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Call for applications: Visiting Research Program

The Oesterreichische Nationalbank (OeNB) invites applications from external researchers (EU or Swiss nationals) 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 (preferably postdoc) members of academic and research institutions who work in the fields of macro-economics, international economics or financial economics and/or whose research has 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, as a rule, have access to the department's computer resources, and they will also be provided with accommodation on demand. 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 three and six 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 2018 should be e-mailed to eva.gehringer-wasserbauer@oenb.at by May 1, 2018.

Applicants will be notified of the jury's decision by mid-June. The following round of applications will close on November 1, 2018.

Recent economic developments and outlook

Developments in selected CESEE countries

Strongest economic momentum in years^{1,2,3}

Supportive
international
economic
environment ...

1 Regional overview

Global macroeconomic and financial market conditions remained favorable in the review period. Equity prices trended upward amid strong earnings, improved consumer and business confidence, and favorable macroeconomic data. At the same time, market volatility remained low and risk appetite strong. Capital flows to emerging market economies have remained resilient in recent months, continuing their recovery after the slump in late 2015 and early 2016.

The accelerated global momentum appears to be well entrenched, given notable upward revisions in major regions of the world economy (including the euro area, Japan, China and Canada), thus pushing up global growth to its highest level since 2011. The euro area has done particularly well, with growth accelerating to 2.3% year on year in the second quarter of 2017 – also the strongest pace since 2011. Global trade likewise rebounded to its most dynamic level in years despite constant fears of a return of protectionist tendencies: The upturn in emerging markets and advanced economies and moderately higher commodity prices lifted world trade growth to 5% annually in summer 2017. Furthermore, Brexit has not yet altered the functioning of the European economy and common European principles (including the free movement of people). More narrowly confined problems like the Volkswagen emission violations have not acted as a game changer either: So far, passenger car registrations in the EU have continued their upward trend, with a drop in diesel sales offset by an increase in petrol vehicles, thus supporting the region's key automotive sector. Finally, while geopolitical risks for CESEE remain elevated, they have not intensified over the review period, and increasing anti-European sentiment and rising populism in some countries have not yet affected economic developments through increased risk perception by investors.

... lifts growth in
CESEE EU Member
States to fastest
pace in years

The favorable international environment has provided the backdrop for a continuing strong momentum of the regions' economies. Average growth in the CESEE EU Member States amounted to 1.2% and 1.3% in the first two quarters of 2017, respectively (quarter-on-quarter rates adjusted for working days and seasonality; see table 1). This represents a major acceleration compared to the previous year and one of the fastest expansions since the downturn in 2008. The Czech Republic stands out with a growth rate of 2.5% (quarter on quarter) in the second quarter, the highest reading since the start of the Czech GDP series in 1996. The CESEE EU Member States' trade openness and integration into international production networks provided for a quick and comprehensive absorption of external growth impulses. Furthermore, important macroeconomic imbalances have been successfully addressed in recent years, thus paving the way for a more balanced and broad-based economic development.

¹ Compiled by Josef Schreiner with input from Stephan Barisitz, Elisabeth Beckmann, Markus Eller, Mariya Hake, Antje Hildebrandt, Mathias Lahnsteiner, Thomas Reininger, Tomas Slacik and Zoltan Walko.

² Cutoff date: October 6, 2017. This report focuses primarily on data releases and developments from April 2017 up to the cutoff date and covers Slovakia, Slovenia, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Turkey and Russia. The countries are ranked according to their level of EU integration (euro area countries, EU Member States, EU candidate countries and non-EU countries). For statistical information on selected economic indicators for CESEE countries not covered in this report (Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro, Serbia and Ukraine), see the statistical annex in this issue.

³ All growth rates in the text refer to year-on-year changes unless otherwise stated.

Growth picked up also in Turkey and Russia. Turkey benefited especially from expansionary fiscal policies. In addition, rebounding external demand (reflecting, among other things, a more competitive Turkish lira and the lifting of the Russian ban on certain Turkish goods and services) and declining political uncertainty after the April referendum also supported the economy. Russian economic growth accelerated in line with a recovery of the oil price and strengthening private consumption.

Also Russia and Turkey perform well

Driven by swift economic expansion, the CESEE EU Member States stand to achieve a growth differential of almost 2 percentage points in 2017 vis-à-vis the euro area according to the latest projections. At the same time, progress with catching up remains heterogeneous across the CESEE countries. For example, Croatia has not yet reached its pre-crisis output levels, while most other CESEE countries (and the euro area) did so several years ago. Furthermore, GDP per capita (at PPP) is still notably below euro area levels in all CESEE countries, ranging from 50% in Bulgaria to 80% in the Czech Republic. The respective figures for Turkey and Russia are within a range of 60% to 65%.

Private consumption remained the major pillar of growth throughout the CESEE region, benefiting especially from improving labor market conditions and rising real wages (see chart 1). At the same time consumer sentiment climbed to historical heights.

Tightening labor market conditions fuel wage growth and private consumption

In fact, labor markets are becoming increasingly tight in many countries, especially in the CESEE EU Member States. Unemployment rates have been falling consistently in recent years, from an average level of around 11% in early 2013 to 6% in July 2017. The Czech Republic reported an unemployment rate of 2.9% in July 2017, the lowest rate in the EU. Positive labor market developments are also substantiated by several other indicators: Unemployment even declined among the most vulnerable age cohorts, namely young persons (below 25 years) and older persons (above 50 years). The trend in long-term unemployment was positive as well and rather broad-based. At the same time, labor shortages are increasingly perceived as a problem in most of the countries. Employment expanded throughout the region, reaching the highest level since late 2008. Strong employment growth also pushed up average employment rates (employed persons in relation to

Table 1

Real GDP growth

	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
	Period-on-period change in %							
Slovakia	3.8	3.3	0.6	0.8	0.7	0.8	0.8	0.8
Slovenia	2.3	3.1	0.8	0.9	1.4	1.3	1.2	1.1
Bulgaria	3.6	3.9	1.1	0.9	0.8	1.1	0.9	1.0
Croatia	2.2	3.0	0.6	0.8	1.4	0.5	0.6	0.8
Czech Republic	5.3	2.6	0.3	0.8	0.2	0.4	1.5	2.5
Hungary	3.1	2.0	-0.5	1.1	0.5	0.8	1.4	0.9
Poland	3.9	2.6	-0.1	0.9	0.4	1.7	1.1	1.1
Romania	3.9	4.8	1.2	1.5	0.7	1.6	1.8	1.7
Turkey	6.1	3.2	0.8	0.2	-0.2	3.8	1.4	2.1
Russia	-2.8	-0.2	0.5	-0.6	0.0	0.5	..	..
Euro area	2.1	1.8	0.5	0.3	0.4	0.6	0.6	0.7

Source: Eurostat, national statistical offices.

the total population aged between 15 and 64) to euro area levels. Some countries (e.g. Czech Republic, Hungary and Slovenia) already reported higher employment rates than the euro area.

Against this background, nominal wages rose powerfully in the review period, increasing by around 9% per annum, on average, in the first half of 2017, from 6% in the second half of 2016. Several countries reported double-digit increases, with Romania leading the ranking: Caused by, among other things, a minimum wage hike, wages in the country increased by close to 19% in the second quarter of 2017. Slowly rising inflation rates somewhat cut into purchasing power throughout the region. Nevertheless, real wages rose by some 8% on average in the first half of 2017.

Rebound in investment helped by stepped-up utilization of EU funds

After a slack in 2016, gross fixed capital formation started to gain speed notably in the first half of 2017 as private investment was rebounding, given capacities approaching their limits, strong industrial confidence and improved credit market conditions amid low interest rates. Investment in construction and public investment picked up, too, being strongly supported by stepped-up utilization of EU funds in many countries as the 2014–2020 programming period unfolded. The recovery in capital formation was especially pronounced in Hungary but also notably above average in Slovenia and the Czech Republic.

Construction activity also lifted capital formation in Russia and Turkey. For Turkey, a more detailed analysis of investments shows that construction (which amounts to around 60% of total investment) grew by 25% year on year. By contrast, machinery and equipment investment (about 35% of the total) contracted for the fourth quarter in a row, falling by 8.6% year on year in the second quarter. In Russia, construction was supported by large infrastructure projects.

External sector's growth contribution diminishes on the back of higher import demand ...

The external sector's contribution to growth declined in most CESEE countries and was either neutral or slightly negative. Exports broadly retained their previous momentum despite a loss in price competitiveness against the background of stronger external demand. At the same time, imports accelerated noticeably given the dynamic development of private consumption and the recovery of investment.

On the country level, net exports delivered the strongest growth contribution in Turkey, helped by currency depreciation, more vivid services exports on the back of a slight recovery in tourism and also by a base effect related to exports after the exceptionally weak performance in previous years. Among the CESEE EU Member States, the Czech Republic was the only country to report a substantial growth contribution as exports accelerated at a noticeably stronger pace than imports.

