS countries are large commodity exporters. Finally, in the SEE region the financial channel dominates the trade channel on average.

In terms of policy implications, we want to highlight the following points: First, spillovers of shocks to output in the euro area to the CESEE region are rather sizeable. Therefore, policymakers seeking to limit fluctuations around trend growth need to be aware of the possible magnitude of these spillovers in order to design appropriate policies. In the event of negative output shocks, effective shock absorption capacities, i.e. adequate buffers to cushion economies against such shocks and market flexibility to facilitate the adjustment to such shocks are essential. Second, the transmission of shocks via the financial channel deserves due attention. While financial integration in Europe has brought notable benefits for the CESEE region in terms of know-how transfer and the funding of the catching-up process, it also has a dark side, in particular if and when the cost of this funding is mispriced, not adequately capturing the risks involved, or when capital buffers of financial institutions are insufficient. Financial regulation and supervisory policies need to address such instances of mispricing or inadequate capitalization so as to avoid financial boom-bust cycles. More specifically, policymakers need to put in place effective tools to be able to cope with excessive credit growth during boom times (including analytical tools to diagnose such events of overly high credit expansion in real time). They must also have the courage to use these policy instruments in a timely and sufficient manner to rein in credit dynamics when needed. With the creation of the Single Supervisory Mechanism (SSM), the Governing Council of the ECB will receive a macroprudential mandate

for euro area countries and for the other EU countries participating in the SSM, jointly with the respective national authorities. This supranational layer will help to make sure that macroprudential challenges in these countries are appropriately addressed. For the other countries, further improvements in home-host cooperation are key, not only but especially so in crisis times so as to prevent a disorderly reduction of foreign exposures of financial institutions vis-à-vis these economies from further aggravating downturns.

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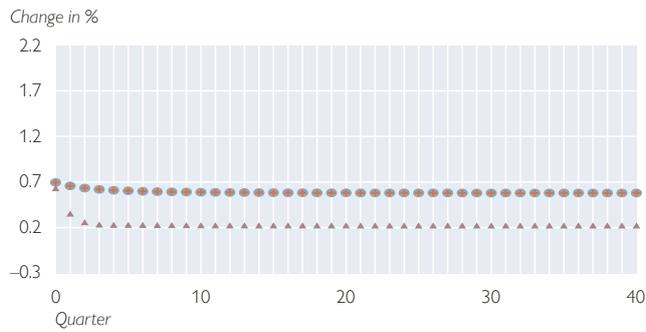
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## Annex A – Tables and Figures

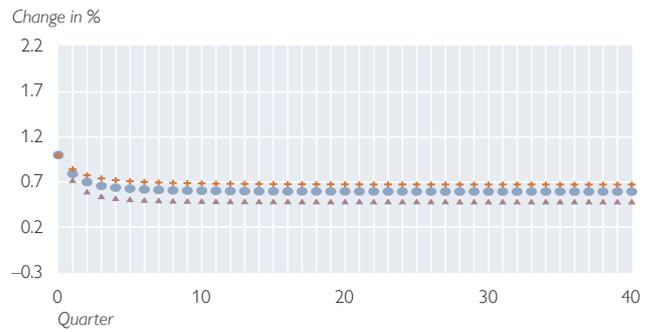
Chart A1

### Response of Output to a +1% Shock to Euro Area Output

#### United States



#### Euro Area



#### United Kingdom

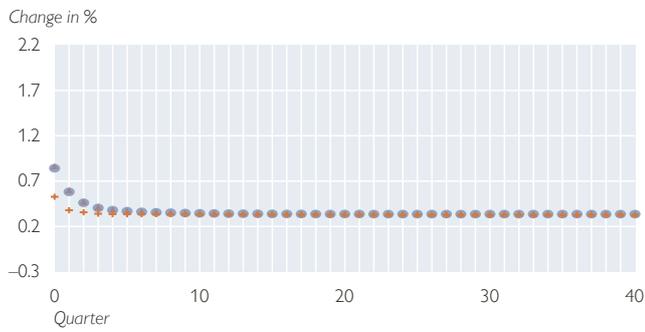


Source: Authors' calculations.

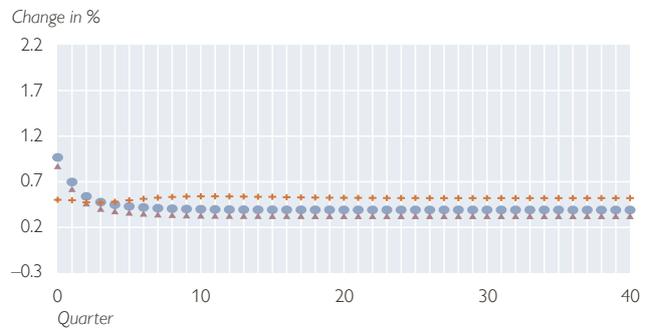
Note: Response of real output to a +1% shock to real output in the euro area. Regional aggregates based on purchasing power parities and defined as in table 1. "Trade" results based on the model that approximates interlinkages based on trade flows, "Financial" results based on financial flows; "Overall" refers to the AIC-based weighted average of those two. For the U.S.A., the overall impulse response function tends to coincide with the one based on trade weights.

### Response of Output to a +1% Shock to Euro Area Output

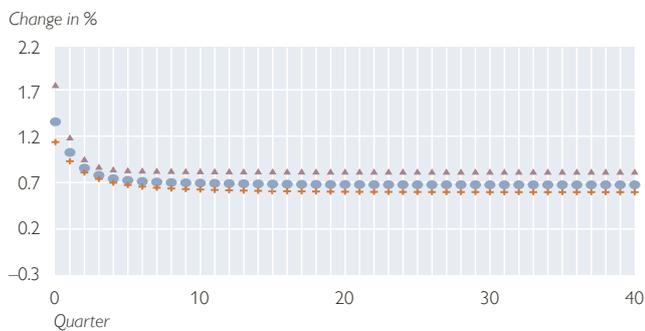
#### CEE



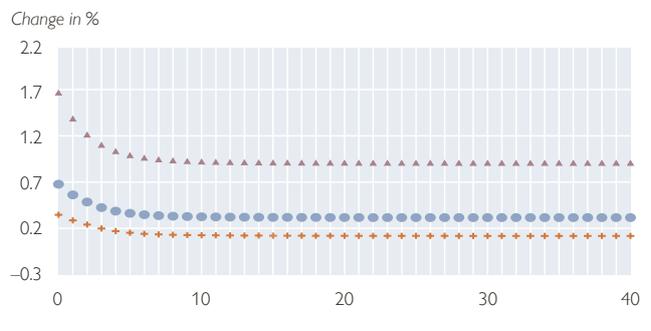
#### SEE



#### CIS



#### Russia



● Overall    ▲ Financial    + Trade

Source: Authors' calculations.

Note: Response of real output to a +1% shock to real output in the euro area. Regional aggregates based on purchasing power parities and defined as in table 1. "Trade" results based on the model that approximates interlinkages based on trade flows; "Financial" results based on financial flows; "Overall" refers to the AIC-based weighted average of those two. For the CEE region, the overall, financial and trade impulse responses tend to coincide.

## Annex B – Model Specification

The specification of the country models for both spillover channels are listed in table A1. We tested for the number of cointegration relationships for each submodel using a nested likelihood-ratio (LR) test that is based on the eigenvalues derived from the reduced rank regressions of the country models (see e.g. Pesaran et al., 2004). Following Cesa-Bianchi et al. (2012), we reduce the number of long-run relationships based on the persistence profiles. That is, we perturb the long-run relationships and examine how long it takes for the economy to restore the equilibrium. Cointegration ranks are reduced as long as all long-run relationships converge within 10 to 15 quarters. Deterministic trend and intercept components are tested for by means of a likelihood-ratio test. Following Juselius (2006) we can distinguish four cases: case I is a zero intercept, zero trend model; case II a restricted intercept, zero trend model; case III an unrestricted intercept, zero trend model; and case IV is an unrestricted intercept restricted trend model. We introduced dummy variables to control for extraordinary high interest rates in Turkey (Q4 2000 to Q1 2001), Russia (Q1 1995 to Q3 1995, and Q3 1998), Romania (Q4 1996 to Q3 1997, and Q3 1998 to Q2 1999) and the Czech Republic (Q1 1997 to Q2 1997). For the model using financial variables we had to adjust the specification for Romania by reducing the cointegration rank to 1 and modifying the intercept/trend specification to case IV in order to get a stable country model.

We carried out two diagnostic tests for both the financial and the trade model. First, we test whether it is appropriate to treat the foreign variables as weakly exogenous by means of an F-test (see, e.g., Dees et al., 2007). At the 1% significance level this holds also true for the major economies, the U.S.A. and the euro area, as well as rising emerging economies, such as China, India and Brazil. Out of 153 test statistics, only 6 (18) are significant at the 1% level for the trade (financial) model. Second, we test for first order-serial autocorrelation in the country models. At the 1% level 151 (152) equations pass the F-test out of the 171 equations in the system.

Table A1

**Model Specification**

Country	Domestic variables	Foreign variables	Cointegration rank	Trend/intercept	AIC weights	
					Trade	Financial
Argentina	y, Dp, rer, stir	y*, stir*, ltir*	2	IV	0.08	0.92
Australia	y, Dp, rer, stir, ltir	y*, stir*, ltir*	2	IV	0.99	0.01
Bulgaria	y, Dp, rer, stir, ltir	y*, stir*, ltir*	2	II	0.01	0.99
Brazil	y, Dp, rer, stir	y*, stir*, ltir*, poil*	1	IV	0.93	0.07
Belarus	y, Dp, rer, stir	y*, stir*, ltir*	3	IV	0.04	0.96
Canada	y, Dp, rer, stir, ltir	y*, stir*, ltir*, poil*	1	I	0.24	0.76
Switzerland	y, Dp, rer, stir, ltir	y*, stir*, ltir*	2	IV	0.09	0.91
Chile	y, Dp, rer	y*, stir*, ltir*	2	II	0.52	0.48
China	y, Dp, rer, stir	y*, stir*, ltir*, poil*	1	IV	0.26	0.74
Czech Rep.	y, Dp, rer, stir	y*, stir*	2	II	0.19	0.81
Denmark	y, Dp, rer, stir, ltir	y*, stir*, ltir*	3	IV	1	0
Euro area	y, Dp, rer, stir, ltir	y*, stir*, ltir*, poil*	1	IV	0.58	0.42
Georgia	y, Dp, rer, stir	y*, stir*, ltir*	3	II	0.45	0.55
Croatia	y, Dp, rer, stir	y*, stir*, ltir*	1	IV	0.82	0.18
Hungary	y, Dp, rer, stir	y*, stir*, ltir*	1	IV	0.1	0.9
Indonesia	y, Dp, rer, stir	y*, stir*, ltir*	1	II	0.34	0.66
India	y, Dp, rer, stir	y*, stir*, ltir*, poil*	1	III	0.25	0.75
Iceland	y, Dp, rer, stir, ltir	y*, stir*, ltir*	3	IV	0.33	0.67
Japan	y, Dp, rer, stir, ltir	y*, stir*, ltir*, poil*	1	III	0.1	0.9
Kyrgyz Rep.	y, Dp, rer, stir	y*, stir*, ltir*	2	II	0.83	0.17
Korea	y, Dp, rer, stir, ltir	y*, stir*, ltir*	1	III	0.92	0.08
Mongolia	y, Dp, rer, stir	y*, stir*, ltir*	2	IV	0.05	0.95
Mexico	y, Dp, rer, stir, ltir	y*, stir*, ltir*, poil*	2	I	0.81	0.19
Norway	y, Dp, rer, stir, ltir	y*, stir*, ltir*, poil*	2	II	0.98	0.02
New Zealand	y, Dp, rer, stir, ltir	y*, stir*, ltir*	2	I	0.84	0.16
Peru	y, Dp, rer, stir	y*, stir*, ltir*	1	IV	0.26	0.74
Philippines	y, Dp, rer, stir	y*, stir*, ltir*	1	IV	0.05	0.95
Poland	y, Dp, rer, stir	y*, stir*, ltir*	2	IV	0.01	0.99
Romania	y, Dp, rer, stir	y*, stir*, ltir*	2	II	0.01	0.99
Russia	y, Dp, rer, stir	y*, stir*, ltir*, poil*	2	II	0.75	0.25
Sweden	y, Dp, rer, stir, ltir	y*, stir*, ltir*	1	IV	0.95	0.05
Singapore	y, Dp, rer, stir	y*, stir*, ltir*	1	I	0.01	0.99
Slovenia	y, Dp, rer, stir	y*, stir*, ltir*	1	IV	0.01	0.99
Slovakia	y, Dp, rer, stir	y*, stir*, ltir*	2	II	0.05	0.95
Thailand	y, Dp, rer, stir, ltir	y*, stir*, ltir*	1	II	0.03	0.97
Turkey	y, Dp, rer, stir	y*, stir*, ltir*	1	II	0.43	0.57
Ukraine	y, Dp, rer, stir	y*, stir*, ltir*	1	III	0.62	0.38
U.K.	y, Dp, rer, stir, ltir	y*, stir*, ltir*	1	IV	0.19	0.81
U.S.A.	y, Dp, stir, ltir, poil	y*, ltir*	1	IV	1	0

Source: Authors' calculations.

Note: y refers to real GDP, Dp to inflation, rer to the real exchange rate vis-à-vis the U.S. dollar, stir (ltir) to short-term (long-term) interest rates and poil to the oil price. The four trend and intercept specifications are described above in the text. For all countries we included one lag of the endogenous, weakly exogenous and exogenous variables.