... and price competitiveness suffers from pronounced growth in labor costs

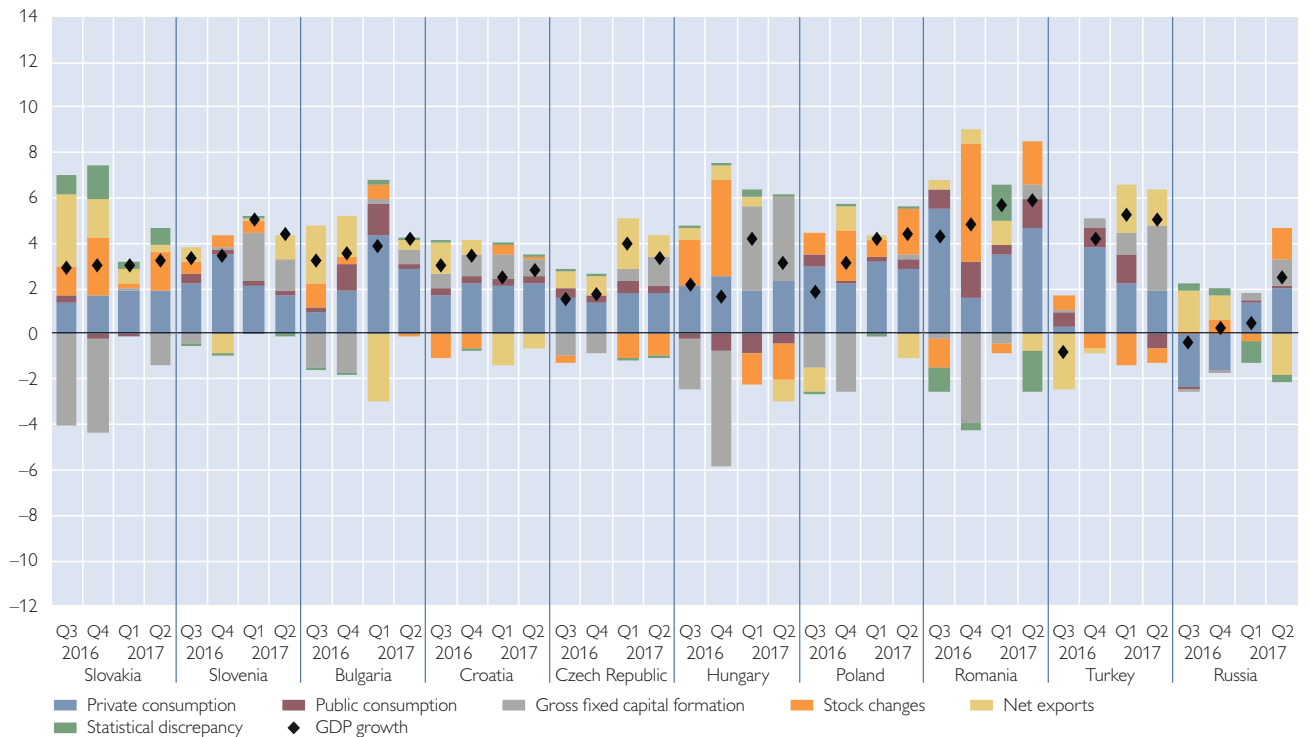
The external sector performed reasonably well given the fact that unit labor costs (ULC) in manufacturing (measured in euro) continued to deteriorate throughout most of the region. On a positive note, productivity growth re-entered positive territory after a prolonged period of slack as increasingly tight labor markets prevented labor input growth from keeping pace with manufacturing output growth. Productivity advances, however, were not strong enough to offset cost increases: Labor cost growth was in the high single or even double digits in the first half of 2017. Furthermore, currency appreciation negatively impacted price competitiveness especially in Central European countries (e.g. in the Czech Republic, Hungary and Poland) and Russia.

Turkey was the only country to report a clear decline in ULC as currency depreciation was strong enough to improve the country's competitive position even in the face of double-digit labor cost rises. Among the CESEE EU Member

Chart 1

GDP growth and its main components

Percentage points, GDP growth in % (year on year)



Source: Eurostat, national statistical offices.

States, only Slovenia managed to marginally cut its ULC in the review period as labor costs growth fell short of the costs observed by other regional peers, especially in the first quarter of 2017.

Strong domestic demand and reduced international competitiveness have already had some impact on external balances. The combined current and capital account balance for CESEE as a whole remained broadly stable in the first half of 2017 at around 0.5% of GDP (four-quarter moving sums; see chart 2). The average, however, masks differing trends. Russia was the only country in the region that managed to improve its external position moderately between the fourth quarter of 2016 and the second quarter of 2017, mainly on the back of an oil price-triggered recovery of exports. All other countries reported a deterioration. This development was especially pronounced in Bulgaria and Romania, where a worsening of the goods and services balances and lower inflows via the capital account adversely impacted external positions. Both factors were at play in most other CESEE countries as well. Developments in the trade balance can be related to the surge in domestic demand as well as to deteriorating price competitiveness. Terms-of-trade effects further contributed somewhat to the explanation. Weakening capital accounts to some extent reflect unusually low EU fund inflows in 2016 that continue to affect annualized figures throughout 2017.

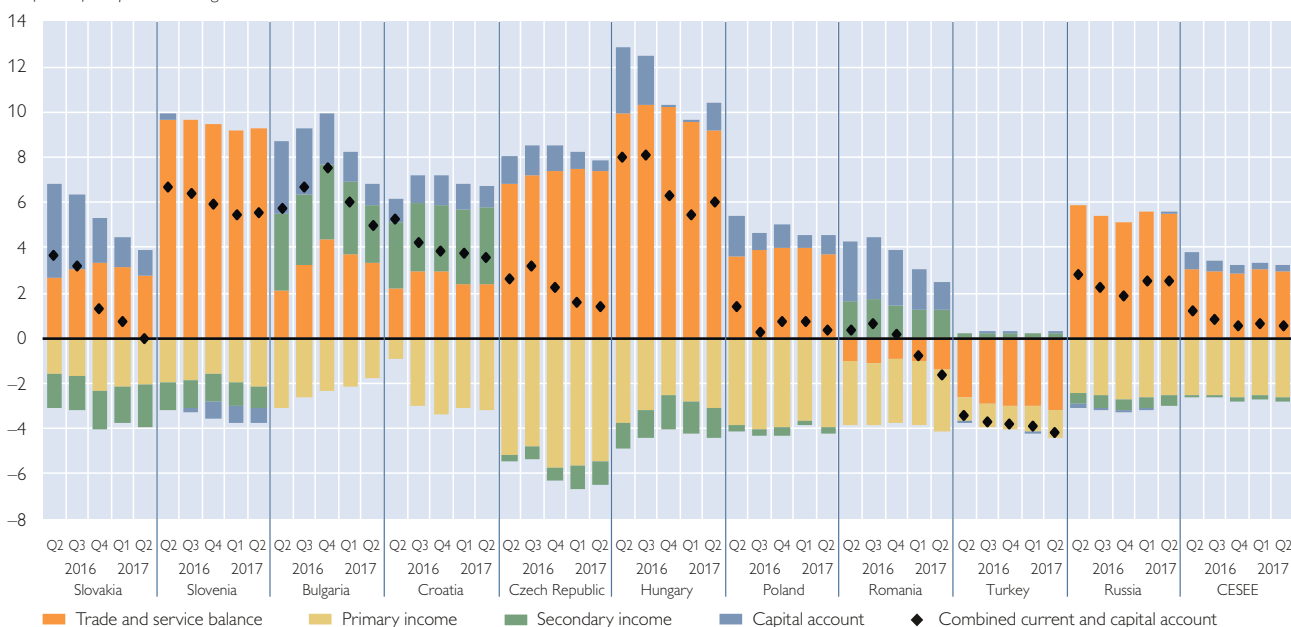
So far, these drops in external surpluses are not worrisome as the region continues to attract international capital. The aggregate financial account balance (i.e. the difference between the net acquisition of assets and the net incurrence of

Deteriorating trade balances weigh on the current account

CESEE continues to attract international capital

Combined current and capital account balance

% of GDP, four-quarter moving sum



Source: Eurostat, IMF, national central banks.

liabilities, excluding reserves) of the ten CESEE countries as a whole diminished from -3% of GDP in the fourth quarter of 2016 to -5.5% of GDP in the second quarter of 2017 (see chart 3). Accordingly, CESEE countries were able to raise additional capital in the magnitude of 1.5% of GDP from international creditors, with portfolio investments being the key driver of this development. On the country level, the Czech Republic stands out with a surge in investment, partly for speculative reasons, prior to the abolition of the exchange rate floor of the Czech koruna in April. This not only had a substantial effect on the inflow of portfolio investments but also strongly raised other investment inflows.

More notable movements in the financial account were also reported for Croatia and Hungary (where the financial account balance declined on the back of other investments) as well as for Slovakia (with FDI and portfolio investments being the key drivers). Poland's financial account turned from a deficit to a balanced position as other investments entered positive territory.

Price pressures increase ...

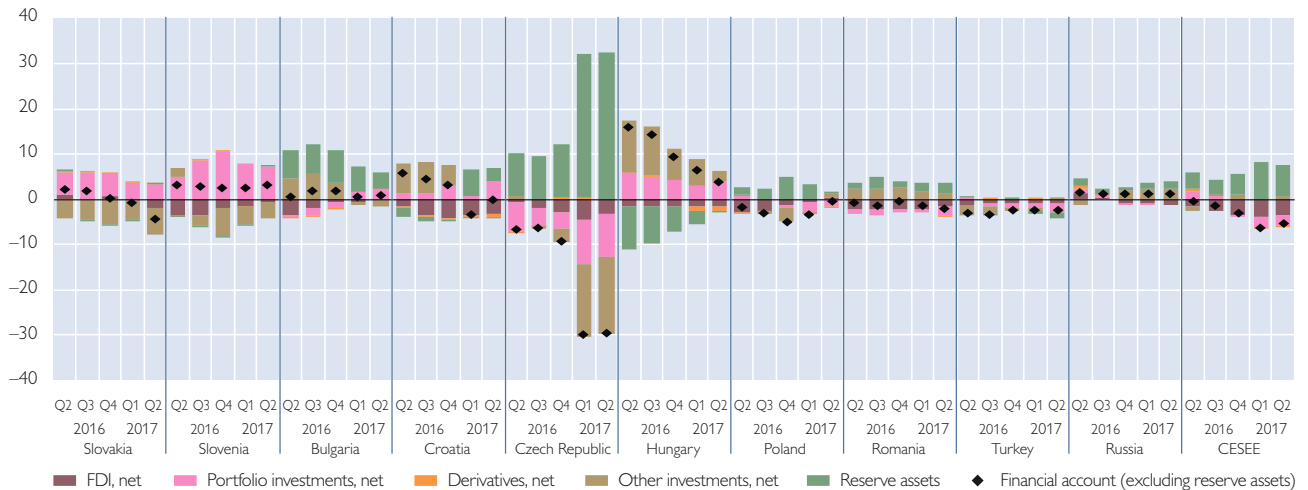
After a prolonged period of deflation, prices in the CESEE EU Member States finally started to rise again in mid-2016. Mirroring developments in world markets, energy prices were among the key drivers of inflation in early 2017, before being superseded by other and less volatile components – especially processed food (including alcohol and tobacco) and services – in recent months. This suggests that general economic factors are becoming more important for price developments, which is also underlined by core inflation: Core inflation more or less continuously increased throughout 2017 and even exceeded headline inflation in several countries (e.g. the Czech Republic, Croatia, Romania and Slovakia) by August 2017.

Several other factors suggest the build-up of more domestic price pressures: According to the European Commission the output gap of the CESEE EU Member

Chart 3

Financial account balance

% of GDP, four-quarter moving sum



Source: National central banks.

States will close in 2017 and become increasingly positive in 2018. Furthermore, capacity utilization has risen continuously since 2013 and reached levels of around 80% in the third quarter of 2017 – some 5 percentage points above its long-term average. Surveys also show that labor is increasingly perceived as a limiting factor for production; corresponding observations in fact hit a historical high in the third quarter of 2017. All of this points toward an increasing utilization of available means of production.

Nevertheless, inflation has been broadly kept in check so far, within a range of 0.6% (Romania) and 2.7% (Hungary) in August 2017 (see chart 4). This was helped by still comparatively moderate commodity and oil prices, compared to earlier years, as well as by low imported inflation, as exchange rates appreciated moderately especially in Croatia, the Czech Republic, Hungary and Poland.

Some countries took first steps to end the period of monetary accommodation. Most importantly, the Czech central bank (CNB) increased its policy rate by 20 basis points to 0.25% in August 2017 after having abandoned its commitment to maintain an exchange rate floor against the euro in April 2017 (see chart 5).

The Romanian central bank (NBR) in September 2017 decided to narrow the symmetrical corridor of interest rates on its standing facilities around the policy rate to ± 1.25 percentage points from ± 1.5 percentage points. Specifically, the deposit facility rate was raised to 0.5% and the interest rate on the lending facility was lowered to 3%, while the key policy rate was kept unchanged at 1.75%.

In contrast, a favorable price outlook provided policy space for the Hungarian central bank (MNB) to further selectively loosen its monetary policy. In September 2017, the overnight deposit rate was cut from -0.05% to -0.15% . The MNB also repeatedly reduced the cap on its three-month deposit facility and extended its foreign currency swap facility in order to boost Hungarian forint liquidity in the system.

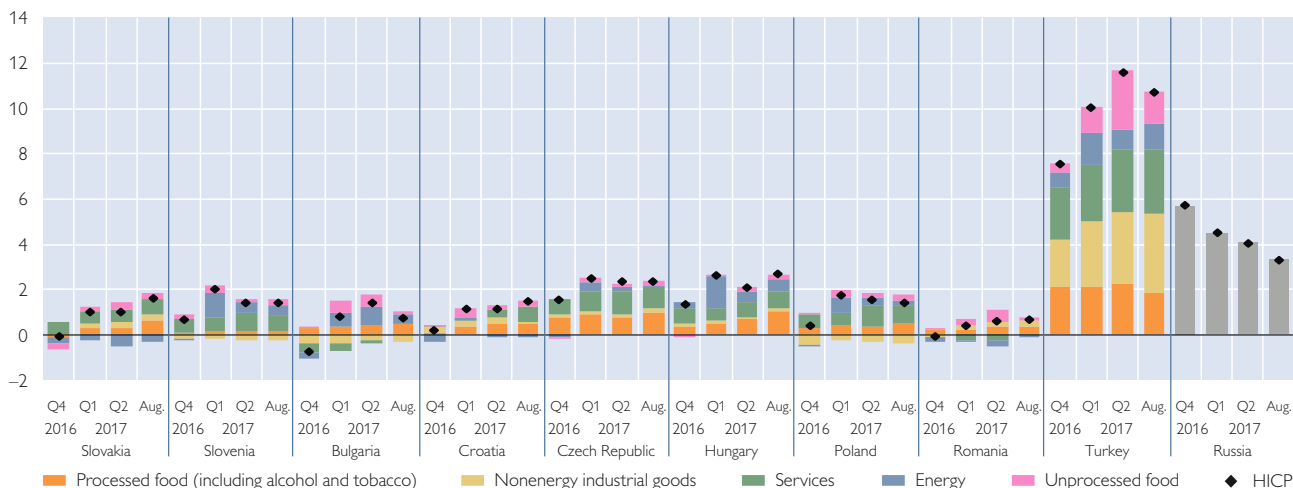
The Turkish central bank (CBRT) tightened policy rates between November 2016 and May 2017 in response to sharp falls in the value of the Turkish lira in November 2016 and January 2017, which contributed to a surge in inflation: Price rises reached

... but inflation remains broadly in check

Some countries have started to tighten monetary policy

HICP inflation and its main drivers

Percentage points, contribution to year-on-year change in HICP; HICP in %



Source: Eurostat.

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

levels of close to 12% in April and May 2017, before moderating again somewhat in recent months. By raising its late-liquidity-window lending rate and reducing the volume of central bank lending at lower rates, the CBRT increased the weighted average cost of funding the banking system from less than 8% to around 12%.

Russia was the only country in the region to report a clear and broad-based downward trend in price pressures. At 3%, the inflation rate for September 2017 was the lowest on record and well below the 4% target. Lower inflation was supported by sharp declines in food and alcohol prices (which account for just over one-third of the consumer price index) but also by the strengthening Russian ruble. Easing inflation, conservative bank lending and firming economic recovery allowed the central bank of Russia (CBR) to cut its key refinancing rate from 9% to 8.5% in September 2017. This was the latest step in a row of rate cuts throughout 2017, which brought down policy rates from 10% at the beginning of the year.

Broad-based acceleration of credit growth

Growth of domestic credit to the private sector (nominal lending to the non-bank private sector adjusted for exchange rate changes; see chart 6) gained further speed in the review period, reflecting solid general economic conditions in an environment of low interest rates, monetary accommodation in the euro area and ample global liquidity.

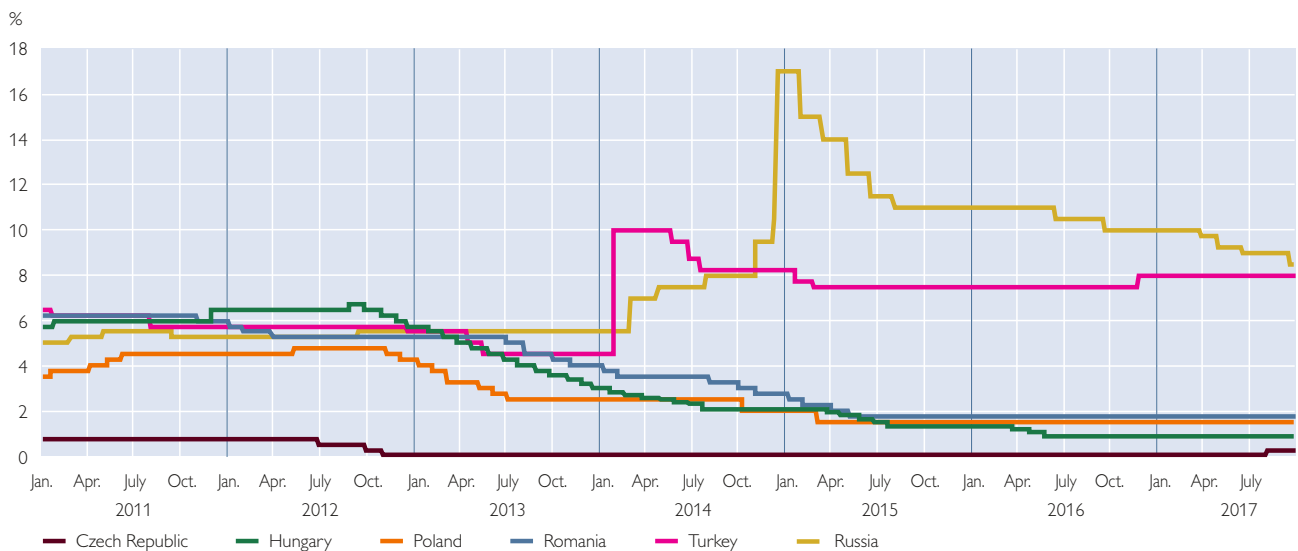
Czech Republic and Slovakia stand to increase countercyclical capital buffers

Credit growth picked up especially in Bulgaria, Hungary, Romania and Slovenia – the countries that had experienced only very moderate or even negative credit expansion back in 2016. All of these countries reported progress in shoring up their banking sectors in recent years: NPLs and loan-to-deposit ratios have been lowered, and credit is fully funded by stable local deposits. Furthermore, the share of foreign currency-denominated credit decreased substantially. Credit developments also benefited from reduced banking sector uncertainty (e.g. in Romania) and central bank measures (e.g. in Hungary).

Among the CESEE EU Member States, the Czech Republic and Slovakia reported the strongest loan growth at or above 10% in annual terms. Central

Chart 5

Policy rate developments in CESEE



Source: National central banks.

banks in both countries decided to introduce a countercyclical capital buffer of 0.5% of total risk exposure as of January and August 2017, respectively, to prevent credit from growing excessively fast. Furthermore, this capital buffer is to be raised to 1% in the Czech Republic and 1.25% in Slovakia by July and August 2018, respectively. Rapid growth in loans went hand in hand with a strong growth of real estate prices. The CNB, for example, considers residential property in the Czech Republic to be moderately overvalued and lending standards for the provision of mortgage loans to be highly relaxed. It has therefore introduced loan-to-value ratios for housing loans as an additional macroprudential measure.