# Households' Expectations and Macroeconomic Outcomes – Evidence from the Euro Survey

Elisabeth Beckmann,  
Isabella Moder<sup>1</sup>

*Using evidence from the OeNB Euro Survey, we show that households in Central, Eastern and Southeastern Europe (CESEE) are more optimistic about the development of their own financial situation than the development of their national economies. There are significant cross-country differences regarding the level and volatility of expectations; however, since the onset of the financial and economic crisis, the movements of expectations have become more homogeneous within CESEE. Households' expectations about the economy are positively correlated with subsequent GDP and consumption growth. These results indicate that data on expectations could add predictive power to forecasting models for CESEE, especially if observed at a higher frequency and released without large time lags.*

*JEL classification: D14, G01, D12, E21*

*Keywords: Expectations, survey data, Central, Eastern and Southeastern Europe*

Countries in Central, Eastern and Southeastern Europe (CESEE) were among those hit hardest by the global financial crisis, with aggregate real GDP falling by 3.6% in 2009 and recording subdued or negative growth since then. Renewed catching-up after the crisis will depend on the external environment and the development of domestic demand. Therefore, from a policymaker's perspective, it is crucial to know how domestic consumption and investment will develop.<sup>1</sup>

Against this background we explore the question whether consumer expectations in CESEE provide an indication of likely future macroeconomic outcomes. We present unique and comparative evidence for ten CESEE countries revealing how consumers think the financial situation of their respective households and national economies will develop. The data used were collected in the course of the semiannual OeNB Euro Survey of households and cover the period before and after the global financial crisis from fall 2007 to fall 2012. We investigate how consumer expectations developed over this time within each country and across countries. We then turn to the question if and how consumer expectations are related to consumption<sup>2</sup> and GDP growth.

We show that consumer expectations dropped sharply in all CESEE countries during the crisis. In line with evidence from other countries, Euro Survey data show that, on average, consumers in CESEE expect their households' situation to develop more favorably than that of the national economy (we will refer to this phenomenon as “household bias” – see Bovi, 2009). Overall, there are significant differences in the level of economic expectations across countries but since 2009 the movements of expectations have become more homogeneous. Moreover, our descriptive results suggest that there is a relationship between expectations regarding the development of the national economy and macroeconomic outcomes.<sup>3</sup> We find that economic expectations are positively correlated with

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<sup>2</sup> In this paper, we will refer to private consumption simply as “consumption.”

<sup>3</sup> Due to the relatively short time period and the relatively large survey interval we cannot address this in a full-fledged econometric analysis.

future consumption growth in most countries and future GDP growth in all countries. At the same time, expectations regarding the financial situation of the household do not seem to have an impact on macroeconomic outcomes.

The first section below will present a brief overview of the related literature. We then introduce the data and present descriptive results on expectations regarding the financial situation of the household and the development of the national economy. Section 3 relates these expectations to macroeconomic variables, namely private consumption and GDP growth, before we summarize our results and conclude.

## 1 Literature Overview

The global financial crisis has also been a crisis of consumer confidence. Therefore, interest in consumer confidence research has increased.<sup>4</sup> A prominent example of related research is the paper by Akerlof and Shiller (2010), who argue that changes in confidence, fairness, corruption and bad faith may trigger changes in economic expectations and should be taken into account for explaining boom-bust cycles.

Consumer confidence surveys are regularly conducted in all developed economies and in many emerging markets as well as in some developing economies. Results from these surveys have been used for a broad spectrum of research – ranging from studies seeking to improve the forecasting properties of standard macroeconomic models to contributions that focus on identifying whether consumer confidence has a causal impact on macroeconomic outcomes. A further strand of literature seeks to explain the dynamics of how expectations are formed. The majority of empirical papers are based on surveys from the United States; for transition economies the literature is scarce. A recent exception is the contribution by Kuzmanović and Sanfey (2012), who study the forecasting power of consumer expectations for a range of macroeconomic variables in Croatia. They find that consumer expectations help to explain retail turnover and imports. Expectations about forthcoming major purchases and imports have strong predictive power with regard to retail turnover, which in turn is highly correlated with quarterly GDP.

Perhaps one of the most obvious research questions is how consumer expectations affect consumption. It is clear that consumer expectations should determine consumption patterns; however, the direction of their impact is not clear. If consumer confidence reflects precautionary savings motives, it should be negatively correlated with consumption *growth* (Ludvigson, 2004). Following this interpretation, consumer confidence reflects lower (higher) uncertainty about the future, which reduces (increases) the need to accumulate precautionary savings and hence increases (reduces) consumption today. Consumers who are more confident regarding the future do not need to accumulate precautionary savings. Thus, they consume more today and this reduces the change in consumption from the present to the future, which means consumption growth will be lower.

<sup>4</sup> In this paper, we will use “consumer confidence” to describe consumers’ trust and certainty regarding both their current situation and their future. The term “expectations” on the other hand only refers to perceptions of future events and assessments of likely future developments in this study.

If consumer confidence is based on expectations regarding future income and wealth, it should be positively correlated with consumption growth. However, the permanent income hypothesis, which in its empirical application assumes rational expectations, would predict a positive correlation between expectations and consumption.

Ludvigson (2004) investigates these two competing hypotheses with U.S. data and finds little support for the precautionary savings interpretation. Instead, he finds that changes in consumer confidence are related to income and wealth growth but also directly to consumption. Souleles (2004) also tests the permanent income hypothesis, but allows for heterogeneity in the importance of confidence shocks. He shows that high- and low-income households are affected differently by shocks, stressing the role of time-varying group-level shocks. However, he finds that the reaction in consumption to consumer confidence shocks, which goes beyond that predicted by the permanent income hypothesis, cannot be fully explained by the heterogeneous effect of shocks on different sociodemographic groups.

## 2 Data and Measurement

The data analyzed in this paper have been taken from the OeNB Euro Survey, which is carried out semiannually on behalf of the OeNB in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, FYR Macedonia<sup>5</sup>, Hungary, Poland, Romania and Serbia.<sup>6</sup> In each survey wave a representative sample of 1,000 respondents aged 14 years and older is polled in every country. The survey collects information on households' saving and loan decisions as well as their economic expectations. We will focus on two questions about expectations regarding the households' financial situation and the national economy. Respondents are asked whether they agree or disagree with the following statements on a scale from 1 (strongly agree) to 6 (strongly disagree):

1. "Over the next five years, the economic situation of [my country] will improve."
2. "Over the next 12 months, I expect the financial situation of my household to get better."

We will refer to results gained from the first question as "expectations regarding the national economy" and those derived from the second question as "expectations regarding the households' financial situation." For the first question, we have a continuous time series from fall 2007 to fall 2012. The second question has only been asked since spring 2009.<sup>7</sup> The questions are very similar to those used in other surveys, the main differences between the questions being the scale and the time horizon. Of course, one could argue that the time horizon of one year versus five years in expectations in the two questions above makes for a big difference. However, additional evidence from the Euro Survey regarding exchange rate expectations provides support for our assumption that the difference in time horizon does not matter to such an extent that we cannot compare the results for expectations regarding the national economy over five years and expectations regarding

<sup>5</sup> Former Yugoslav Republic of Macedonia.

<sup>6</sup> For more information on the OeNB Euro Survey, please visit: [ceec.oenb.at](http://ceec.oenb.at).

<sup>7</sup> Neither question was included in the spring wave of 2012.

the households' financial situation over one year.<sup>8</sup> Furthermore, Bovi (2009) also compares expectations regarding the national economy and regarding the households' financial situation with a time horizon of one year for both questions and gets similar results overall, in particular regarding the “household bias,” which we will discuss later. For our analysis, we exclude respondents answering “Don't know” and “No Answer,” assuming that nonresponse is random. We think this assumption is reasonable because the overall nonresponse rate is below 10%.

In order to compare expectations over time and between countries and analyze the link to macroeconomic developments, we compute the following balance statistics:

$$\text{Balance statistic} = (\text{strongly agree} + 0.7 * \text{agree} + 0.3 * \text{somewhat agree}) - \\ (0.3 * \text{somewhat disagree} + 0.7 * \text{disagree} + \text{strongly disagree})$$

where the levels of agreement are percentages of respondents choosing the respective answer. Therefore, balance statistics range from 100 (all respondents “strongly agree”) to –100 (all respondents “strongly disagree”). Positive values indicate that on average households expect their national economy to improve<sup>9</sup> or their own financial situation to get better,<sup>10</sup> whereas negative values indicate the opposite. The weights for the respective response categories are arbitrary, of course. Therefore, we also computed unweighted balance statistics. This does not change the pattern of expectations over time.

### 3 Expectation Patterns – Some Stylized Facts

Chart 1 presents the balance statistics for the two questions over time broken down by country. In some countries the balance statistics have decreased constantly since the beginning of the survey (e.g. Poland and to a lesser extent the Czech Republic), while in other countries expectations started to improve again in early 2011 (Romania, Serbia). Interestingly, the development of expectations over time in Hungary resembles a hump-shaped pattern with a peak in 2009, when the Hungarian economy contracted by 6.6%.<sup>11</sup>

Expectations regarding the households' financial situation and those regarding the national economy are highly correlated in all countries (chart 1). When comparing the results for the two questions it is striking that in most countries the financial future of the household is perceived to be brighter than the future of the whole economy. Notable exceptions are households in the Czech Republic and Hungary (chart 1), where respondents are more optimistic about the future of the economy than the future of their household. However, if we compute the balance statistics for expectations regarding the national economy and the financial situation

<sup>8</sup> The Euro Survey elicits data on expectations about exchange rate developments over one year and over five years. If we compare the exchange rate expectations for the two time horizons we find that expectations do not differ a great deal. Detailed results are available from the authors upon request.

<sup>9</sup> From a household's perspective, an improvement of the national economy could refer to a range of factors, i.e. GDP growth, less volatile inflation or exchange rates, greater stability of the financial system, etc. What exactly “improvement” refers to most likely depends on the individual respondent's situation and experience. Exploring this at an individual level would amount to a research question in its own right.

<sup>10</sup> Improvement of the household's situation – as with expectations regarding the national economy – could mean a number of things, e.g. being able to consume or save more, or struggling less to repay a loan. Understanding the individual connotations of the answers would require separate research and, most likely, additional survey questions.

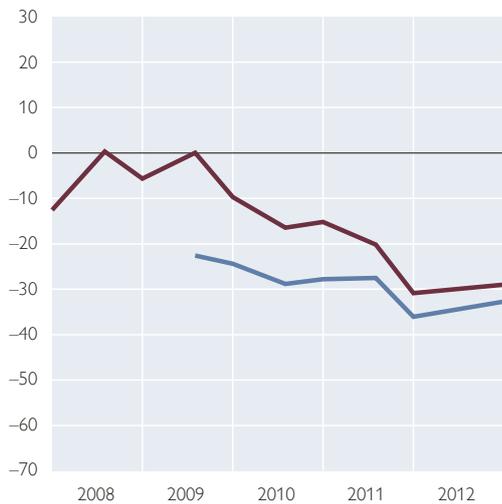
<sup>11</sup> Interestingly, this hump shape found for Hungary is similar for expectations regarding the national economies in the European Union as collected by the Eurobarometer.

Chart 1

### Development of Expectations regarding the Households' Financial Situation and regarding the National Economy

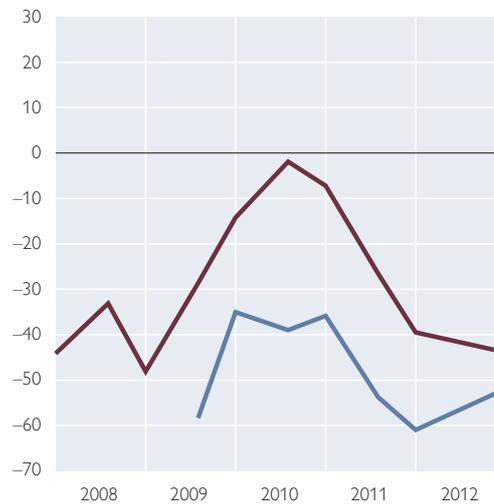
#### Czech Republic

Balance statistics



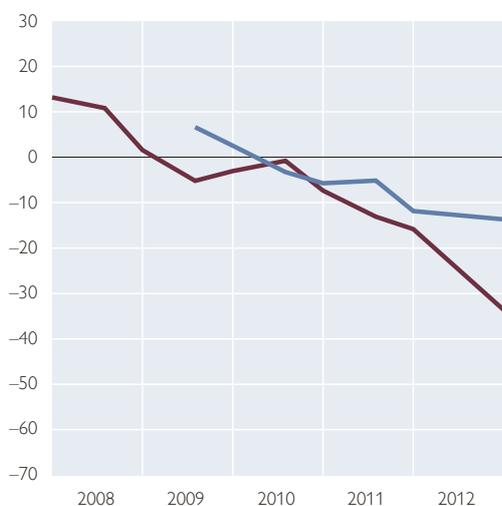
#### Hungary

Balance statistics



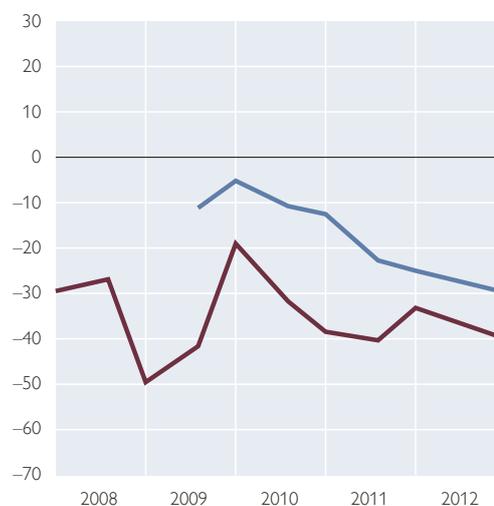
#### Poland

Balance statistics



#### Bulgaria

Balance statistics



— Households' financial situation — National economy

Source: OeNB Euro Survey (authors' calculations).

Note: The years indicate the year in which the survey was carried out, with the spring wave recorded at the grid line and the fall wave between grid lines.

of the household based on the Eurobarometer data for these two countries, we find that – as in all other countries – households are more optimistic about their own financial situation. This result that households are biased in their expectations is in line with Bovi (2009). He finds the same pattern to be valid for ten Western European countries over 22 years.

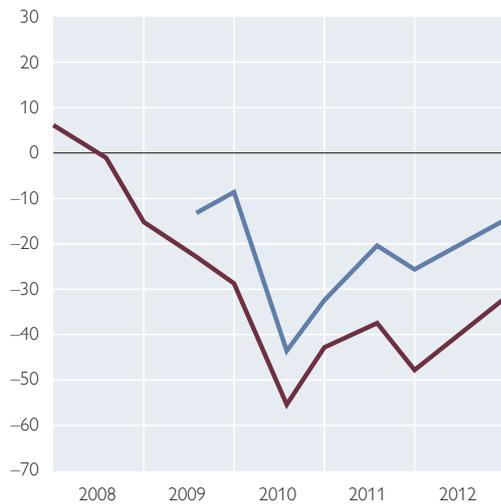
What could be the reason for the more optimistic bias of expectations toward the situation of one's own household? There are three possible explanations: Households might misjudge the future development of the economy, that of their

Chart 1 continued

### Development of Expectations regarding the Households' Financial Situation and regarding the National Economy

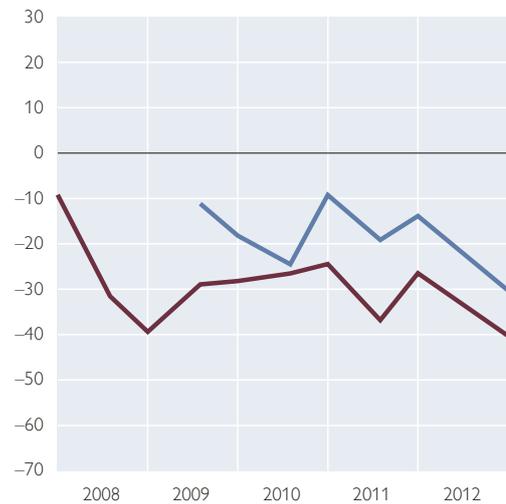
#### Romania

Balance statistics



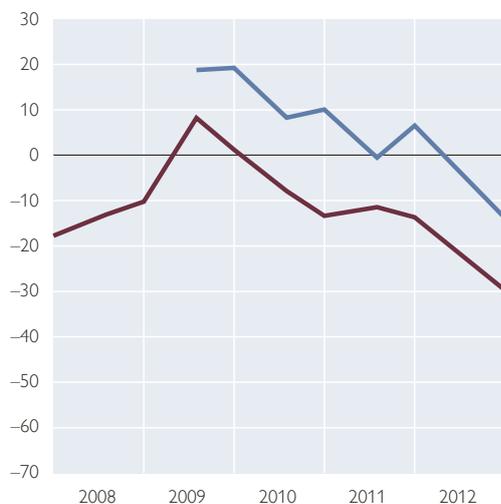
#### Croatia

Balance statistics



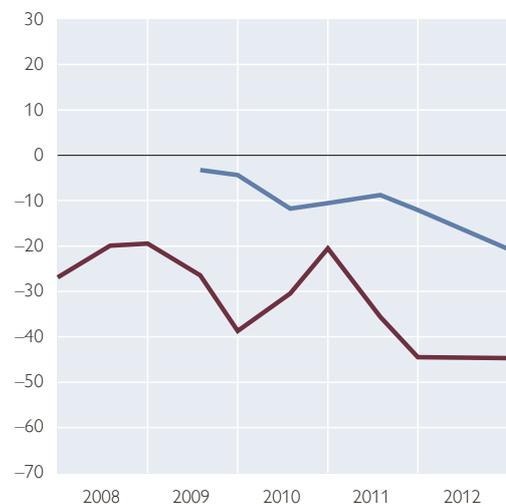
#### Albania

Balance statistics



#### Bosnia and Herzegovina

Balance statistics



— Households' financial situation — National economy

Source: OeNB Euro Survey (authors' calculations).

Note: The years indicate the year in which the survey was carried out, with the spring wave recorded at the grid line and the fall wave between grid lines.

own household finances, or possibly both. Bovi (2009) refers to the distortion in households' expectations as "illusion of control" and argues that people think that "their own future situation will get better against all odds."<sup>12</sup>

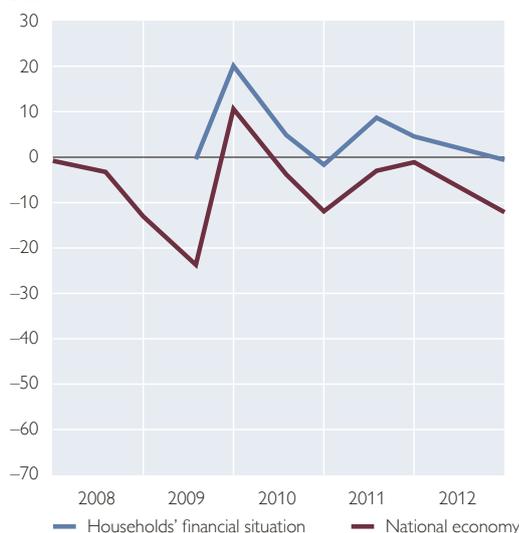
<sup>12</sup> Another reason for the incongruity of expectations could be the different time horizons, since respondents in the Euro Survey are asked what they expect within the next year for their household situation and within the next five years with regard to economic development. However, Bovi (2009) asks both questions for the same time horizon (one year) and obtains similar results.

Chart 1 continued

## Development of Expectations regarding the Households' Financial Situation and regarding the National Economy

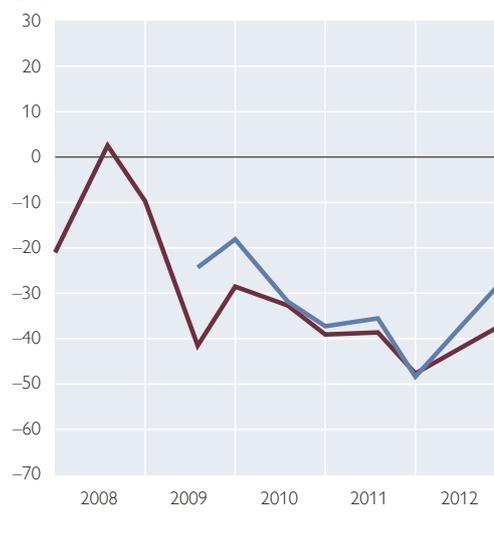
### FYR Macedonia

Balance statistics



### Serbia

Balance statistics



Source: OeNB Euro Survey (authors' calculations).

Note: The years indicate the year in which the survey was carried out, with the spring wave recorded at the grid line and the fall wave between grid lines.

Previous research highlights heterogeneities in economic expectations within countries across sociodemographic groups (Souleles, 2004). These heterogeneities are also present in our sample of CESEE countries: In all ten CESEE countries high-income households on average are more optimistic regarding the future of the economy than low-income households. However, this difference is not observed for different levels of education. Respondents with a higher level of education are not always more optimistic about the future of the economy.<sup>13</sup>

Given that some countries in our sample show significant regional differences in terms of economic development, we also look at expectations within the country. Somewhat surprisingly, we do not find that expectations vary a great deal across regions. The one exception in this respect is Bosnia and Herzegovina.

<sup>13</sup> This is somewhat surprising given that education and income are generally thought to be highly correlated. As expected, we find a positive correlation between education and income but it is not very high. However, a higher level of education is correlated with greater financial literacy, which in turn is negatively correlated with expectations.

Table 1

### Summary Statistics on Expectations regarding the National Economy

	Mean	Standard deviation
Czech Republic	-13.92	10.79
Hungary	-28.73	16.27
Poland	-5.33	13.55
Bulgaria	-35.01	8.73
Romania	-27.71	19.86
Croatia	-29.17	8.99
Albania	-10.78	10.23
Bosnia and Herzegovina	-30.72	9.74
FYR Macedonia	-6.22	9.33
Serbia	-29.29	15.63

Source: OeNB Euro Survey (authors' calculations).

As can be seen in chart 1, the levels of expectations differ substantially across countries. Table 1 presents the summary statistics on expectations regarding the national economy.

Average expectations regarding the national economy are negative in all countries, Bulgaria being the most pessimistic country with a balance statistic of roughly –35. The most optimistic countries are the Czech Republic, Albania and FYR Macedonia. Regarding households' financial situation (results not shown in the table), we find that households in Hungary have the most pessimistic expectations.

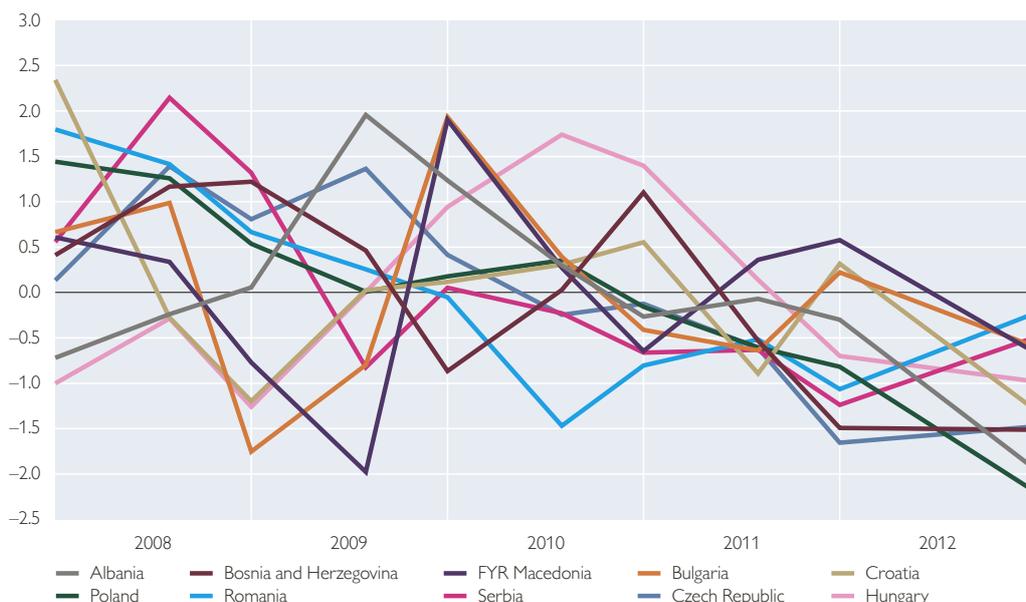
Apart from the high heterogeneity in levels, the development of expectations over time also differs across countries, both in terms of direction and in terms of volatility (as can be seen from the standard deviations in table 1). It would be interesting to know whether expectations have moved in a more uniform direction since the onset of the financial crisis, which – as an external factor – could also have driven swings in expectations at the CESEE level.

Chart 2 shows the development of standardized balance statistics on expectations regarding the national economy corrected by country-specific levels and standard deviations (given the different levels and volatilities of expectations among the countries this allows a better comparison). The chart reveals a downward trend in most countries' expectations starting in 2009 and intensifying around 2010. This downward trend is not surprising given the outbreak of the financial and economic crisis in 2008 and the subsequent sovereign debt crisis from 2010 onward, which became an additional influence next to the country-specific factors that had dominated the development of expectations before.

Chart 2

### Standardized Balance Statistics on Expectations regarding the National Economy's Development over the Next Five Years

Standardized balance statistics



Source: OeNB Euro Survey (authors' calculations).

Note: Values are standardized balance statistics (balance statistics minus mean and divided by standard deviation). The years indicate the year in which the survey was carried out, with the spring wave recorded at the grid line and the fall wave between grid lines.

Does the importance of external factors mean that expectations only mirror global economic developments and are thus less relevant for national policymakers? To explore this question, we will now focus on the relation between expectations and macroeconomic outcomes.

#### 4 Expectations and Macroeconomic Outcomes

To what extent are expectations related to macroeconomic outcomes? As our survey is only carried out semiannually we only have ten balance statistics observations. Based on this limited amount of data it is not possible to answer the above question using VAR estimations or other standard econometric techniques. However, we can approach this question descriptively.

We use data on year-on-year growth in consumption and GDP in real terms. The literature does not reach a conclusive result regarding the relation between consumption/GDP growth and expectations, although it does indicate, at least for the U.S.A., that the effect runs from expectations to consumption and not vice versa. We study both the relation between expectations and previous consumption/GDP growth (i.e. the difference of the half-year preceding the survey against the prior half-year) and the relationship between expectations and future consumption/GDP growth (i.e. the difference of the half-year following the survey against the prior half-year) by computing Spearman correlation coefficients. We employ the Spearman correlation because the balance statistics are based on ordinal data, which we do not assume to be normally distributed.

Table 2 shows some interesting results: The correlation of subsequent consumption growth with expectations regarding the national economy is positive for most countries, except for Hungary and Romania. Previous consumption growth is also correlated with expectations regarding the national economy but the pattern is weaker and overall the picture is less clear. Subsequent GDP growth is positively correlated with expectations in all countries. Again, the relationship between past developments and expectations is less clear. The negative correlation in some countries is somewhat surprising but weak.

Table 2

#### Correlation of Expectations regarding the National Economy with Subsequent and Previous Consumption and GDP Growth (Spearman Correlation Coefficients)

	Subsequent consumption growth	Subsequent GDP growth	Previous consumption growth	Previous GDP growth
Czech Republic	0.357	0.042	0.515	0.176
Hungary	-0.321	0.515	-0.612	-0.164
Poland	0.679	0.503	0.661	0.539
Bulgaria	0.107	0.176	-0.055	-0.067
Romania	-0.536	0.321	0.491	0.576
Croatia	0.571	0.43	0.03	-0.006
Bosnia and Herzegovina	..	0.667	..	0.697
FYR Macedonia	0.5	0.317	-0.03	-0.006
Serbia	0.357	0.358	0.442	0.394

Source: OeNB Euro Survey (authors' calculations).

Note: No quarterly consumption data available for Bosnia and Herzegovina; no data available for Albania. The number of observations per country is ten. "Subsequent" refers to the two quarters following the survey whereas "previous" refers to the two quarters preceding the survey.

These correlations allow two conclusions. The extent to which expectations and macroeconomic outcomes are related varies strongly across countries. Overall, however, the correlation between subsequent economic outcomes and expectations is somewhat stronger than in the case of previously observed growth. Hence, expectations regarding the national economy could have some predictive power for consumption and GDP growth.

The positive correlation between consumption growth and expectations could provide some indication that the permanent income hypothesis holds for most CESEE countries. By extension, this positive correlation would then indicate that our measure of expectations regarding the national economy captures expectations regarding future income and wealth.