Croatia was the only CESEE EU Member State in which the credit stock continued to decrease in the review period even once the effect of the conversion and partial write-off of loans denominated in Swiss franc had ended. The rate of decrease, however, moderated notably. This development was mainly attributable to some recovery in household credit, reflecting an improvement of the general economic environment and labor market conditions. At the same time, the corporate credit stock was reduced by the sale of nonperforming assets. While those sales had a positive impact on NPL ratios, profitability was hurt by the banking sector's provisioning for its exposure to Agrokor, the country's ailing retailer.

Credit growth was highest in Turkey where accommodative macroprudential policies as well as fiscal measures and incentives pushed up credit expansion to close to 15%.

Lending surveys indicate a continued strength in demand for credit in the CESEE region. The most recent CESEE Bank Lending Survey of the European Investment Bank (EIB) found that demand for loans improved across the board in the first half of 2017. This marked the fourth year of favorable developments. All factors influencing demand made a positive contribution. Notably, investment accounted for a good part of the strengthening in demand, whilst debt restructuring

Lending surveys indicate rising credit demand amid broadly unchanged supply conditions

was almost irrelevant. Access to funding also continued to improve in CESEE, supported by easy access to domestic sources (mainly retail and corporate deposits).

Aggregate supply conditions remained basically unchanged during the first half of 2017 according to the EIB survey. Across the client spectrum, supply conditions eased partially in the corporate segment, including SME lending, while credit standards have tightened on mortgages and consumer credit. Changes in regulation and banks' capital constraints are perceived as key factors adversely affecting supply conditions.

While the mismatch between rising demand and broadly unchanged supply conditions might hint toward a credit squeeze, it could also imply that credit is more prudently allocated and that most of the new credit is on average of a better quality than in prior credit cycles.

Country-level bank lending surveys conducted by national central banks partly corroborate these findings: While virtually all countries reported rising demand for loans across sectors, trends in lending conditions were reported to be more heterogeneous than in the EIB report and ranged from a considerable easing (e.g. housing and consumer loans in Croatia) to a tightening (e.g. housing loans in the Czech Republic). On average, lending conditions seem to have been eased somewhat more strongly than the EIB report survey suggests.

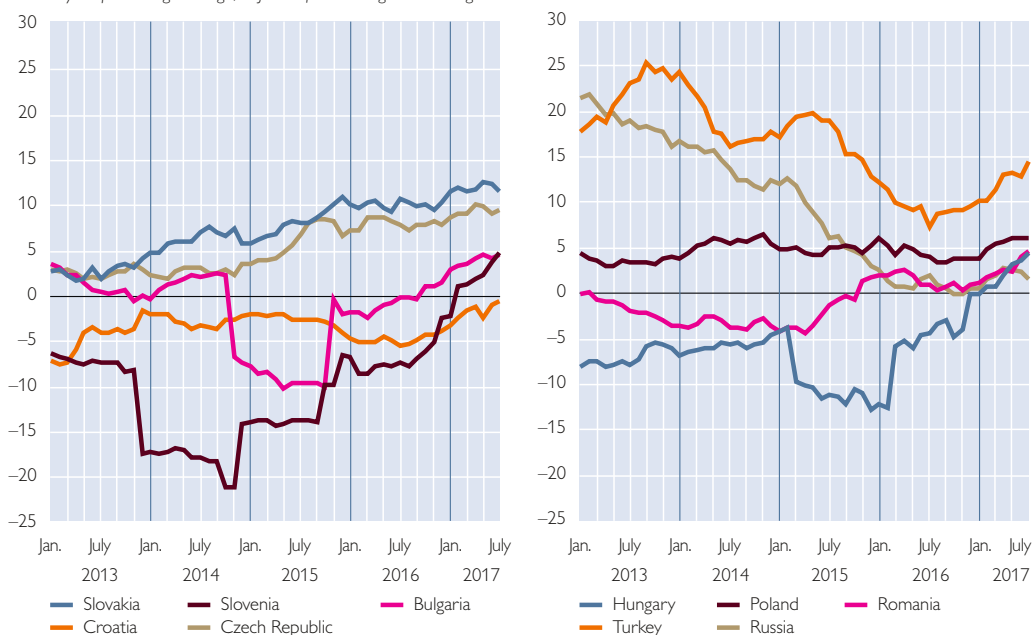
Favorable lending conditions underline the current dynamism of the region's economies. Leading indicators also support the picture of a broad-based and dynamic economic upturn that will continue at least in the near future.⁴ The growth rates of industrial production and retail sales have increased strongly since

High-frequency and sentiment indicators point toward continued solid growth

Chart 6

Growth of credit to the private sector

Year-on-year percentage change, adjusted for exchange rate changes



Source: National central banks.

⁴ For the GDP forecast for the CESEE region, see "Outlook for selected CESEE countries" on page 40 in this issue.

the start of the year and both reached multi-annual highs in July 2017 (see chart 7). Construction output, which still had contracted in January 2017, started to expand subsequently and recorded an increase of 5.0% in July 2017. This positive momentum was not only confined to the CESEE EU Member States but also encompassed Russia and Turkey.

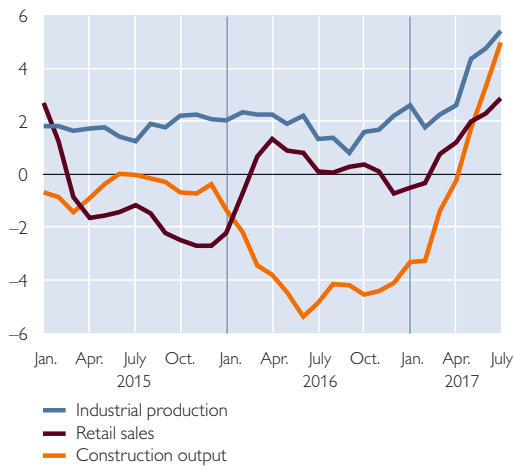
Economic sentiment developed equally favorably. The Economic Sentiment Index (ESI; average for the CESEE EU Member States) stood at levels substantially above its long-term average throughout the review period. In September 2017, it peaked at 108.4 points, the highest reading since May 2007. Increases in the index were led by sentiment in construction and the retail sector, with all other components of the index developing positively, too. The Purchasing Managers' Index (PMI) for Russia declined somewhat since the beginning of the year but remained firmly above 50 points (the threshold indicating an expansion). Turkey's PMI increased from 48.7 points in January 2017 to around 54 points in summer 2017. This was the highest reading since late 2013.

Chart 7

Leading indicators

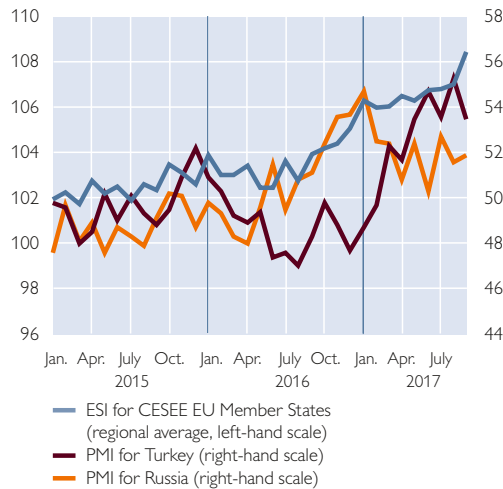
Activity indicators (CESEE regional average)

Year-on-year change in %, three-month moving averages



Sentiment indicators

Points



Source: Eurostat, wiw, European Commission, Markit.

Ukraine regains market access, while recovery stays moderate and external vulnerabilities linger

In the first half of 2017, the moderate recovery continued with GDP growth at 2.4% year on year, driven by private consumption and gross fixed capital formation. Year-on-year export growth turned negative again, partly due to the trade embargo imposed by Ukraine vis-à-vis the non-government controlled area. At the same time import growth slowed down markedly. Net exports, public consumption and inventories delivered a negative growth contribution. The National Bank of Ukraine (NBU) cut its key policy rate in April and May by 50 basis points each time, to 12.5%. Having fallen to single digits in the course of 2016, the annual inflation rate accelerated to 16.2% in August, mainly due to food and administered prices. Meanwhile, core inflation (excluding raw food, fuel and administered prices) went up to 7.8%. Inter alia pointing to upcoming base effects, the NBU expects headline inflation rates to trend downward again toward the end of the year, but to stay above the mid-point of the target range (8% ±2 percentage points) at end-2017.

The disbursement of the fourth IMF tranche in the amount of USD 1 billion together with a further EU tranche in the amount of EUR 600 million raised the NBU's international reserves to USD 17.2 billion in April. Since then, international reserves increased further to USD 18.6 billion at end-September 2017. In addition to official financing, the reduction of foreign currency cash outside the banking system (which is recorded as a capital inflow), trade credits and moderate net FDI inflows were instrumental in generating a net inflow in the financial account in the first seven months of this year. The economy's gross external debt is still very high (USD 114 billion or 114% of GDP in mid-2017), and substantially rising public external debt repayments in the next two years appear challenging. The current account deficit increased slightly to 3.8% of GDP in the four quarters up to mid-2017, from 3.7% of GDP at end-2016.

Ukraine managed to regain access to international markets in September 2017. The Ukrainian government sold USD 3 billion of 15-year eurobonds with a 7.375% annual yield, partially to buy back USD 1.6 billion of 2019 and 2020 eurobonds, alleviating forthcoming repayment spikes somewhat. The bond issue was oversubscribed more than three times. The smooth issuance shows that the IMF program was successful with regard to macroeconomic stabilization, but it also reflects prevailing positive global market conditions. At the same time, the eurobond issue illustrates that the dependence on IMF disbursements has declined, at least tentatively.