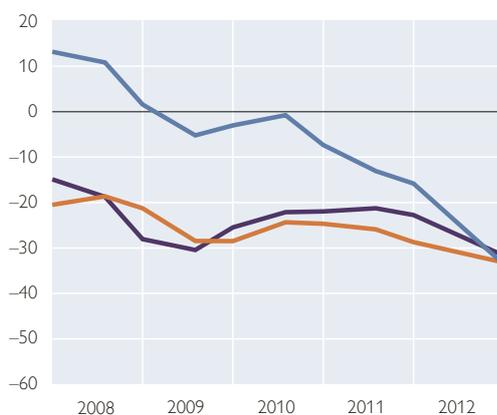
For Romania and Hungary, the negative correlation between consumption growth and expectations could point to the precautionary savings hypothesis,

Chart 3

### Expectations regarding the National Economy, Consumption and GDP Growth for Selected Countries

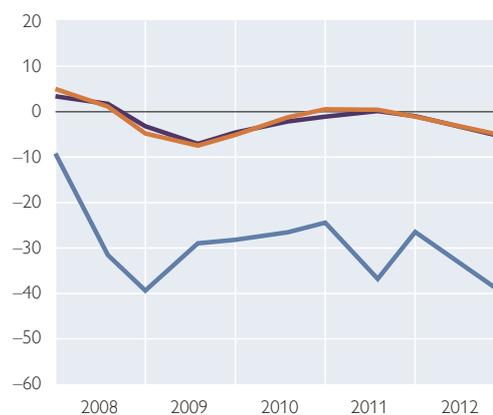
#### Poland

Balance statistics



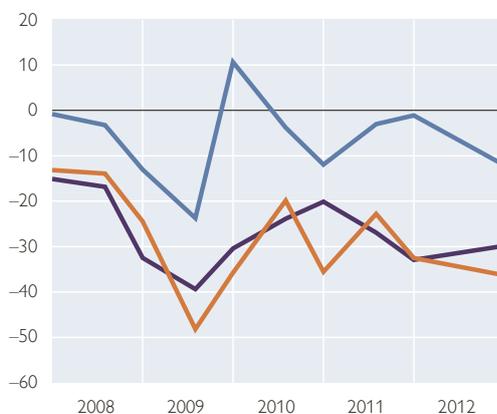
#### Croatia

Balance statistics



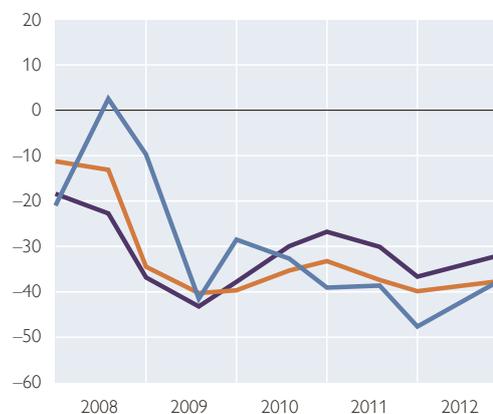
#### FYR Macedonia

Balance statistics



#### Serbia

Balance statistics



— Expectations (left-hand scale) — Consumption growth (right-hand scale) — GDP growth (right-hand scale)

Source: OeNB Euro Survey (authors' calculations), Eurostat, NCBS.

Note: The years indicate the year in which the survey was carried out, with the spring wave recorded at the grid line and the fall wave between grid lines.

which would suggest that better expectations regarding the future increase consumption today and hence reduce subsequent consumption growth.

Chart 3 plots the development of expectations regarding the national economy, consumption and GDP growth for Poland, Croatia, FYR Macedonia and Serbia, for which the correlations are especially strong. Confirming the correlation results, there is a clear co-movement of expectations and subsequent consumption and GDP growth and some indication for the leading role of expectations.

## 5 Summary

Using evidence from the OeNB Euro Survey, we show that households in most CESEE countries are more optimistic about the development of their own finances than about the development of their national economies. This “household bias” is in line with results presented in existing literature on other countries. Within the CESEE region, high-income households are more optimistic about the future of their national economy than low-income households.

We find that the levels of expectations differ substantially across countries in CESEE; however, since the onset of the financial and economic crisis the movements of expectations have become more homogeneous within CESEE.

Regarding the link between expectations and macroeconomic outcomes, we find a positive correlation between households' expectations regarding the national economy and future GDP growth. For consumption growth, the correlation is also positive with the exception of two countries. Our descriptive analysis, of course, cannot identify whether expectations drive these macroeconomic variables or vice versa. What we can say is that the correlation of expectations with subsequent consumption and GDP growth across countries is more clear-cut than that of expectations with previous growth.

Altogether, these results might indicate that expectations, especially if observed at a higher frequency and released without large time lags, could add predictive power to forecasting models for CESEE. By extension, policymakers could possibly gain insights into likely future developments by monitoring expectations. Also, by keeping track of expectations, policymakers might obtain a greater understanding of the volatility in expectations, which may also indicate a strong sensitivity to certain news and announcements. However, our results – as the general results from the literature – are still inconclusive and further research is needed. For policymakers it would be important to also better understand the determinants of expectations in CESEE countries. In particular, understanding heterogeneities in expectations across sociodemographic groups would be a next step toward designing targeted policy measures. Furthermore, it would be useful to understand which events trigger swings in expectations.

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# Oil Prices, Excess Uncertainty and Trend Growth

## A Forecasting Model for Russia's Economy

Jouko Rautava<sup>1</sup>

*The sharp contraction of Russian output in 2008–2009 and the country's recent poor growth performance came as a surprise to policymakers and analysts in Russia and elsewhere. In this paper, we examine the factors behind these developments, using a small structural error-correction (SVEC) macro model built for forecasting purposes. The estimation of the model indicates that Russia's economy is still strongly influenced by international oil prices and that there seems to be no major difference in this respect before and after the 2008–2009 crisis. However, in our linear model setup, oil prices alone cannot, for example, explain the major recession Russia faced in 2008–2009. To improve our forecasts around such particular events, we should explicitly account for increased uncertainty that is likely to have a direct impact on the real economy. Here, we estimate the impact of excess uncertainty by using exchange rate expectations. As to Russia's recent poor growth performance, the computations in this paper suggest that trend growth in Russia has halved from about 4% before 2008 to about 2% in 2013.*

*JEL classification: C32, E17, O13, P28, Q43*

*Keywords: Russian GDP, oil prices, trend growth, uncertainty, SVEC, forecasting*

After the 1998 ruble crisis, Russia's economy witnessed a sharp turnaround compared with the dismal developments of the 1990s. In the first half of the 2000s, output and incomes increased, on average, by almost 7% on the back of the devaluation of the ruble, increasing oil prices, ambitious economic reforms and disciplined fiscal policy. In 2006–2007, Russia's GDP grew by over 8% per year due to the exceptional boom in the global economy and very high commodity prices. The country managed to repay its foreign debt and built up significant financial buffers in the form of the state oil fund and foreign exchange reserves of the central bank. Consequently, many people – including top Russian decision makers – believed that Russia's economic growth had gained a momentum of its own and could easily withstand any negative shocks, including those that started to threaten the world economy in 2008.

Events in Russia left no doubt, after the deepening of the global financial crisis in the latter part of 2008, however, that the country was still heavily dependent on global developments and in particular on energy prices. Russia's GDP contracted much more steeply in 2009 than in any other major economy, the recovery from the recession was slow, and economic growth has been weaker than expected ever since despite the resurgence of oil prices. These developments have been a source of much puzzlement and discussion among Russian decision makers and analysts in Russia and elsewhere.

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The economic structure of Russia and its oil dependency offer a unique starting point for modeling and forecasting Russia's growth dynamics. Oil prices play a key role in most if not all reported macro models.<sup>2</sup> At the Bank of Finland Institute for Economies in Transition (BOFIT), we have already been running a macro econometric model for Russia as part of our forecasting process for about ten years. The model has been revised and re-estimated to address changes in data and Russia's economy. Despite its small size, we have found that the model is a useful tool for analyzing Russia's growth dynamics and for promoting discussion on Russia's economy and economic policy.<sup>3</sup>

This paper illustrates the structure and performance of the model used at the BOFIT, as we analyze Russia's growth performance during and after the 2008–2009 global financial turmoil. Using our model, we show how the sharp contraction in Russian output in 2009 can be explained by oil prices and excess uncertainty, which is measured by changes in exchange rate expectations. As regards developments since 2009, our estimations indicate that there has been a significant decline in trend growth after the crisis in 2008–2009. There is no evidence that the role of oil prices in the Russian economy radically changed during the years studied here.

The paper is organized as follows: Section 1 offers a short discussion of the modeling strategy and data used in this exercise. In section 2, we estimate the long-run model, which is then integrated into our final short-run forecasting model in section 3. Section 4 presents three scenarios on oil prices and increased uncertainty to produce a baseline forecast and analyze the key properties of the model. Section 5 concludes with a summary of the key findings and comments on the usefulness of our model.

## 1 Model and Data

In our modeling work, we focus on Russia's GDP and imports as they are the key factors to explain other countries' exports to Russia.<sup>4</sup> To analyze and forecast GDP and import developments, we use vector autoregressive (VAR) modeling and cointegration techniques. The general framework model we use (with two lags) can be written in matrix form as:

$$\Delta y_t = \Pi_0 y_{t-1} + \Gamma_1 \Delta y_{t-1} + \Gamma_2 \Delta y_{t-2} + \Psi D_t + \varepsilon_t \quad (1)$$

Equation (1) shows how the values of first differences of endogenous variables in the system depend on their own lagged values and lagged values of other endogenous variables, on predetermined variables  $D_t$ , and on the error term  $\varepsilon_t$ .

<sup>2</sup> See Benedictow et al. (2013) for a recent analysis of Russia's oil dependency based on an econometric macro model.

<sup>3</sup> The BOFIT forecast process involves several stages. Given the oil price forecast (often oil futures), we compute with the model a forecast for the current year and the next two years. These forecasts are then evaluated and discussed while taking into account other information. The final published forecasts are seldom exactly the same as the model forecasts.

<sup>4</sup> The BOFIT Russia forecast is part of a wider assessment of Finland's export market developments. It is also an integral part of the joint OeNB and BOFIT semiannual forecasts of economic developments in selected CESEE countries. Similar to the Russian forecast model presented in this study, these forecasts are based on a broad range of information, including country-specific time series models. For technical details and country coverage, see Crespo Cuaresma et al. (2009).

The matrix  $\Pi_0$  is a product of two matrices, i.e.  $\Pi_0 = \alpha\beta'$ , and it determines how the levels of our endogenous variables enter the system. The  $\alpha$  matrix consists of the speed-of-adjustment coefficients and the  $\beta$  matrix displays the long-run relationships, or cointegration vectors, among the variables.<sup>5</sup>

We start with estimating long-run equilibrium conditions (cointegration vectors) among the levels of our key variables. At the next stage, these equilibrium conditions are included as error-correction terms in the short-run model, where the key variables are expressed in first differences (a vector error-correction (VEC) model). Finally, we impose restrictions on individual equations to exclude variables that are not significant to get a final parsimonious structural vector error-correction model (SVEC model).

In the model, endogenous variables, which are determined within the model, include Russia's GDP (*gdp*), imports (*imp*) and the real exchange rate of the ruble (*reer*). Trends of the key model variables are shown in chart 1. The price for Russia's main crude oil export blend, Urals, is an exogenous variable as its value depends on global energy markets and not on the endogenous variables of our system (see chart 2). In addition to the key variables, a constant term and a time trend as well as a number of time dummies are used as explanatory variables at different stages of the estimation process. Moreover, a step dummy is introduced to capture Russia's poor growth performance in the post-crisis period.

As earlier versions of our model had had difficulty in predicting the extent of Russia's GDP plunge in 2008–2009, we have added in our short-run model a particular variable (*crisis*) to capture excess uncertainty around crisis periods in Russia. This variable is based on the idea that sudden negative market sentiment about coming quarters would immediately impact on real developments in the current quarter. In our exercise, we mimic this kind of uncertainty by using exchange rate expectations. So, our crisis variable is computed by taking the first difference of the value of the nominal ruble basket and raising the remainder to the square. To allow the impact of thus computed excess uncertainty to be distributed more extensively over coming quarters, we employ a distributed lag model to compute the final uncertainty variable, which is used with a one-period lead in our model estimations.<sup>6</sup> Chart 2 shows both the non-smoothed and the final smoothed series, the latter being used in our exercise, to illustrate the behavior of our proxy for excess uncertainty.<sup>7</sup>

<sup>5</sup> See, for example, Doornik and Hendry (2009), Juselius (2006) or Patterson (2000) for a full description of VAR modeling and cointegration. While using a slightly different variable set, Rautava (2004) offers a more detailed description of the econometric issues related to our modeling strategy. Rautava (2009) presents one later version of the model and discusses its forecast properties during the 2008–2009 crisis.

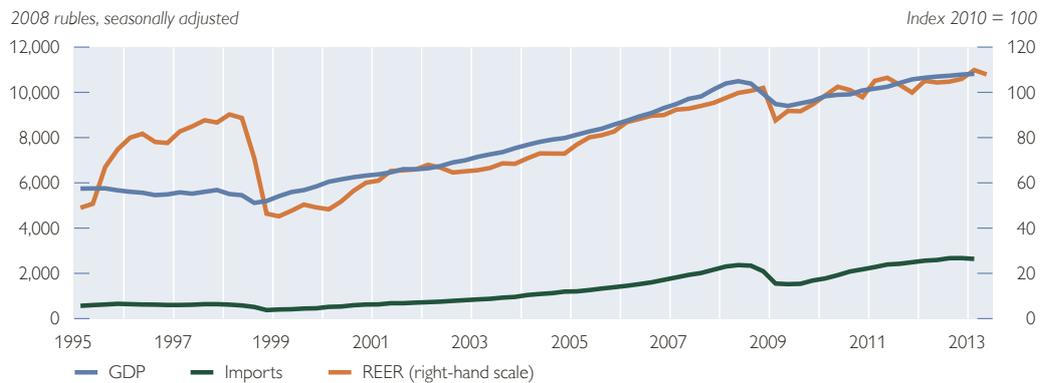
<sup>6</sup> We use the Almon lag function of PcGive with parameters (*lags*=3, *power*=1) to distribute changes in our uncertainty measure over the current and three following quarters as illustrated in chart 2. The choice of these particular parameter values reflects our view on how long a possible uncertainty shock may impact the real sector and is based on a few experiments about how the significance of the crisis variable changes in our model estimations with different smoothing parameters.

<sup>7</sup> One should note that our crisis measure does not distinguish between the depreciation and appreciation of the ruble as an indication of increased uncertainty. For estimation purposes, this is, however, not a problem given the absence, during our estimation period, of any exceptional positive shocks to the Russian economy that would have caused a sudden and significant strengthening of the ruble. As regards estimation of the model in the future, we will of course have to reconsider our crisis variable should excess uncertainty related to ruble appreciation become an issue. Actually, we could use a series whose values differ from zero only when the ruble weakens; for our current estimations this would not imply major changes.

We draw on quarterly data from Q1 1995 to Q1 2013 for our analysis. Data for real GDP (*gdp*) and imports (*imp*) come from Rosstat, while the index of the ruble's real effective exchange rate (*reer*) comes from the BIS. Dollar prices for Russia's Urals oil (*oil*) come from Bloomberg. For GDP and imports, we use seasonally adjusted data. Data for the key variables are in logarithmic form, which allows for the interpretation of estimated parameters as elasticities.<sup>8</sup>

Chart 1

### Key Model (Endogenous) Variables: Russian GDP, Imports and the Real Exchange Rate of the Ruble



Source: Rosstat, BIS, author's calculations.

Chart 2

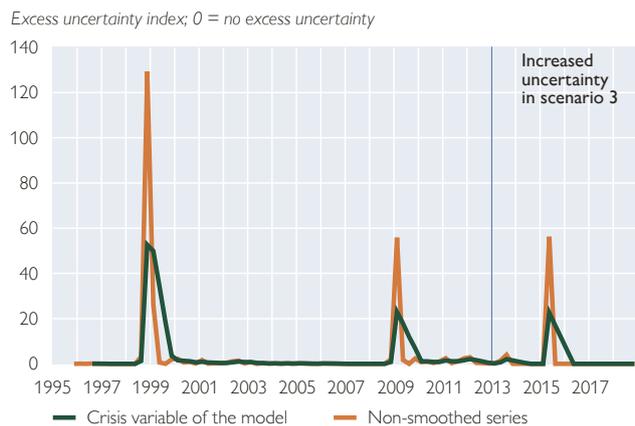
### Predetermined (Exogenous) Variables

#### Oil Prices



Source: Bloomberg, author's calculations.

#### Excess Uncertainty



Source: Author's calculations.

## 2 Long-Run Analysis

Chart 1 suggests that there are strong links among our model variables. This, together with the observation that they seem to be nonstationary in a sense that their statistical means seem to change over time, indicates possible cointegration

<sup>8</sup> PcGive is used for model estimations. The Tramo/Seats package of EViews is used for seasonal adjustment.

among the model variables. So, we start with the long-run analysis, which is based on the Johansen method. Given our focus on Russian GDP and imports, as well as our prior understanding about the possible links among the variables, it is in principle relatively easy to identify two long-run cointegration vectors among our three endogenous variables.<sup>9</sup> However, in light of the high volatility of the Russian data and clearly distinct developments, first, before and after the ruble crisis in 1998, and, second, after the global financial crisis in 2008–2009, in practice it is far from straightforward to establish stable long-run relations for our system. In this respect, the current situation seems to be more difficult than that before 2008. Actually, while we try to follow standard modeling practices and use available test diagnostics, the final choice of long-run parameters is based on numerous estimations and previous findings.<sup>10</sup> Nevertheless, it is possible to establish reasonable long-run equilibrium equations for Russia's GDP (equation 2) and imports (equation 3), which are not too different from our earlier estimations and which can be accepted by most test diagnostics. In other words, we may have managed in our model to capture some true long-run features of the Russian economy. As shown later, equations (2) and (3) work well as error-correction terms in our short-run model, which serves as the final test of their significance.

$$gdp = 0.2*oil + 0.005*trend \quad (2)$$

$$imp = 2.0*gdp + 0.7*reer \quad (3)$$

The time trend is the most interesting – and difficult – issue in the long-run model estimations. In equation (2) for Russian GDP, the parameter value of the trend variable (0.005) indicates that the long-run underlying trend growth of the Russian economy is about 2% per annum. This is only half of what we had observed before the onset of the global financial crisis in 2008. While it is not possible to identify the actual reasons for the decline in trend growth in our model setup, one may speculate that it relates to a poor business environment, a slowdown of reforms and a loss of competitiveness of Russian enterprises in post-crisis Russia, which has hit, in particular, investments.<sup>11</sup> The parameter value of the oil variable (0.20) in equation (2) indicates that a permanent 10% increase in international oil prices is associated with a 2.0% increase in the level of Russian GDP, i.e. a gradual

<sup>9</sup> After having managed to identify cointegration vectors for GDP and imports, i.e. our main interests, we do not consider identifying a long-run equilibrium condition for the real exchange rate as otherwise we should abandon either the GDP or the import equation.

<sup>10</sup> After numerous estimations, we test whether our identification of equations and restrictions on parameter values in equations (2) and (3) are in line with data. There are problems with residual heteroskedasticity, but single equation residual tests concerning normality and autocorrelation as well as the likelihood ratio test on restrictions point to no particular problems with our model. The  $\alpha$  parameters of GDP and imports are negative, which indicates a proper adjustment of the system to deviations from long-run equilibrium, although a low value of  $\alpha$  related to GDP suggests a slow correction. The estimation period for the long-run analysis ranges from Q1 1996 to Q4 2011. Inclusion of data for 2012 would have suggested the elimination of the trend variable in equation (2), a feature we do not, at least not yet, want to introduce in our model.

<sup>11</sup> Russia ranks poorly in studies concerning business environment and competitiveness. In the WEF Global Competitiveness Report 2012–2013, Russia's rank is 67 among 144 countries (Switzerland is in first place). The Doing Business 2013 survey by the World Bank and the IFC puts Russia in the 112<sup>th</sup> position among 185 economies (Singapore tops the list). According to Transparency International, Russia's position was 133 among the 176 least corrupted countries in 2012 (Denmark, Finland and New Zealand shared the first rank).

increase in output to a new sustainable level. However, estimations indicate that this adjustment process would be relatively slow. Given the on-and-off debate about the role of the ruble in economic policy, it is perhaps interesting to note that the level of the real exchange rate does not seem to play a role in determining long-run growth.<sup>12</sup> In fact, in the longer run, the causality may run from output to the real exchange rate rather than vice versa.

The interpretation of the long-run import equation (3) is straightforward. The long-run output elasticity of imports suggests that a 1% permanent increase in the level of GDP is associated with a 2% increase in real imports. This is in line with our prior knowledge that imports tend to overreact to changes in incomes (GDP).<sup>13</sup> In a similar manner, a 10% appreciation of the ruble's real exchange rate tends to boost the level of real imports by some 7%. Oil prices do not seem to impact imports directly, but rather through GDP, which may explain the relatively high income elasticity of imports in our model.

### 3 Short-Run Forecasting Model

Next, the above two long-run equilibrium conditions are included in the short-run, first-difference model of our variables as error-correction terms ( $ECgdp$  and  $ECimp$ ). In table 1, we report the estimation results of our current model specification. As evidenced in table 1, the parameter values of lagged error correction terms for output ( $ECgdp$ ) and imports ( $ECimp$ ) in their respective short-run equations are significant with negative signs, which indicates that our model adjusts in an equilibrating manner to deviations from the long-run equilibrium. Russia's poor growth performance since 2008 is underlined by our growth dummy ( $growth\_dummy$ ) variable that takes the value 0 before the second quarter of 2008 and 1 thereafter. The negative value of the parameter ( $-0.0060$ ) indicates that the decline in trend growth in our long-run model cannot by itself explain the poor performance of Russia's economy since the 2008 onset of the financial crisis. In addition to their impact via the long-run equilibrium correction mechanism, oil prices also have a direct positive short-run effect on both output and imports. As regards the role of the real exchange rate, while it is not linked to output in the long run, depreciation (appreciation) of the ruble has a positive (negative) impact on output in the short run. In our model setup, the trends in the real exchange rate ( $reer$ ) for their part can be explained by output developments and the lagged values of  $reer$  as well as our  $crisis$  variable, which is not a surprise as the latter reflects changes in the nominal exchange rate. Chart 1 illustrates the close relationship between Russian GDP and the real exchange rate of the ruble. Moreover, the output variable also seems to indirectly account for the possible impact of oil prices on the real exchange rate in the model.

Our variable for excess uncertainty ( $crisis$ ) is highly significant in all equations and seems to compensate for some time dummies, which would otherwise have been needed to control for volatility in our data. So, increased uncertainty, measured by nominal exchange rate expectations concerning the next quarter, has a negative

<sup>12</sup> Kuboniwa (2012) likewise argues that the real exchange rate of the ruble should not enter the long-run equation of Russian GDP.

<sup>13</sup> See Senhadji (1998) for income elasticities of imports for a large number of countries and Kuboniwa (2012) for Russia.

impact on all endogenous variables in our system. Had it been introduced earlier, this variable would have considerably improved our GDP forecast concerning the deepness of recession in Russia around 2008–2009. We will demonstrate this aspect in the next section.

The only puzzle in table 1 seems to be the negative sign of the real exchange rate in the import equation. This implies that appreciation of the ruble would cut imports, which is clearly against our intuition. Whether this negative sign reflects some short-run behavior where households and firms feel confident to postpone their import orders when the ruble appreciates or whether it is only a statistical artifact, remains an open issue. Nevertheless, in our long-run import equation (3) the real exchange rate has an expected sign and the respective error-correction term in the short-run import equation is highly significant. Moreover, our short-run model passes standard test diagnostics without obvious problems, so perhaps we do not have to worry too much about this particular puzzle (see the annex for the test diagnostics).

Next, we demonstrate the performance of the model by running some scenarios. Here, we will focus only on GDP developments.

#### 4 Three Scenarios on Oil Prices and Uncertainty

While our previous model version without the *crisis* variable was able to forecast the deceleration of growth in Russia in the latter part of 2008, it failed to predict the deepness and duration of the actual recession.<sup>14</sup> We believe that the current model with the *crisis* variable will produce more accurate forecasts if we face a comparable situation in the future. To illustrate the difference between the model which relies only on oil prices and the model where we take increased uncertainty into account, we run three scenarios for the period from Q2 2013 to Q4 2016.

First, we compute a baseline scenario, i.e. scenario 1, using actual prices for oil for Q2 2013; thereafter the oil price is fixed at USD 110 per barrel. In the second scenario, we assume that oil prices plunge to USD 53/bbl at the beginning of 2015 (in analogy to the drop in Q4 2008) and then follow a path similar to

<sup>14</sup> Based on our model projections, we wrote a policy note on October 17, 2008 (Bank of Finland, Monetary Policy and Research Department, Oil prices and the Russian economy – Sensitivity calculations for 2009), where we warned that Russia's GDP growth might only be 1% in 2009 if oil prices collapsed to USD 50/bbl. The Consensus forecast in October 2008 for 2009 Russian output growth was still 5%. Actually, Russia's GDP declined 8% in 2009, while the average oil price was USD 61/bbl.

Table 1

#### The Final Parsimonious Short-Run Model

	Coefficient	t-value	t-prob
<b>Equation for Dgdp</b>			
Constant	0.4581	2.73	0.010
Dgdp_1	0.2834	3.93	0.000
Dreer_1	-0.0676	-2.47	0.018
Dreer_2	-0.0490	-3.15	0.003
Doil	0.0293	4.22	0.000
ECgdp_1	-0.0554	-2.66	0.012
crisis_1	-0.0014	-9.23	0.000
growth_dummy	-0.0060	-2.73	0.010
<b>Equation for Dimp</b>			
Constant	-2.8143	-7.05	0.000
Dgdp_1	1.7919	10.8	0.000
Dgdp_2	0.3345	2.33	0.025
Dimp_1	-0.1517	-2.86	0.007
Dreer_1	-0.1935	-4.22	0.000
Doil	0.0647	5.61	0.000
ECimp_1	-0.2027	-7.09	0.000
crisis_1	-0.0026	-10.6	0.000
<b>Equation for Dreer</b>			
Dgdp_1	1.2749	7.47	0.000
Dreer_2	-0.2292	-4.98	0.000
crisis_1	-0.0039	-10.1	0.000

Source: Author's estimations.

Note: In the first column, a positive number after the variable indicates lags and a negative number leads. Time dummies are not reported.

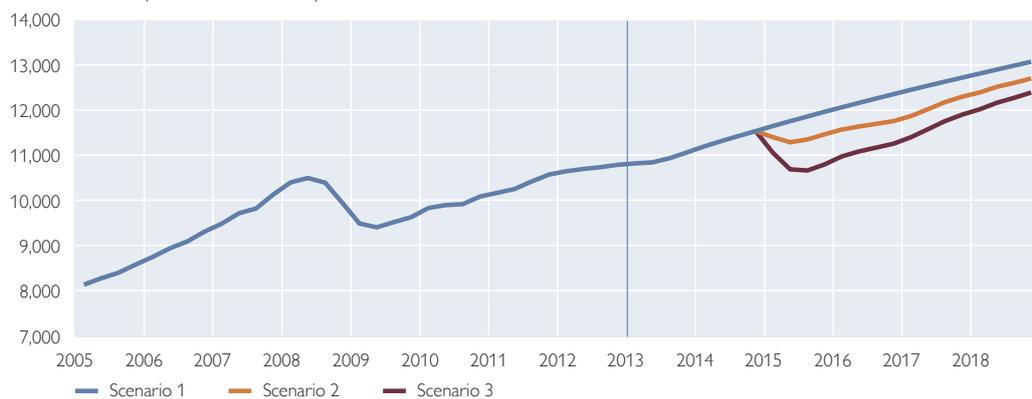
the one seen after the oil price collapse in Q4 2008 (see chart 2)<sup>15</sup>. In these two scenarios, there is no excess uncertainty, which would become evident in our crisis variable. In the third scenario, oil prices are the same as in the second scenario, but now we assume that the sudden collapse of oil prices also causes additional uncertainty. In the terms of our model variables, we may consider a situation where people expect the ruble to depreciate markedly in Q2 2015, which is reflected in our crisis variable. In this respect, the situation resembles conditions in the fall of 2008, when devaluation speculations and massive capital outflow preceded the actual devaluation of the ruble at the beginning of 2009. Moreover, the magnitude of the assumed increase in uncertainty compares well with the situation in 2008–2009 (see the crisis series in chart 2). The three scenarios are presented in chart 3 and table 2.