Indeed, progress on reform steps needed to complete the fourth review (pension and land reform, anti-corruption court legislation, measures to speed up privatizations) in order to unlock the fifth IMF tranche has been sluggish. Discussions with the IMF on the fourth review were initiated in May. A pension reform was adopted by parliament in early October, but it remained unclear whether it fully met IMF expectations. In the other areas, hardly any effective steps were taken and signals from the political leadership rather pointed to a stalling reform process. Yet, most recent remarks by the Ukrainian president might suggest a shift to a more complacent stance with regard to the anti-corruption court, the creation of which seems to be a key issue for the IMF. It remains to be seen whether a consensus on how to embed it into the judicial system can be reached among Ukrainian lawmakers and with the IMF. On top of uncertainties around the realization of required reforms, difficulties in completing the review will likely emanate from the government's reluctance to increase gas prices by deviating from the IMF-agreed automatic tariff adjustment mechanism.

Private consumption growth in the Western Balkans¹ supported by labor market developments

GDP in the Western Balkans increased by 2% (weighted average) in the first half of 2017 (compared to 2.9% in the first half of 2016 and 3.0% for 2016 as a whole). The deceleration was mainly driven by Serbia, where GDP growth moderated to 1.2% due to unfavorable weather conditions (very cold winter, heat waves in spring and summer). In FYR Macedonia, GDP growth even turned negative, due to political instability, coming in at -0.9%. By contrast, Albania, Montenegro and Kosovo saw economic growth accelerate to around 4%.

Real GDP growth in the Western Balkans

	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
	Period-on-period change in %							
Albania	2.2	3.4	3.5	3.2	2.7	4.1	4.0	4.1
Bosnia and Herzegovina	3.1	3.2	2.8	2.6	3.8	3.6	2.8	1.7
Montenegro	3.4	2.5	1.1	2.7	2.4	3.4	3.2	5.1
FYR Macedonia	3.8	2.4	2.4	2.9	2.0	2.4	0.0	-1.8
Serbia	0.8	2.8	3.8	2.1	2.8	2.5	1.0	1.3
Kosovo	4.1	3.4	3.6	3.3	3.8	3.0	3.8	4.6

Source: National statistical offices.

In the first half of 2017, private consumption supported GDP growth in all Western Balkan countries. Improving labor markets across the region and partly rising (real) wages, in particular in Albania, fueled real disposable incomes. Unemployment (based on labor force survey data) dropped most strongly in Bosnia and Herzegovina, to about 20%, in the first quarter of 2017 (no data available for the second quarter of 2017 yet). In Albania and Serbia, the countries with the lowest unemployment rates in the Western Balkans, unemployment continued to fall to below 14% and 12%, respectively, in the second quarter of 2017. Only Kosovo registered increasing joblessness (rising to above 30%, the highest rate in the region) compared to a year earlier. However, participation rates increased at the same time (to above 40%), suggesting that the higher unemployment rate also reflects a larger labor force. In all Western Balkan countries, employment has increased noticeably in the first half of 2017 compared to the same period of 2016. Despite these positive short-term developments, youth and structural unemployment, high inactivity rates as well as brain drain keep weighing on economic growth. Remittances remained generally robust² in the period under review, thus supporting private spending, together with some increase in lending to households (see below).

Developments in public consumption were more mixed. In Albania as well as in Montenegro, public consumption growth turned out to be strong in the first half of 2017, largely driven by higher public wages. In Kosovo, public consumption growth continued to be negative because of the ongoing reform process of public administration, which involves a reduction of the public wage bill. Public consumption growth in Serbia slowed down somewhat on the back of fiscal consolidation measures.

Investment activity delivered a mixed picture in the region in the first half of 2017 as well. In FYR Macedonia and in Montenegro, gross (fixed) capital formation³ declined in the second quarter of 2017. In FYR Macedonia, the decrease by close to 10% (due to a huge slump in the second quarter of 2017) was due partly to a base effect and partly to the protracted political crisis that had resulted in early parliamentary elections in December 2016. However, the new government was formed only in May and the prolonged period of uncertainty restrained (pub-

¹ The Western Balkans comprise the EU candidate countries Albania, FYR Macedonia, Montenegro and Serbia as well as the potential candidate countries Bosnia and Herzegovina, and Kosovo. The designation "Kosovo" is used without prejudice to positions on status and in line with UNSC 1244 and the opinion on the Kosovo Declaration of Independence.

² According to World Bank data, remittances are particularly important for Kosovo (14.8% of GDP in 2016), Bosnia and Herzegovina (11.1%) and Montenegro (9.5%).

³ For FYR Macedonia, only data on gross capital formation on a quarterly basis are available.

lic and private) investments in the first half (and especially in the second quarter) of 2017. The 10% decline in Montenegro in the second quarter (following an acceleration by more than 30% in each of the four preceding quarters) is largely due to the finalization of a large energy project. The picture is less volatile in the remaining countries under review here: Investment growth continued to be strong in Albania (largely driven by the energy sector) and in Kosovo. Investment activity, in contrast, was rather sluggish in Bosnia and Herzegovina (low public capital spending) as well as in Serbia (partly hampered by cold weather).

The robust economic performance in the EU, by far the largest trading partner for most Western Balkan countries, resulted in robust export growth across the region. Moreover, the countries have been able to benefit from the revival in global export growth. Particularly strong export growth was recorded in Albania (on the back of rising energy exports), in Montenegro as well as in Kosovo (due to higher exports of raw materials and energy) and in Bosnia and Herzegovina (where exports of electricity increased).

In most Western Balkan countries, import growth moderated in the first half of 2017 compared to the same period of 2016. Lower import growth in FYR Macedonia and Montenegro (in both countries only in the second quarter of 2017) was the result of low investment activity in that period. By contrast, import growth in Serbia accelerated in the first half of 2017 compared to the corresponding period of 2016 as the adverse weather conditions that strongly affected Serbia in the first half of 2017 prompted the country to import more energy and food.

In Albania, strong export growth and somewhat weaker import growth resulted in a positive contribution of net exports to GDP growth in the first half of 2017. In FYR Macedonia and Montenegro, the drop in import growth resulted in a positive contribution of net exports in both countries only in the second quarter of 2017 (after a negative contribution in the first quarter of 2017). In Serbia, the contribution of net exports turned negative (after a positive contribution in the first half of 2016).

Overall, the Western Balkan countries continue to report elevated trade deficits mirroring their weaknesses in competing on international markets. In Montenegro and Kosovo, the countries with the largest shortfalls, trade deficits even widened further, to above 44% of GDP and close to around 38% of GDP, respectively, in the first half of 2017 despite robust export growth. In Montenegro, this outcome was driven by continued strong import growth in the first quarter of 2017. Apart from imports for consumption purposes, high trade deficits also result from the high import content of major (in particular public) investment projects. Serbia reports the lowest trade deficit (around 12% in the first half of 2017), yet some worsening compared to the 2016 outcome occurred. In Albania and Montenegro, favorable developments in tourism boosted service exports in the first half of 2017 and compensated somewhat the shortfall in the goods trade balance. Current account deficits have also widened in accordance with higher trade deficits and are highest in Montenegro (close to 19% of GDP in the first half of 2017) and Kosovo (close to 10%). With a current account deficit of around 3% of GDP, FYR Macedonia reports the lowest shortfall in the Western Balkan countries. In the first half of 2017, FDI inflows covered the current account deficits in Albania, Serbia and FYR Macedonia. In the remaining countries, FDI coverage ranged between around 44% in Kosovo and 60% in Montenegro in that period. FDI inflows increased noticeably in Albania in the second half of 2017 due to investment in the energy sector (Trans-Adriatic Pipeline). Furthermore, Kosovo registered strong inflows of FDI driven by investment in the financial sector, construction and real estate. In Bosnia and Herzegovina as well as in FYR Macedonia FDI inflows were weak, possibly due to the fragile political situation.

In the first half of 2017, growth of domestic credit to resident households and nonfinancial corporations accelerated strongly in Kosovo and Montenegro (with lending rates of around 10% year on year). Also Bosnia and Herzegovina and Serbia (adjusted for exchange rate movements) recorded robust lending rates. In FYR Macedonia particularly weak credit growth in the first half of 2017 – likely being related to subdued demand as a result of the political crisis – was followed by much stronger credit growth in July and August. Similarly, lending to the nonbank private sector in Albania was almost flat in the first half of 2017 but recovered more recently to around 2% annually. As a common feature of the whole region, household lending has recently developed much more dynamically than lending to corporates. In the short run, demand for credit is supported by economic recovery and presumably also by more

optimistic growth expectations going forward. Taking a longer-term perspective, the ongoing reduction of nonperforming loans (NPLs) due to restructuring, work-out and sales bodes well for new lending. However, as the stock of NPLs is still high, they remain a considerable obstacle to lending activity. In this respect, Albania and Serbia are most strongly burdened by NPLs in the region, with ratios of around 15%. Albania managed to bring down the level of NPLs most strongly (by almost 3 percentage points) in the six months to June 2017. With a ratio below 4%, Kosovo is least burdened with NPLs in the region.

Up to September 2017, inflation increased markedly across the Western Balkans, largely driven by supply-side factors: Global energy prices recovered and food prices increased because heatwaves and drought affected agricultural output. Inflation increased most strongly in Serbia (up from around 1% in 2016 to rates of above 3% annually) and peaked at 4% in April 2017. Despite rising inflationary pressure, the National Bank of Serbia loosened its monetary policy stance and cut its key repo rate to 3.5% in two steps (in September and October 2017) from 4% as inflation is expected to remain within the tolerance band of 1.5 to 4.5% in the medium term. In Albania – where the central bank also targets inflation – price pressures have picked up as well, but at roughly 2% per annum inflation remains at the lower bound of the central bank's target range (3% \pm 1 percentage point). In August and September, inflation moderated slightly to 1.6% annually compared to previous months. Bosnia and Herzegovina and FYR Macedonia clearly left the deflationary territory in which they were in 2016, and a similar development was observed in Kosovo. Following no price level increase in 2016, inflation in Montenegro increased noticeably to 2.5% annually in the first half of 2017 and even further during the summer months as the favorable tourist season put upward pressure on prices.

A number of governments in the Western Balkans have recognized the need to consolidate their finances in light of rising public debt levels. The Montenegrin authorities, for instance, adopted comprehensive fiscal consolidation measures (such as VAT increases, more targeted social spending) in June 2017 to address the strongly accelerating public debt level strained by the Bar-Boljare highway project. These efforts to stabilize the fiscal situation prompted Moody's to change the outlook for Montenegro's B1 sovereign rating from negative to stable in September 2017. Serbia continues its stability-oriented policies in compliance with the IMF program (see below). The IMF expects the general government debt ratio to fall to around 71% of GDP by the end of 2017, compared to 76% of GDP at end-2015 when the debt level had reached its peak. In FYR Macedonia, the new government adopted a supplementary budget for 2017 in August, taking account of lower growth this year. The target is to limit the budget deficit to 3% of GDP in 2017.

Currently, three Western Balkan countries have programs with the IMF. In September, Serbia successfully completed the 7th economic review under its three-year stand-by arrangement (SBA) with the IMF. So far, Serbia has not drawn any resources under the arrangement and the Serbian authorities do not intend to do so going forward. The SBA will expire in February 2018. Concerning Kosovo, the outstanding review of the current SBA with the IMF (expiry date: August 2017) has not been completed so far because the forming of a new government after the June 2017 election was only completed in early September and the final disbursement has not been carried out. Regarding Bosnia and Herzegovina, the lending arrangement (Extended Fund Facility) with the IMF is still off track due to the insufficient implementation of stipulated economic reforms.

The formal EU accession process of the Western Balkans has continued at a very measured pace. In October, the 8th Stabilization and Association Committee meeting between the candidate country Albania and the European Union took place, with the EU welcoming the Albanian progress in implementing reforms in a number of areas. Against this backdrop, it is becoming more likely that the EU will open accession negotiations with Albania in the near future. In June 2017, Montenegro and the EU opened two more chapters of negotiations (chapter 1 on free movement of goods and chapter 22 on regional policy) and provisionally closed chapter 30 on external relations. Thus, 28 out of 35 negotiations chapters have been opened by now (of which 3 have been provisionally closed). Serbia has opened 10 chapters (of which 2 have been provisionally closed by now). Accession negotiations with FYR Macedonia have not yet started, inter alia due to the continuing country name dispute with Greece.

Private consumption has replaced exports as the major growth driver

2 Slovakia: growth composition increasingly based on domestic demand

Slovakia's real GDP growth largely maintained its swift pace also during the first half of 2017. In the first six months of 2017, private consumption was the main driver of growth, particularly in retail trade, in the restaurant sector and other private sector services. Household consumption benefited from real income increases fostered by historically high employment, rising average wages as well as still low commodity prices. In contrast, growth in exports (especially of cars) slowed down marginally compared to 2016 while import growth accelerated. The weakening of car exports is likely to reflect largely falling demand for high-end SUV vehicles. The contribution of net exports to the economic expansion fell significantly but remained mildly positive. Unlike in most of its regional peers, in Slovakia the low interest rate environment and rather strong demand did not provide a sufficient stimulus for investment to grow. Hence, large investment in a new automotive plant notwithstanding, fixed capital formation continued to shrink in the six months to June, although at a significantly slower pace than in 2016. Not surprisingly in the context of negative investment and rather strong growth, capacity utilization increased further, averaging 86% in the first three quarters of 2017, compared to 84.5% in 2016 and around 77% in 2013.

A slight increase in the services balance in the first half of 2017 compared to end-2016 was fully offset by a similar deterioration in the trade balance. Hence, as the income balance remained broadly stable, so did the mildly negative current account deficit. Having declined to 1.7% of GDP in 2016, the general government deficit is projected to fall further this year. The deficit reduction will be driven by higher tax revenues amid robust economic growth, lower interest expenses as well as restrained growth in social spending and intermediate consumption. General government debt, hovering slightly above 50% of GDP, is still rather high by historical standards but thanks to fiscal restraint it has been going down since 2013.

Inflation has turned positive at last, supported, inter alia, by a booming labor market

Economic growth has translated into favorable developments in the labor market. High demand for skilled labor is reflected in marked employment and wage growth, particularly at larger companies in manufacturing, retail and services. As a result, while employment has reached record highs, unemployment has continued to decline, dropping to levels last seen in the early 1990s (e.g. 7.7% in July 2017). On the flip side, shortages of skilled labor are increasingly perceived as a constraint to economic growth. However, the ensuing wage hike has outpaced productivity growth since the second half of 2016, entailing accelerated increase in unit labor costs.

Inflation turned positive in early 2017. Following a 1% increase in prices in the first six months of 2017, inflation accelerated to 1.6% in August. A granular view suggests that the recent boost to inflation has been brought about particularly by (unprocessed) food, services on the back of continued growth in wages and, to a lesser extent, nonenergy industrial goods. The rise in prices of the latter reflects an ascending trend in import prices as well as robust household demand. In contrast, fuel and energy prices continued to decline.

Private credit continues to grow strongly

In spite of several macroprudential measures introduced by the Slovak central bank since 2014, the stock of household loans has been continuously growing at rather high speed in recent years. It continued to expand at double-digit rates nominally in the first seven months of 2017. Correspondingly, the stock of household loans has doubled since late 2010. Household credit growth has been largely driven by mortgage loans, which make up more than three-quarters of household debt.

Table 2

Main economic indicators: Slovakia

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	2.6	3.8	3.3	3.4	3.8	3.0	3.0	3.1	3.3
Private consumption	1.4	2.2	2.9	2.6	3.1	2.5	3.2	3.3	3.5
Public consumption	5.3	5.4	1.6	3.6	2.5	2.1	-1.0	-0.7	-0.1
Gross fixed capital formation	1.2	16.9	-9.3	1.8	-1.1	-17.0	-15.0	0.9	-6.7
Exports of goods and services	3.7	7.0	4.8	0.3	7.8	4.5	6.3	8.6	0.2
Imports of goods and services	4.4	8.1	2.9	0.3	5.9	0.8	4.5	8.3	-0.2
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	3.0	4.6	0.9	3.4	1.9	-1.1	-0.1	2.1	2.2
Net exports of goods and services	-0.5	-0.7	1.8	0.0	1.9	3.2	1.8	0.6	0.3
Exports of goods and services	3.4	6.4	4.5	0.3	7.3	3.8	6.0	8.2	0.2
Imports of goods and services	-3.9	-7.2	-2.7	-0.3	-5.4	-0.7	-4.2	-7.6	0.1
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	0.7	1.2	0.9	1.0	-0.1	0.3	2.1	2.5	3.2
Unit labor costs in manufacturing (nominal, per hour)	1.8	-2.0	2.5	2.4	-1.3	5.1	3.7	0.4	7.9
Labor productivity in manufacturing (real, per hour)	2.4	6.3	1.7	1.4	3.8	0.4	1.1	5.1	0.4
Labor costs in manufacturing (nominal, per hour)	4.2	4.1	4.2	3.8	2.4	5.5	4.9	5.6	8.3
Producer price index (PPI) in industry	-3.5	-3.0	-4.0	-4.2	-5.1	-4.3	-2.3	2.7	3.0
Consumer price index (here: HICP)	-0.1	-0.3	-0.5	-0.5	-0.6	-0.7	-0.1	1.0	1.0
EUR per 1 SKK, + = SKK appreciation	..	..	..	..	..	..	..	..	..
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	13.2	11.5	9.7	10.4	9.7	9.6	9.2	8.8	8.2
Employment rate (%, 15–64 years)	61.0	62.7	64.9	64.1	64.9	65.1	65.3	65.8	66.1
Key interest rate per annum (%)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	4.9	11.1	5.4	9.3	8.8	8.2	5.4	5.3	5.2
<i>Contributions to the year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	4.3	1.8	7.6	-2.2	2.9	5.4	7.6	12.0	9.8
Domestic credit provided by the banking system	6.7	17.3	8.3	13.5	12.4	10.8	8.3	7.2	7.3
<i>of which: claims on the private sector</i>	5.1	7.8	7.5	6.5	5.7	7.2	7.5	9.0	9.6
<i>claims on households</i>	5.4	5.9	6.5	5.8	6.1	6.4	6.5	6.8	6.6
<i>claims on enterprises</i>	-0.3	1.9	1.0	0.7	-0.4	0.8	1.0	2.2	2.9
<i>claims on the public sector (net)</i>	1.7	9.6	0.8	7.0	6.7	3.6	0.8	-1.8	-2.3
Other assets (net) of the banking system	-6.2	-8.1	-10.5	-2.0	-6.6	-7.9	-10.5	-13.9	-11.9
<i>% of GDP</i>									
General government revenues	39.3	42.5	39.3	..	..	..	..	..	..
General government expenditures	42.0	45.2	41.5	..	..	..	..	..	..
General government balance	-2.7	-2.7	-2.2	..	..	..	..	..	..
Primary balance	-0.8	-1.0	-0.6	..	..	..	..	..	..
Gross public debt	53.5	52.3	51.8	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	52.7	51.8	55.2	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	32.6	35.1	38.3	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	3.6	2.6	2.8	3.3	4.0	2.2	1.8	2.3	2.0
Services balance	0.2	0.2	0.5	0.5	0.6	0.7	0.2	0.9	1.1
Primary income	-1.0	-1.0	-2.4	-2.5	-2.6	-2.4	-2.0	-1.4	-2.5
Secondary income	-1.7	-1.6	-1.7	-2.0	-1.4	-1.6	-1.8	-1.7	-2.3
Current account balance	1.1	0.2	-0.7	-0.6	0.6	-1.0	-1.8	0.2	-1.7
Capital account balance	1.0	3.5	2.0	3.2	2.4	0.6	2.1	0.0	1.8
Foreign direct investment (net) ¹	0.6	0.0	0.6	-0.5	6.0	-2.7	-0.3	-4.5	-0.7
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	90.2	85.4	91.1	85.4	87.8	90.0	91.1	95.3	95.5
Gross official reserves (excluding gold)	1.5	2.1	2.0	2.0	2.0	2.0	2.0	1.8	2.0
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
<i>EUR million, period total</i>									
GDP at current prices	75,946	78,686	80,958	18,524	20,242	21,256	20,936	19,276	21,066