Forecast simulations show that the halving of oil prices causes a significant deceleration of growth in our model calculations. Yet, it does not trigger a true

Chart 3

### Russian Output Developments

GDP in RUB billion (in constant 2008 rubles)



Source: Author's computations.

Table 2

### Russia's GDP Growth

	Scenario 1	Scenario 2	Scenario 3
Average oil price in 2015, USD/bbl	110	55	55
Increased uncertainty in 2015	No	No	Yes
GDP growth, %			
2012	3.5	3.5	3.5
e2013	1.8	1.8	1.8
e2014	4.2	4.2	4.2
e2015	3.9	0.1	-5.0
e2016	3.4	2.5	3.0
e2017	3.1	3.7	4.8
e2018	2.8	3.8	4.7

Source: Author's computations.

recession comparable to that in 2008–2009. We see a drop in output at the beginning of 2015 (chart 3), but even if the annual growth rate declines by 4 percentage points, it nevertheless remains in positive territory, albeit marginally (table 2). However, the situation changes dramatically when we take into account the likely increase in overall uncertainty in Russia after the collapse of oil prices. The slump in oil prices combined with increased uncertainty produces a deep recession reminiscent

<sup>15</sup> Since we use a linear model, assumptions about the oil price (increase/decrease) yield symmetric effects.

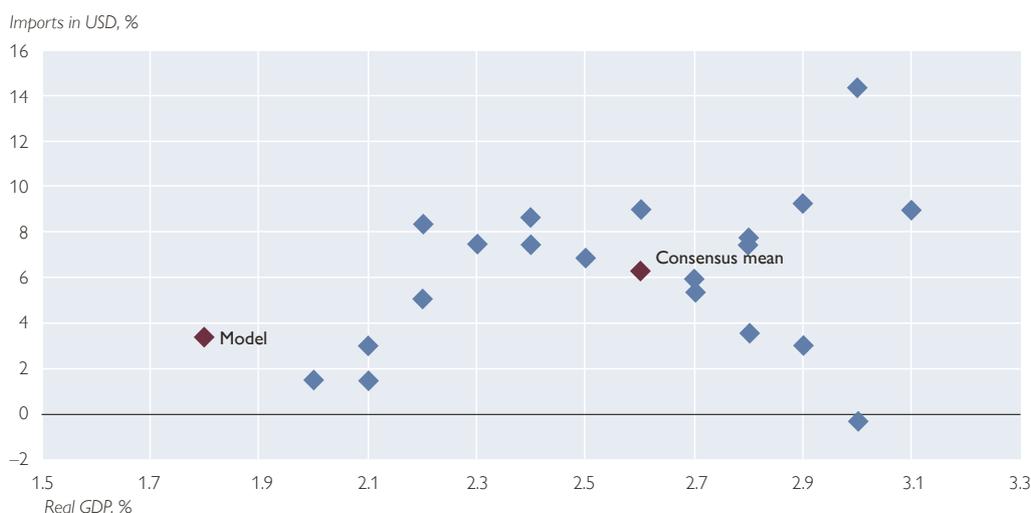
of the situation in Russia in 2008–2009. In scenario 3, it takes GDP two and a half years to recover to the pre-crisis level. In the previous recession, it took slightly more than three years for output to rev back to the Q2 2008 level.

The statistical significance of the crisis variable in the estimated model and the model's ability to produce realistic forecasts during crisis periods attest to the plausibility of our method to model excess uncertainty. First, using excess exchange rate volatility as a proxy for uncertainty allows us to estimate our model parameters in a straightforward way. Second, we may also use market expectations in the forecast process. For example, in the fall of 2008, just before the ruble plummeted, there were plenty of market speculations about the size of the coming devaluation of the ruble. With the benefit of hindsight, using these expectations about the ruble's devaluation would have helped compute more realistic GDP forecasts for 2009 compared with the forecasts published in late 2008. Third, our *crisis* variable offers a flexible way to consider uncertainties of a different kind (e.g. political) concerning the Russian economy if we can formulate them in terms of this variable. Assessing uncertainty in varying circumstances is of course difficult, but as demonstrated by our simulations here, we can use previous crises and the history of our *crisis* series to construct proxies for excess uncertainty that produce interesting and useful results. To accomplish this difficult task of evaluating uncertainties and risks, it naturally helps to have a deep understanding of the Russian economy and society.

Russia's output growth has decelerated from the latter part of 2011 as clearly evidenced by chart 3. Our model calculations in scenario 1, however, indicate a pickup in growth after 2013, after which the model starts adjusting the growth rate toward long-run trend growth of 2% because there are no changes in oil prices or uncertainty. Under this baseline scenario, the oil price is assumed to be

Chart 4

### Growth Forecasts for Russia's GDP and Imports in 2013



Source: Consensus Economics July 2013, author's calculations.

Note: The vertical axis reports changes in USD-based imports except in the case of our model for which it shows a change in the volume of imports. Blue diamonds refer to the individual forecasts of economic and financial forecasters that participate in the Consensus Economics exercises, the right red diamond (Consensus mean) denotes the unweighted average of these forecasts, the left red diamond (Model) the forecast of the BOFIT model.

close to actual oil prices as at July 2013. Interestingly, a pure model forecast predicts Russia's GDP to grow by only 2% in 2013 and to rebound to 4% in 2014. Compared with July's Consensus forecasts for Russia, our model projections indicate weaker growth in 2013 (see chart 4), whereas the Consensus mean of 3% for 2014 is lower than our model forecast.<sup>16</sup>

## 5 Conclusions

In spite of its small size, the macro model of the Russian economy presented in this paper is able to produce useful benchmark forecasts that inspire discussions about Russian developments.<sup>17</sup> It also offers a tool to compute scenarios based on different oil prices, a task that would be very difficult without a model. The above model calculations shed light on three particular issues that have in recent years been widely debated by professional forecasters of the Russian economy.

First, oil prices continue to play a key role in Russia's economy, and the model estimations in this paper show no major changes in this respect during the latter part of the 2000s and the beginning of this decade. However, particularly in very uncertain times, changes in oil prices alone cannot offer a proper explanation for output developments. At least, this is the case in our linear model setup. So, it would be interesting to study whether nonlinear models could reveal some new insights in this respect.

Second, we show that explicitly addressing increased uncertainty in exceptional times helps improve our forecasts. In this exercise, we construct a "crisis" variable based on exchange rate expectations to deal with excess uncertainty. Our model forecasts confirm that such a variable may help understand how sudden increases in uncertainty may negatively affect real sector developments. In addition to standard forecasting, a crisis variable like the one presented here appears to be important for scenario calculations as oil prices alone cannot evidently capture developments in turbulent times in Russia.

Third, our paper contributes to the current discussion about Russia's recent growth performance. We have a case to claim that underlying trend growth in Russia has significantly decelerated in comparison with pre-crisis years. The computations here suggest that annual trend growth halved from around 4% before 2008 to around 2% in recent years, and we cannot exclude an even bigger drop. While it is not possible to analyze the reasons for this decline in our model framework, potential suspects are a worsening – at least in relative terms – of the business environment and a loss of competitiveness of Russian firms as economic reforms stalled in the latter part of the last decade.

<sup>16</sup> One should note that the low value of Rosstat's Q1 2013 GDP figure inspired a lively discussion about its accuracy. Estimations during the writing of this article give some support to worries that the figure may be too low compared to developments of other factors in our model. Any revisions of the series would of course affect forecasts presented here.

<sup>17</sup> The size of the model is perhaps not as critical as one may think as the findings of the earlier versions of our model compare well with the results obtained when using larger structural models, see Benedictow et al. (2013) or Rautava (2010).

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## Annex

The following tables show the test diagnostics of the short-run model.

Table A1

### Correlation of Structural Residuals (standard deviations on diagonal)

	Dgdp	Dimp	Dreer
Dgdp	0.0080	0.3573	-0.3655
Dimp	0.3573	0.0132	0.1546
Dreer	-0.3655	0.1546	0.0249

Source: Author's calculations.

Table A2

### Single-Equation Diagnostics Using Reduced-Form Residuals

Dgdp:	AR 1-5 test:	F(5,50)=	0.9004	[0.4882]
Dgdp:	ARCH 1-4 test:	F(4,60)=	0.3803	[0.8218]
Dgdp:	Normality test:	Chi <sup>2</sup> (2)=	1.4498	[0.4844]
Dgdp:	Heteroskedasticity test:	F(13,52)=	0.4534	[0.9403]
Dimp:	AR 1-5 test:	F(5,43)=	1.6709	[0.1622]
Dimp:	ARCH 1-4 test:	F(4,60)=	0.5797	[0.6785]
Dimp:	Normality test:	Chi <sup>2</sup> (2)=	2.8192	[0.2442]
Dimp:	Heteroskedasticity test:	F(14,52)=	0.8357	[0.6286]
Dreer:	AR 1-5 test:	F(5,52)=	0.5041	[0.7718]
Dreer:	ARCH 1-4 test:	F(4,60)=	0.6550	[0.6257]
Dreer:	Normality test:	Chi <sup>2</sup> (2)=	2.9323	[0.2308]
Dreer:	Heteroskedasticity test:	F(6,59)=	0.4123	[0.8680]
Vector	SEM-AR 1-5 test:	F(45,110)=	1.0511	[0.4074]
Vector	Normality test:	Chi <sup>2</sup> (6)=	12.043	[0.0610]
Vector	Heteroskedasticity test:	F(126,233)=	1.0218	[0.4391]

Source: Author's calculations.



## Event Wrap-Ups

## 74<sup>th</sup> East Jour Fixe: Latvia Joining the Euro Area

Compiled by  
Tomáš Slačik and  
Jarmila Urvová

The OeNB's 74<sup>th</sup> East Jour Fixe was organized in cooperation with the Austrian Society for European Politics and took place on October 21, 2013. It focused on Latvia, which on January 1, 2014, will be the 18<sup>th</sup> EU Member State to introduce the euro. While the discussion centered on Latvia's experience of coping with the economic and financial crisis by internal adjustment (i.e. without changing its long-standing exchange rate peg to the euro), substantial attention was also paid to the country's economic outlook and to challenges awaiting Latvia following euro adoption.

After an introductory statement by *Doris Ritzberger-Grünwald*, Director of the OeNB's Economic Analysis and Research Department, who sketched the evolution of Latvia's plans of euro introduction, *Paul Kutos*, Head of Unit in the European Commission's DG ECFIN, delivered a keynote address on "Latvia's Accession to EMU: Macroeconomic Background and Remaining Challenges." He provided an overview of the Latvian transition process, the country's economic performance in the run-up to the crisis and the subsequent adjustment program. Kutos stressed that after euro adoption, it will be crucial for Latvia to ensure sustainable convergence and to maintain its commitment to sound policies, in particular in the areas of public finances, the labor market and in the financial sector.

The next session, entitled "Strengthening Macroeconomic Stability and Competitiveness in Latvia," was chaired by *Helene Schuberth*, Head of the OeNB's Foreign Research Division, and opened by *Daniel Hardy*, Expert at the Austrian Financial Market Authority, with his presentation on "Non-Resident Deposits and Financial Market Stability." He explained the role of nonresidents' deposits in Latvia and how they became a problem during the crisis. Hardy analyzed the recent resurgence of nonresidents' deposits in Latvia and sketched the differences between Latvia and genuine offshore financial centers. He discussed measures the Latvian government took to tackle possible risks as well as areas which might need further policy attention, such as the country's deposit guarantee scheme.

*Plamen Iossifov*, Senior Economist at the European Central Bank, discussed "Newly Rising House Prices against the Backdrop of Overleveraged Balance Sheets: A Cause for Concern?" He provided an overview of the latest house price boom-bust episode in the Baltic countries, which had been fueled by rapid credit growth. After the crisis, Latvian households started repairing their overleveraged balance sheets and house prices started to recover, although they remain well below their pre-crisis peaks. According to Iossifov, potentially long-lasting low real interest rates pose a risk to the sustainability of this recovery process.

*Anders Paalzow*, Rector of the Stockholm School of Economics in Riga, discussed "Price and Non-Price Competitiveness: A Key Factor for a Small Open Economy." He stressed that the internal devaluation Latvia undertook during the crisis, which had resulted in significant export growth, was just a necessary price adjustment. According to Paalzow, this was the "easy part," however, as fundamentals have not yet been addressed. The adoption of the euro is thus just the "end of the beginning." Against this background, Paalzow called upon the Latvian authorities to pay increased attention to non-price competitiveness, which is of essential importance for small and open economies like Latvia. In particular, Paalzow considers a sound

fiscal policy and effective investment in physical infrastructure and education the most important drivers bolstering non-price competitiveness.

The workshop continued with a panel discussion featuring the governors of the Latvian and Austrian central banks, *Ilmārs Rimšēvičs* and *Ewald Nowotny*, respectively. This high-level debate was moderated by *Paul Schmidt*, Secretary-General of the Austrian Society for European Politics. Governor Rimšēvičs started the discussion by walking the audience through Latvia's experience with the crisis and the euro adoption process, pointing out that despite ex-ante warnings of protracted recession risks under an internal adjustment scenario, internal adjustment in fact was followed by a strong V-shaped recovery. For the last three years, Latvia has been the fastest-growing EU economy and, according to the European Commission's forecast, it is expected to remain the EU growth leader over the next three years. Rimšēvičs stressed that this impressive economic performance has only been possible because of Latvia's sizeable fiscal consolidation, which is underpinned by structural reforms, as well as its unique combination of specific factors, namely speed, ownership, commitment and solidarity. With respect to the country's upcoming introduction of the euro, Rimšēvičs pointed out that Latvia will benefit from the common currency in many ways. As a euro area country, Latvia will be able to participate in crucial decision-making processes; moreover, the common currency is also expected to spur exports, investment and growth, reduce debt servicing costs and risk premiums and save transaction costs. According to Latvijas Banka's estimates, the long-term advantages will clearly outweigh short-term costs, and the net benefit for Latvia will amount to some EUR 9 billion, cumulatively, over the next ten years. Rimšēvičs wrapped up by presenting survey evidence suggesting that public support for the euro in Latvia is steadily increasing and that, in general, the Latvian population implicitly welcomes the benefits the introduction of the euro will entail.