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)

- = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

3 Slovenia: strong growth momentum, balanced developments

Rebounding investments push up GDP growth in first half of 2017

Economic expansion during the first half of 2017 substantially outpaced growth seen in 2016 despite some deceleration in the second quarter. Strong GDP growth was attributable to a substantial rebound of investments, driven particularly by nonresidential construction and machinery and equipment. The revved-up investment activity is primarily attributable to the private sector and reflects record-high capacity utilization rates in industry, strong business confidence and improving credit market conditions for corporates. Domestic consumption growth slowed gradually during the first half of 2017, albeit from a very strong final quarter in 2016. In the public sector this was in line with further efforts to cut the budget deficit. While the slowdown of private consumption mirrored slowing real wage growth, it coincided with accelerating growth of credit to households, record strong consumer confidence and a pick-up in employment growth. Export and import growth accelerated roughly by the same magnitude as in 2016, and the contribution of net real exports remained slightly positive at 0.6 percentage points.

Headline budget deficit on a downward path as economic dynamics beat expectations

In its spring 2017 forecast, the European Commission expects Slovenia's fiscal deficit to narrow to 1.4% of GDP in 2017 and further to 1.2% in 2018 from 1.8% in 2016. The improvement is expected to rest on strong economic growth while the country's structural deficit is expected to widen from 1.7% in 2016 to 2.3% of GDP by 2018. Therefore, in its assessment of Slovenia's fiscal prospects in June 2017, the Council of the European Union came to the conclusion that there was an increasing risk of deviation from the adjustment path to the country's medium-term objective (MTO), which would require further substantial fiscal effort. With regard to the country's medium-term fiscal strategy, the Council recommended to push ahead with the planned healthcare, long-term care and pension reforms, and increase the employability of low-skilled and older workers. Improving financing conditions especially for corporations and strengthening the performance and governance of state-owned enterprises (including a revision of the state's asset management strategy) remain on the reform agenda. Declining fiscal deficits and favorable debt developments were also the major drivers for the upgrade of Slovenia's foreign currency debt ratings by S&P (June 2017) and Moody's (September 2017). Both agencies warned that the political cycle (parliamentary elections by mid-2018 at the latest) in the fragmented political landscape could push structural reforms into the background in the near future.

Inflation in low positive territory, domestic lending recovering

Following the spike in inflation to 2.5% in early 2017 on the back of rising energy and unprocessed food prices, HICP growth fell back to around 1% to 1.5% by the third quarter of 2017. The slowdown was again attributable primarily to energy and to a smaller extent to the unprocessed food component, while core inflation was unchanged at slightly less than 1% year on year. The recovery of lending to households and corporates, which began in February 2017, has so far not stopped adverse developments in banks' net interest income. As net noninterest income also continued to decline while operating costs remained steady, bank profitability deteriorated somewhat during the first half of 2017. Nonetheless, in the assessment of Banka Slovenije, the banking sector continues to be well capitalized and liquid, and nonperforming exposures keep falling.

Table 3

Main economic indicators: Slovenia

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	2.6	3.8	3.3	3.4	3.8	3.0	3.0	3.1	3.3
Private consumption	1.4	2.2	2.9	2.6	3.1	2.5	3.2	3.3	3.5
Public consumption	5.3	5.4	1.6	3.6	2.5	2.1	-1.0	-0.7	-0.1
Gross fixed capital formation	1.2	16.9	-9.3	1.8	-1.1	-17.0	-15.0	0.9	-6.7
Exports of goods and services	3.7	7.0	4.8	0.3	7.8	4.5	6.3	8.6	0.2
Imports of goods and services	4.4	8.1	2.9	0.3	5.9	0.8	4.5	8.3	-0.2
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	3.0	4.6	0.9	3.4	1.9	-1.1	-0.1	2.1	2.2
Net exports of goods and services	-0.5	-0.7	1.8	0.0	1.9	3.2	1.8	0.6	0.3
Exports of goods and services	3.4	6.4	4.5	0.3	7.3	3.8	6.0	8.2	0.2
Imports of goods and services	-3.9	-7.2	-2.7	-0.3	-5.4	-0.7	-4.2	-7.6	0.1
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	0.7	1.2	0.9	1.0	-0.1	0.3	2.1	2.5	3.2
Unit labor costs in manufacturing (nominal, per hour)	1.8	-2.0	2.5	2.4	-1.3	5.1	3.7	0.4	7.9
Labor productivity in manufacturing (real, per hour)	2.4	6.3	1.7	1.4	3.8	0.4	1.1	5.1	0.4
Labor costs in manufacturing (nominal, per hour)	4.2	4.1	4.2	3.8	2.4	5.5	4.9	5.6	8.3
Producer price index (PPI) in industry	-3.5	-3.0	-4.0	-4.2	-5.1	-4.3	-2.3	2.7	3.0
Consumer price index (here: HICP)	-0.1	-0.3	-0.5	-0.5	-0.6	-0.7	-0.1	1.0	1.0
EUR per 1 SIT, + = SIT appreciation	..	..	..	..	..	..	..	..	..
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	13.2	11.5	9.7	10.4	9.7	9.6	9.2	8.8	8.2
Employment rate (%, 15–64 years)	61.0	62.7	64.9	64.1	64.9	65.1	65.3	65.8	66.1
Key interest rate per annum (%)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Nominal year-on-year change in the period-end stock in %</i>									
Broad money (including foreign currency deposits)	4.9	11.1	5.4	9.3	8.8	8.2	5.4	5.3	5.2
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	4.3	1.8	7.6	-2.2	2.9	5.4	7.6	12.0	9.8
Domestic credit provided by the banking system	6.7	17.3	8.3	13.5	12.4	10.8	8.3	7.2	7.3
<i>of which: claims on the private sector</i>	5.1	7.8	7.5	6.5	5.7	7.2	7.5	9.0	9.6
<i>claims on households</i>	5.4	5.9	6.5	5.8	6.1	6.4	6.5	6.8	6.6
<i>claims on enterprises</i>	-0.3	1.9	1.0	0.7	-0.4	0.8	1.0	2.2	2.9
<i>claims on the public sector (net)</i>	1.7	9.6	0.8	7.0	6.7	3.6	0.8	-1.8	-2.3
Other assets (net) of the banking system	-6.2	-8.1	-10.5	-2.0	-6.6	-7.9	-10.5	-13.9	-11.9
<i>% of GDP</i>									
General government revenues	39.3	42.5	39.3	..	..	..	..	..	..
General government expenditures	42.0	45.2	41.5	..	..	..	..	..	..
General government balance	-2.7	-2.7	-2.2	..	..	..	..	..	..
Primary balance	-0.8	-1.0	-0.6	..	..	..	..	..	..
Gross public debt	53.5	52.3	51.8	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	52.7	51.8	55.2	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	32.6	35.1	38.3	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	3.6	2.6	2.8	3.3	4.0	2.2	1.8	2.3	2.0
Services balance	0.2	0.2	0.5	0.5	0.6	0.7	0.2	0.9	1.1
Primary income	-1.0	-1.0	-2.4	-2.5	-2.6	-2.4	-2.0	-1.4	-2.5
Secondary income	-1.7	-1.6	-1.7	-2.0	-1.4	-1.6	-1.8	-1.7	-2.3
Current account balance	1.1	0.2	-0.7	-0.6	0.6	-1.0	-1.8	0.2	-1.7
Capital account balance	1.0	3.5	2.0	3.2	2.4	0.6	2.1	0.0	1.8
Foreign direct investment (net) ¹	0.6	0.0	0.6	-0.5	6.0	-2.7	-0.3	-4.5	-0.7
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	90.2	85.4	91.1	85.4	87.8	90.0	91.1	95.3	95.5
Gross official reserves (excluding gold)	1.5	2.1	2.0	2.0	2.0	2.0	2.0	1.8	2.0
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
<i>EUR million, period total</i>									
GDP at current prices	75,946	78,686	80,958	18,524	20,242	21,256	20,936	19,276	21,066

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)

- = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

4 Bulgaria: ongoing economic recovery despite political uncertainty

Improved labor market conditions push up private consumption while inflation has remained benign

Economic growth continued at a swift pace of 3.7% in the first half of 2017. Private consumption and exports exhibited by far the largest growth contributions, while due to buoyant imports, net exports were negative (for the first time since late 2015). Private consumption showed the strongest expansion since end-2015, benefiting from substantial improvements in the labor market. The unemployment rate reached its lowest level since 2009 (6.4% in June) and the employment rate climbed to its highest level in two decades (above 67%). As a consequence of labor market tightening but also due to a 10% hike in statutory minimum wages at the beginning of the year, real wages continued to grow annually at about 9% in the first half of 2017, again above productivity advances. Following a long deflationary episode from August 2013 until December 2016, annual HICP inflation turned positive at the beginning of the year and reached a maximum of 1.7% in April 2017 before declining again to 0.7% in August 2017. Food and energy prices have been the main drivers of recent price dynamics (core inflation has not reached more than 0.2% yet, i.e. until August 2017).