OeNB Governor Nowotny added that while in Austria public opinion in favor of EU membership has always been rather high and stable, public support for the euro increased significantly only after the introduction of the common currency. He then went on to recall Austria's experience with its hard currency policy, which – given the small size and the openness of the Austrian economy – had proved very successful and had also served as an instrument to promote deeper structural changes. Nowotny then took up Paalzow's notion that for Latvia, euro adoption was just “the end of the beginning” and warned against reform fatigue. While acknowledging that every policy measure comes at some cost, political and public willingness to accept these costs is essential. Nowotny then opened the general discussion by raising the question whether within the future banking union we should pursue the same, pan-European standards despite different perspectives and interests of home and host countries. The subsequent discussion centered on the challenges the Latvian banking sector in Latvia is facing, in particular on its relatively high share of nonresidents' deposits, and on the differences in the extent of such deposits in Latvia and Cyprus. Another issue was Latvia's need to find a new convergence model that is not based on capital inflows but geared to addressing labor market challenges, in particular emigration.

# Seminar on the IMF's Regional Economic Issues: "Faster, Higher, Stronger – Raising the Growth Potential of CESEE"

Compiled by  
Christina Lerner

On October 18, 2013, the OeNB hosted a seminar on the IMF's Regional Economic Issues (REI) for Central, Eastern and Southeastern Europe (CESEE<sup>1</sup>). *Aasim Husain*, Deputy Director of the IMF's European Department, analyzed the current economic situation and near-term outlook, while *Bas Bakker*, Chief of the Emerging Economies Division in the IMF's European Department, focused on longer-term growth perspectives and policies to improve them. The two presentations were followed by a lively discussion among journalists, OeNB economists and experts from various economic institutions and commercial banks.

The seminar was opened by *Kurt Pribil*, Executive Director of the OeNB, and chaired by *Doris Ritzberger-Grünwald*, Director of the OeNB's Economic Analysis and Research Department. In his opening remarks, Pribil stressed that the issue of reviving growth in the CESEE region – a region that has always been of strategic interest for the OeNB – was key in order to ensure a renewed phase of economic catching-up.

In his presentation, *Aasim Husain* explained that the current REI, in contrast to its predecessor Regional Economic Outlook (REO), focuses entirely on the CESEE region and is more strongly issues oriented. He stated that financial markets in CESEE have been under pressure since spring 2013. According to Husain, CESEE countries with weaker fundamentals and with larger previous inflows have been affected more strongly. The past five years have been a setback for convergence with Western Europe.

*Bas Bakker* then explained that, due to a drop in growth potential that was worse than in other emerging market economies, post-crisis growth in CESEE has been disappointing. Looking ahead, headwinds to potential growth are substantial. He confirmed, however, that CESEE is starting to come out of this downturn, as it benefits from the pickup in the euro area. Bakker further remarked that space for countercyclical policies is limited in many countries: fiscal deficits are still elevated and public debt is rising. Thus, it is essential to achieve "faster, higher, stronger" growth in CESEE by taking four decisive steps:

(1) *Addressing crisis legacies*: Cleaning up the existing stock of nonperforming loans (NPLs) will be crucial to break the vicious circle of high NPLs and low growth. (2) *Boosting the tradable sector*: Bakker outlined how more balanced growth and trade openness foster growth. Attracting productive FDI inflows could help the tradable sector grow faster. (3) *Improving the investment climate*: Many countries should simplify regulations, strengthen competition and increase investor protection in order to improve the investment climate. (4) *Ensuring a well-functioning labor market*: High unemployment has a large structural component, but is also caused by weak growth and corporate balance sheet adjustments. Enhanced active labor market policies and education are needed to improve labor market outcomes.

<sup>1</sup> CESEE refers to Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, FYR Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, Turkey and Ukraine.

# 18<sup>th</sup> Global Economy Lecture: Rachel Griffith

## Multinational Firms, Intellectual Property and Taxation

Compiled by  
Julia Wörz

On October 10, 2013, *Rachel Griffith*, President elect of the European Economic Association and Research Director at the London-based Institute for Fiscal Studies (IFS), gave the 2013 Global Economy Lecture<sup>1</sup> at the OeNB. Her presentation focused on the challenges that governments face in designing and implementing nonfinancial corporate income taxes in the 21<sup>st</sup> century. Over the past three decades, economies have become more open and the movement of goods, services, people and, above all, capital across national borders has increased. The resulting global corporate structures make it more difficult for tax authorities to allocate taxable profits to individual entities and at the same time easier for firms to avoid taxes by shifting taxable profits between tax jurisdictions. In addition, a much greater share of income is now generated from investments in intangible assets which often have no clear geographical location and are harder to value than tangible assets.

Still, most countries operate a variant of a source-based tax system under which they attempt to tax profits that arise in their jurisdiction, raising fears of a “race to the bottom.” Indeed, headline corporate tax rates have shown a seminal decline, foreign-sourced income is often subject to lower tax rates, and also income from intellectual property is often subject to preferential tax rates. Nevertheless, taxable profits as a percentage of GDP have increased in most countries, leading to steady or rising tax revenues. Professor Griffith raised awareness in her talk for the potentially costly distortions to economic activity implied by recent reforms to address the challenges of globalization on corporate taxation. Recalling that corporate taxes are ultimately paid by capital owners, workers and consumers, she pledged for more research on the nature of taxable profits in order to minimize distortions between the three groups. Policy recommendations differ greatly, depending on whether taxable profits represent normal (risk-adjusted) returns on equity, labor compensation or returns to market power.

The very lively discussion challenged, among others, Griffith’s view that, in the OECD average, corporate tax revenues have risen sufficiently to offset lower tax rates. It was further observed that the relatively constant hierarchy of tax rates among countries has probably limited the redistribution of profits toward tax havens and prevented a complete race to the bottom. A discussion also emerged about the comparatively high tax rates in the United States, specifically about the difference between the statutory rates and the considerably lower level of effective tax rates. In her response to this observation, Rachel Griffith also stressed the costs involved in moving activity and income, as well as the importance of locational factors other than taxes. Being prompted on whether the race to the bottom is apparently a European problem, she acknowledged that international cooperation at the European and the global level alike would clearly increase welfare.

<sup>1</sup> *The Global Economy Lecture is an annual event jointly organized by the Oesterreichische Nationalbank (OeNB) and The Vienna Institute for International Economic Studies (wiiw).*



## Statistical Annex

# Statistical Annex

This section provides tables detailing selected economic indicators for Albania, Bosnia and Herzegovina, FYR Macedonia,<sup>1</sup> Kosovo, Montenegro, Serbia and Ukraine, i.e. CESEE countries not covered in the Recent Economic Developments and Outlook section.

## Conventions used

x = No data can be indicated for technical reasons

. . = Data not available at the reporting date

Discrepancies may arise from rounding.

Table 1

## Gross Domestic Product

	2006	2007	2008	2009	2010	2011	2012
	<i>Annual real change in %</i>						
Albania	5.4	5.9	7.5	3.3	3.8	3.1	1.5
Bosnia and Herzegovina	5.5	6.0	5.6	-2.8	0.7	1.0	-1.7
FYR Macedonia	5.0	6.1	5.0	-0.9	2.9	2.8	-0.2
Kosovo	x	x	7.2	3.5	3.2	4.5	2.1
Montenegro	8.6	10.7	6.9	-5.7	2.5	3.2	-2.5
Serbia	3.6	5.4	3.8	-3.5	1.0	1.6	-1.7
Ukraine	7.3	7.9	2.3	-14.8	4.1	5.2	0.2

Source: wiw.

Table 2

## Industrial Production

	2006	2007	2008	2009	2010	2011	2012
	<i>Annual real change in %</i>						
Albania	4.0	-12.7	29.9	-1.2	19.9	-10.1	16.5
Bosnia and Herzegovina	11.5	6.4	7.3	1.5	3.7	6.4	-5.2
FYR Macedonia	3.6	3.7	5.5	-7.7	-4.3	6.9	-2.7
Kosovo <sup>1</sup>	x	x	x	-1.5	-5.6	19.2	-10.0
Montenegro	1.0	0.1	-2.0	-32.2	17.5	-10.3	-7.1
Serbia	4.7	3.7	1.1	-12.1	2.9	2.1	-2.9
Ukraine	6.2	7.6	-5.2	-21.9	11.2	7.6	-1.8

Source: wiw.

<sup>1</sup> According to gross value added data.

<sup>1</sup> Former Yugoslav Republic of Macedonia.

Table 3

**Average Gross Wages – Total Economy**

	2006	2007	2008	2009	2010	2011	2012
	<i>Annual change in %</i>						
Albania	9.2	25.2	25.3	5.2	-3.6	4.9	7.7
Bosnia and Herzegovina	9.5	9.8	16.7	8.1	1.1	4.6	1.3
FYR Macedonia	8.0	4.8	8.7	14.1	1.0	1.2	0.2
Kosovo <sup>1</sup>	x	x	x	22.8	12.5	14.6	0.9
Montenegro	15.6	31.7	22.5	5.6	11.2	1.0	0.7
Serbia	24.4	22.0	17.9	-3.3	7.5	11.1	8.9
Ukraine	29.2	29.7	33.7	5.5	17.5	17.6	14.9

Source: wiiw.

<sup>1</sup> Average net monthly wages.

Table 4

**Unemployment Rate<sup>1</sup>**

	2006	2007	2008	2009	2010	2011	2012
	<i>%</i>						
Albania	x	13.5	13.0	13.8	14.2	14.3	13.9
Bosnia and Herzegovina	31.1	29.0	23.4	24.1	27.2	27.6	28.0
FYR Macedonia	36.0	34.9	33.8	32.2	32.0	31.4	31.0
Kosovo	x	x	47.5	45.4	45.1	44.8	44.0
Montenegro	29.6	19.3	17.2	19.3	19.6	19.7	19.7
Serbia	20.9	18.1	13.6	16.1	19.2	23.0	23.9
Ukraine	6.8	6.4	6.4	8.8	8.1	7.9	7.5

Source: wiiw.

<sup>1</sup> Labor force survey, period average.

Table 5

**Industrial Producer Price Index**

	2006	2007	2008	2009	2010	2011	2012
	<i>Period average, annual change in %</i>						
Albania	0.8	3.5	6.5	-1.6	0.3	2.6	1.5
Bosnia and Herzegovina	x	x	8.6	-3.2	0.9	3.7	1.5
FYR Macedonia	7.3	2.5	10.3	-6.5	8.5	12.4	4.6
Kosovo	x	x	x	3.8	4.7	5.7	1.0
Montenegro	3.6	8.5	14.0	-3.9	-0.9	3.2	1.9
Serbia	13.3	5.9	12.4	5.6	12.7	14.2	5.5
Ukraine	9.6	19.5	35.5	6.5	20.9	19.0	3.7

Source: wiiw.

Table 6

**Consumer Price Index**

	2006	2007	2008	2009	2010	2011	2012
<i>Period average, annual change in %</i>							
Albania	2.4	2.9	3.4	2.3	3.6	3.4	2.0
Bosnia and Herzegovina	6.2	1.5	7.5	-0.4	2.1	3.7	2.1
FYR Macedonia	3.2	2.3	8.3	-0.8	1.6	3.9	3.3
Kosovo	x	x	9.4	-2.4	3.5	7.3	2.5
Montenegro	3.0	4.2	7.4	3.4	0.5	3.1	4.1
Serbia	11.7	7.0	13.5	8.6	6.8	11.0	7.8
Ukraine	9.1	12.8	25.2	15.9	9.4	8.0	0.6

Source: wiiw.

Table 7

**Trade Balance**

	2006	2007	2008	2009	2010	2011	2012
<i>% of GDP</i>							
Albania	-23.1	-26.9	-27.4	-26.5	-23.5	-24.5	-20.7
Bosnia and Herzegovina	-34.2	-36.9	-37.9	-27.6	-25.5	-27.7	-32.7
FYR Macedonia	-19.1	-19.8	-26.2	-23.3	-20.5	-22.5	-23.8
Kosovo	x	x	-42.3	-41.2	-40.8	-43.1	-42.2
Montenegro	-45.0	-57.6	-65.6	-44.3	-40.8	-40.4	-42.4
Serbia	-21.4	-24.8	-26.0	-17.1	-16.4	-16.9	-18.2
Ukraine	-4.8	-7.4	-8.9	-3.7	-6.1	-9.9	-11.6

Source: wiiw, European Commission.

Table 8

**Current Account Balance**

	2006	2007	2008	2009	2010	2011	2012
<i>% of GDP</i>							
Albania	-6.6	-10.5	-15.6	-15.3	-11.5	-13.0	-10.6
Bosnia and Herzegovina	-7.9	-10.6	-13.9	-6.3	-5.7	-8.7	-9.5
FYR Macedonia	-0.4	-7.1	-12.8	-6.8	-2.0	-3.0	-3.9
Kosovo	x	x	-11.7	-9.3	-12.0	-13.8	-7.6
Montenegro	-31.3	-39.5	-49.8	-27.9	-22.9	-17.7	-17.9
Serbia	-10.1	-17.7	-21.6	-6.6	-6.7	-9.1	-10.5
Ukraine	-1.5	-3.7	-7.1	-1.5	-2.2	-6.3	-8.4

Source: wiiw.

Table 9

**Net FDI Inflows**

	2006	2007	2008	2009	2010	2011	2012
	<i>% of GDP</i>						
Albania	3.6	6.1	7.5	8.2	8.9	8.2	7.7
Bosnia and Herzegovina	4.4	11.8	5.4	1.5	1.7	2.2	3.7
FYR Macedonia	6.6	8.5	6.0	2.2	2.3	4.5	1.0
Kosovo	x	x	x	7.3	8.5	8.3	4.6
Montenegro	23.1	25.5	21.2	36.9	18.5	12.4	14.5
Serbia	14.6	8.8	6.2	4.9	3.6	6.2	0.9
Ukraine	5.2	6.9	6.1	4.1	4.8	4.4	4.4

Source: wiiw.

Table 10

**Reserve Assets Excluding Gold**

	2006	2007	2008	2009	2010	2011	2012
	<i>End of period, % of GDP</i>						
Albania	18.5	18.1	18.3	18.5	20.8	20.3	19.8
Bosnia and Herzegovina	28.0	30.5	25.3	25.4	25.8	24.4	24.6
FYR Macedonia	25.1	23.5	20.3	21.3	21.0	24.1	23.6
Kosovo	x	x	x	14.4	14.8	12.0	16.8
Montenegro	8.0	9.7	7.0	5.8	5.3	5.3	5.7
Serbia	37.9	33.1	24.2	35.5	34.1	36.5	34.3
Ukraine	19.3	20.8	17.8	21.2	24.4	20.1	12.5

Source: wiiw.

Table 11

**Gross External Debt**

	2006	2007	2008	2009	2010	2011	2012
	<i>End of period, % of GDP</i>						
Albania	26.4	28.7	37.6	41.3	46.2	52.5	54.8
Bosnia and Herzegovina <sup>1</sup>	20.9	18.0	17.0	21.6	25.4	26.0	27.7
FYR Macedonia	47.9	47.6	49.2	56.4	58.2	64.9	69.0
Kosovo	x	x	x	28.6	31.4	29.9	30.4
Montenegro <sup>1</sup>	23.5	17.2	15.6	23.5	29.4	32.9	39.5
Serbia	60.9	60.2	64.6	77.7	84.9	76.7	85.8
Ukraine	48.2	52.2	58.6	85.8	86.0	83.4	74.7

Source: wiiw.

<sup>1</sup> Gross external public debt.

Table 12

**General Government Balance**

	2006	2007	2008	2009	2010	2011	2012
	% of GDP						
Albania	-3.3	-3.5	-5.5	-7.0	-3.1	-3.6	-3.4
Bosnia and Herzegovina	2.8	1.2	-2.2	-4.4	-2.5	-1.3	-3.0
FYR Macedonia	-0.5	0.6	-0.9	-2.7	-2.4	-2.5	-3.9
Kosovo	x	x	x	4.1	-1.3	-0.2	-1.2
Montenegro	2.7	6.7	1.7	-3.6	-3.0	-1.3	-0.4
Serbia	-1.5	-1.9	-2.6	-4.5	-4.7	-5.0	-6.4
Ukraine	-0.7	-1.1	-1.5	-4.1	-6.0	-1.8	-3.6

Source: wiw.

Table 13

**Gross General Government Debt**

	2006	2007	2008	2009	2010	2011	2012
	% of GDP						
Albania	56.7	53.8	55.1	59.3	57.8	58.6	62.9
Bosnia and Herzegovina	22.0	29.8	30.8	36.2	39.6	40.7	43.1
FYR Macedonia	38.8	32.3	27.9	31.7	34.8	35.0	36.0
Kosovo <sup>1</sup>	x	x	x	6.2	6.1	5.3	6.2
Montenegro	32.6	27.5	29.0	38.2	40.9	45.9	51.9
Serbia	37.7	30.9	29.2	34.7	44.5	48.5	59.3
Ukraine	14.8	12.3	20.0	34.8	39.9	36.3	36.6

Source: wiw.

<sup>1</sup> Public debt (national definition).

Table 14

**Broad Money**

	2006	2007	2008	2009	2010	2011	2012
	End of period, annual nominal change in %						
Albania (M2)	16.7	12.9	7.2	6.8	12.5	9.2	5.0
Bosnia and Herzegovina (M2)	24.2	19.2	4.1	2.2	7.2	5.8	3.4
FYR Macedonia (M3)	25.0	29.3	11.2	6.0	12.2	9.7	4.4
Kosovo (M4)	x	x	23.6	11.2	12.9	8.8	7.1
Montenegro (M2)	87.9	72.9	-41.5	-7.0	3.4	2.1	8.4
Serbia (M2)	38.3	42.5	9.8	21.5	12.9	10.3	9.4
Ukraine (M3)	34.5	51.7	30.2	-5.5	22.7	14.7	12.8

Source: wiw, European Commission.

Table 15

**Official Key Interest Rate**

	2006	2007	2008	2009	2010	2011	2012
<i>End of period, %</i>							
Albania (refinancing base rate)	5.5	6.3	6.3	5.3	5.0	4.8	4.0
Bosnia and Herzegovina <sup>1</sup>	x	x	x	x	x	x	x
FYR Macedonia (CB bills) <sup>2</sup>	5.7	4.8	7.0	8.5	4.1	4.0	3.7
Kosovo <sup>3</sup>	x	x	x	x	x	x	x
Montenegro <sup>3</sup>	x	x	x	x	x	x	x
Serbia (two-week repo rate) <sup>4</sup>	14.0	10.0	17.8	9.5	11.5	9.8	11.3
Ukraine (discount rate)	8.5	8.0	12.0	10.3	7.8	7.8	7.5

Source: *wiiw*.<sup>1</sup> Currency board.<sup>2</sup> Monthly weighted average interest rate on Central Bank Bills auctions (28 days).<sup>3</sup> Unilateral euroization.<sup>4</sup> 2002–05: Weighted average interest rates on securities used in open market operations by Narodna banka Srbije.

Table 16

**Exchange Rate**

	2006	2007	2008	2009	2010	2011	2012
<i>Period average, national currency per EUR</i>							
Albania	123.08	123.63	122.80	132.06	137.79	140.33	139.04
Bosnia and Herzegovina	1.96	1.96	1.96	1.96	1.96	1.96	1.96
FYR Macedonia	61.19	61.18	61.27	61.27	61.52	61.53	61.53
Kosovo	x	x	x	x	x	x	x
Montenegro	x	x	x	x	x	x	x
Serbia	84.19	79.98	81.47	93.94	102.90	101.96	112.98
Ukraine	6.34	6.92	7.71	10.87	10.53	11.09	10.27

Source: *wiiw*.



Notes

# Periodical Publications

See [www.oenb.at](http://www.oenb.at) for further details.

## **Geschäftsbericht (Nachhaltigkeitsbericht) Annual Report (Sustainability Report)**

German | annually  
English | annually

This report informs readers about the Eurosystem's monetary policy and underlying economic conditions as well as about the OeNB's role in maintaining price stability and financial stability. It also provides a brief account of the key activities of the OeNB's core business areas. The OeNB's financial statements are an integral part of the report.

[www.oenb.at/de/presse\\_pub/period\\_pub/unternehmen/geschaeftsbericht/geschaeftsberichte.jsp](http://www.oenb.at/de/presse_pub/period_pub/unternehmen/geschaeftsbericht/geschaeftsberichte.jsp)

[www.oenb.at/en/presse\\_pub/period\\_pub/unternehmen/geschaeftsbericht/geschaeftsbericht.jsp](http://www.oenb.at/en/presse_pub/period_pub/unternehmen/geschaeftsbericht/geschaeftsbericht.jsp)

## **Konjunktur aktuell**

German | seven times a year

This online publication provides a concise assessment of current cyclical and financial developments in the global economy, the euro area, Central, Eastern and Southeastern European countries, and in Austria. The quarterly releases (March, June, September and December) also include short analyses of economic and monetary policy issues.

[www.oenb.at/de/geldp\\_volksw/konjunktur/konjunktur\\_aktuell.jsp](http://www.oenb.at/de/geldp_volksw/konjunktur/konjunktur_aktuell.jsp)

## **Monetary Policy & the Economy**

English | quarterly

This publication assesses cyclical developments in Austria and presents the OeNB's regular macroeconomic forecasts for the Austrian economy. It contains economic analyses and studies with a particular relevance for central banking and summarizes findings from macroeconomic workshops and conferences organized by the OeNB.

[www.oenb.at/en/presse\\_pub/period\\_pub/volkswirtschaft/geldpolitik/monetary\\_policy\\_and\\_the\\_economy.jsp](http://www.oenb.at/en/presse_pub/period_pub/volkswirtschaft/geldpolitik/monetary_policy_and_the_economy.jsp)

## **Fakten zu Österreich und seinen Banken Facts on Austria and Its Banks**

German | twice a year  
English | twice a year

This online publication provides a snapshot of the Austrian economy based on a range of structural data and indicators for the real economy and the banking sector. Comparative international measures enable readers to put the information into perspective.

[www.oenb.at/de/presse\\_pub/period\\_pub/statistik/fakten/fakten\\_zu\\_oesterreich\\_und\\_seinen\\_banken.jsp](http://www.oenb.at/de/presse_pub/period_pub/statistik/fakten/fakten_zu_oesterreich_und_seinen_banken.jsp)

[www.oenb.at/en/presse\\_pub/period\\_pub/statistik/fakten/facts\\_on\\_austria\\_and\\_its\\_banks.jsp](http://www.oenb.at/en/presse_pub/period_pub/statistik/fakten/facts_on_austria_and_its_banks.jsp)

## **Financial Stability Report**

English | twice a year

The Reports section of this publication analyzes and assesses the stability of the Austrian financial system as well as developments that are relevant for financial stability in Austria and at the international level. The Special Topics section provides analyses and studies on specific financial stability-related issues.

[www.oenb.at/en/presse\\_pub/period\\_pub/finanzmarkt/finanzmarktstabilita/financial\\_stability\\_report.jsp](http://www.oenb.at/en/presse_pub/period_pub/finanzmarkt/finanzmarktstabilita/financial_stability_report.jsp)

## **Focus on European Economic Integration**

English | quarterly

This publication presents economic analyses and outlooks as well as analytical studies on macroeconomic and macrofinancial issues with a regional focus on Central, Eastern and Southeastern Europe.

[www.oenb.at/en/presse\\_pub/period\\_pub/volkswirtschaft/integration/focus\\_on\\_european\\_economic\\_integration.jsp](http://www.oenb.at/en/presse_pub/period_pub/volkswirtschaft/integration/focus_on_european_economic_integration.jsp)

## **Statistiken – Daten & Analysen**

German | quarterly

This publication contains analyses of the balance sheets of Austrian financial institutions, flow-of-funds statistics as well as external statistics (English summaries are provided). A set of 14 tables (also available on the OeNB's website) provides information about key financial and macroeconomic indicators.

[www.oenb.at/de/presse\\_pub/period\\_pub/statistik/statistiken/statistiken\\_-\\_daten\\_und\\_analysen.jsp](http://www.oenb.at/de/presse_pub/period_pub/statistik/statistiken/statistiken_-_daten_und_analysen.jsp)

## Statistiken – Daten & Analysen: Sonderhefte Statistiken – Daten & Analysen: Special Issues

German | irregularly  
English | irregularly

In addition to the regular issues of the quarterly statistical series “Statistiken – Daten & Analysen” the OeNB publishes a number of special issues on selected statistics topics (e.g. sector accounts, foreign direct investment and trade in services).

[www.oenb.at/en/presse\\_pub/period\\_pub/statistik/statistics.jsp](http://www.oenb.at/en/presse_pub/period_pub/statistik/statistics.jsp)

## Research Update

English | quarterly

This online newsletter informs international readers about selected research findings and activities of the OeNB’s Economic and Analysis and Research Department. It offers information about current publications, research priorities, events, conferences, lectures and workshops. Subscribe to the newsletter at:

[www.oenb.at/en/presse\\_pub/period\\_pub/volkswirtschaft/newsletter/einleitung.jsp#tcm:16-171525](http://www.oenb.at/en/presse_pub/period_pub/volkswirtschaft/newsletter/einleitung.jsp#tcm:16-171525)

## CESEE Research Update

English | quarterly

This online newsletter informs readers about research priorities, publications as well as past and upcoming events with a regional focus on Central, Eastern and Southeastern Europe. Subscribe to the newsletter at:

[www.oenb.at/en/geldp\\_volksw/zentral\\_osteuropa/News/newsletter/cesee\\_newsletter.jsp](http://www.oenb.at/en/geldp_volksw/zentral_osteuropa/News/newsletter/cesee_newsletter.jsp)

## OeNB Workshop Proceedings

German, English | irregularly

This series, launched in 2004, documents contributions to OeNB workshops with Austrian and international experts (policymakers, industry experts, academics and media representatives) on monetary and economic policymaking-related topics.

[www.oenb.at/en/presse\\_pub/period\\_pub/volkswirtschaft/workshops/workshops.jsp#tcm:14-172875](http://www.oenb.at/en/presse_pub/period_pub/volkswirtschaft/workshops/workshops.jsp#tcm:14-172875)

## Working Papers

English | irregularly

This online series provides a platform for discussing and disseminating economic papers and research findings. All contributions are subject to international peer review.

[www.oenb.at/en/presse\\_pub/research/020\\_workingpapers/\\_2013/working\\_papers\\_2013.jsp#tcm:16-256010](http://www.oenb.at/en/presse_pub/research/020_workingpapers/_2013/working_papers_2013.jsp#tcm:16-256010)

## Proceedings of the Economics Conference

English | annually

The OeNB’s annual Economics Conference provides an international platform where central bankers, economic policymakers, financial market agents as well as scholars and academics exchange views and information on monetary, economic and financial policy issues. The proceedings serve to document the conference contributions.

[www.oenb.at/en/presse\\_pub/period\\_pub/volkswirtschaft/vowitagung/economics\\_conferences.jsp](http://www.oenb.at/en/presse_pub/period_pub/volkswirtschaft/vowitagung/economics_conferences.jsp)

## Proceedings of the Conference on European Economic Integration

English | annually

The OeNB’s annual CEEI conference deals with current issues with a particular relevance for central banking in the context of convergence in Central, Eastern and Southeastern Europe as well as the EU enlargement and integration process.

[http://www.oenb.at/en/geldp\\_volksw/zentral\\_osteuropa/Events/archive\\_programs\\_eeei.jsp](http://www.oenb.at/en/geldp_volksw/zentral_osteuropa/Events/archive_programs_eeei.jsp)

The proceedings have been published with Edward Elgar Publishers, Cheltenham/UK, Northampton/MA, since the 2001 conference.

[www.e-elgar.com](http://www.e-elgar.com)

## Publications on Banking Supervisory Issues

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