Robust export performance offset by rising import demand

In line with improved external demand, exports continued to grow strongly and expanded by 4.8% on average in the first half of 2017. After an already outstanding tourism season 2016, Bulgaria has so far experienced another very dynamic year: up to July 2017, nights spent by nonresidents in Bulgarian tourist accommodations have grown by 11% compared to the same period a year ago. Mirroring the strong increase in domestic demand, also imports widened substantially (by nearly 8% in the first half of 2017).

Sound financial sector developments support domestic demand though NPL legacies persist

Lending to corporates and households returned to rates not seen for several years (with annual growth rates of 4% and 5.7%, respectively, in July 2017). After-tax profits of the banking sector declined somewhat in the first half of 2017 from very high 2016 levels. Yet, profitability remained high, with returns on assets and on equity reaching 1.4% and 10.9%, respectively, in June 2017. Capitalization of the banking sector has remained strong too, with a total capital adequacy ratio of 22.5% in mid-2017. At the same time, it has not been possible to reduce NPLs during the review period at a similar pace as in the past two years. Despite growing loans, the NPL ratio (>90 days overdue specification) decreased only slightly from 9.0% in December 2016 to 8.7% in June 2017. The coverage of NPLs by provisions and reserves has remained stable (74.1% in June 2017 compared to 75.4% in December 2016).

Early parliamentary elections brought a heterogeneous government coalition into power; some expansionary fiscal stance expected for 2017

Following the snap parliamentary elections of end-March, a new government coalition (with a thin majority in parliament) was formed in early May 2017, led again by the conservative party GERB with nationalist parties (the three-party bloc United Patriots) as a new junior partner. The new government's priorities lie in running a successful EU presidency in the first half of 2018 and in achieving progress in further EU integration during the years ahead (i.e. exiting the co-operation and verification mechanism and entering the Schengen area and ERM II).

Domestically, the focus has been set on strengthening household income, public infrastructure, defense and education. Against this background, the government targets a modest general government budget deficit of 0.6% of GDP in 2017. The medium-term goal is a deficit of 0.5% of GDP in 2018 and surpluses of 0.1% of GDP in the period from 2019 to 2020.

Table 4

Main economic indicators: Bulgaria

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	1.3	3.6	3.9	4.2	4.5	3.0	4.3	3.6	3.9
Private consumption	2.7	4.5	3.6	6.4	2.8	0.4	4.7	3.8	5.7
Public consumption	0.1	1.4	2.2	-2.6	1.0	3.0	6.8	5.8	1.2
Gross fixed capital formation	3.4	2.7	-6.6	-1.4	-3.1	-9.5	-10.0	2.4	4.0
Exports of goods and services	3.1	5.7	8.1	2.8	7.4	10.7	10.6	6.1	3.6
Imports of goods and services	5.2	5.4	4.5	3.2	3.7	5.9	4.9	9.1	6.2
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	2.7	3.5	1.6	4.4	2.0	-0.5	1.3	5.3	5.2
Net exports of goods and services	-1.3	0.1	2.3	-0.4	2.4	3.7	3.0	-2.2	-1.5
Exports of goods and services	2.0	3.7	5.2	1.9	4.8	7.2	5.9	4.0	2.3
Imports of goods and services	-3.4	-3.6	-2.9	-2.4	-2.5	-3.5	-2.9	-6.2	-3.8
<i>Year-on-year change of the period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	4.5	2.3	2.5	4.4	2.7	2.8	-0.3	2.6	4.1
Unit labor costs in manufacturing (nominal, per hour)	4.7	1.7	7.8	7.5	10.9	6.4	6.3	7.1	2.5
Labor productivity in manufacturing (real, per hour)	0.9	7.4	2.1	2.8	-0.2	3.3	2.5	3.1	8.8
Labor costs in manufacturing (nominal, per hour)	5.6	9.2	10.0	10.5	10.8	10.0	9.0	10.4	11.5
Producer price index (PPI) in industry	-1.2	-2.0	-3.1	-4.7	-5.2	-3.0	0.6	4.8	4.2
Consumer price index (here: HICP)	-1.6	-1.1	-1.3	-1.1	-2.3	-1.1	-0.8	0.8	1.4
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)	11.5	9.3	7.7	8.7	8.2	7.1	6.7	7.0	6.4
Employment rate (%, 15–64 years)	61.1	62.9	63.4	62.3	63.7	64.2	63.4	64.3	67.2
Key interest rate per annum (%) ¹	..	..	..	..	..	..	..	..	..
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)	1.1	8.8	7.6	6.1	8.9	8.7	7.6	8.5	7.0
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	9.9	8.3	12.3	11.0	14.1	13.7	12.3	6.3	1.6
Domestic credit provided by the banking system	-7.5	1.7	-3.1	-3.0	-2.5	-2.4	-3.1	2.6	4.3
<i>of which: claims on the private sector</i>	-6.4	-1.2	1.2	-1.8	-0.6	-0.1	1.2	2.7	3.1
<i>claims on households</i>	-0.5	-0.4	0.5	-0.4	-0.2	0.1	0.5	1.1	1.4
<i>claims on enterprises</i>	-5.9	-0.9	0.7	-1.4	-0.4	-0.2	0.7	1.6	1.6
<i>claims on the public sector (net)</i>	-1.1	2.9	-4.3	-1.2	-2.0	-2.3	-4.3	-0.1	1.2
Other assets (net) of the banking system	-1.3	-1.3	-1.6	-2.0	-2.7	-2.7	-1.6	-0.5	1.2
<i>% of GDP</i>									
General government revenues	36.6	39.1	34.9	..	..	..	..	..	..
General government expenditures	42.1	40.7	35.0	..	..	..	..	..	..
General government balance	-5.5	-1.6	0.0	..	..	..	..	..	..
Primary balance	-4.6	-0.7	0.8	..	..	..	..	..	..
Gross public debt	27.0	26.0	29.0	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	108.9	98.4	93.5	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	24.9	23.6	23.1	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-6.5	-5.8	-2.0	-3.2	-2.1	-0.4	-2.8	-7.0	-4.2
Services balance	5.9	6.6	6.4	3.0	5.6	13.8	2.5	3.8	6.1
Primary income	-3.1	-4.5	-2.4	-3.1	-2.1	-2.0	-2.3	-2.2	-0.7
Secondary income	3.8	3.6	3.3	5.0	5.5	1.6	1.8	4.6	2.9
Current account balance	0.1	0.0	5.3	1.8	6.9	13.0	-0.8	-0.7	4.1
Capital account balance	2.2	3.1	2.2	5.6	2.2	1.4	0.6	1.1	0.6
Foreign direct investment (net) ²	-2.1	-5.1	-0.7	-2.8	-4.0	-0.8	3.7	-1.9	-1.3
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	97.5	82.0	79.2	81.3	82.2	79.7	79.2	78.9	77.4
Gross official reserves (excluding gold)	35.8	42.2	46.7	43.4	45.1	46.5	46.7	46.5	45.9
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	6.6	8.0	9.4	8.5	8.9	9.3	9.4	9.1	8.8
<i>EUR million, period total</i>									
GDP at current prices	42,762	45,287	48,129	9,957	11,603	13,076	13,493	10,260	12,347

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

¹ Not available in a currency board regime.

² + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

5 Croatia: economic recovery continuing on the back of private consumption

Growth driven by upturn in private consumption

The recovery of the Croatian economy broadly continued in the first half of 2017. Annual GDP growth increased from 2.5% in the first quarter to 2.8% in the second quarter of 2017, driven mainly by domestic demand, in particular private consumption. The increase of 3.8% in private consumption in the second quarter of 2017 was the highest on record since 2008. Consumer optimism took a temporary hit in April when Croatia's largest private company, Agrokor, became insolvent, but consumer sentiment has recovered since then. The growth in private consumption was fueled by a cut in income taxes and a 6% increase in public sector wages in 2017. In addition, moderate improvements in the labor market supported private consumption growth: Unemployment declined to 11.1% in the second quarter of 2017 and employment increased to 59.2% mainly due to another record tourist season. Although this is the highest employment rate recorded in Croatia since 2009, it is still the second-lowest within the EU after Greece. Furthermore, the reduction in the unemployment rate was likely driven in part by continuing emigration – in 2016, according to the Croatian Bureau of Statistics around 36,500 Croatians emigrated, the majority of whom are of working age. After having picked up to 5.1% in 2016, investment growth continued in the first quarter at 5.4% but then slowed down significantly to 3.2% in the second quarter of 2017. Given the strong increase in private consumption, import growth exceeded export growth, leading to an overall negative contribution of net exports to growth in the review period.

Current account position unchanged, external vulnerability moderately reduced

Croatia's current account position barely altered in the first half of 2017. Another record tourist season bodes well for the full-year current account to remain in surplus. According to Croatia's Ministry of Tourism, tourist arrivals increased by 23% in the first half of 2017 compared to the first half of 2016. In the first quarter of 2017, gross external debt increased to 94.7% of GDP but decreased in the second quarter to 86.1% of GDP. This quarterly movement was largely due to government refinancing patterns – with significant bond issuance happening in March and repayment taking place in April 2017.

Appreciation pressures on the kuna exchange rate

Inflation remained in positive territory in the first half of 2017. The central bank (HNB) intervened to stem appreciation pressures on the exchange rate of the Croatian kuna against the euro and conducted four foreign exchange interventions, purchasing EUR 601.5 million in total from banks until early October 2017. The HNB and the government are currently preparing a joint documentation on Croatia's preparations and milestones for future euro area accession. The main initial goal is to disseminate information and raise awareness for the issues involved. In a recent interview, Governor Vujčić stressed that euro area membership would have little costs for Croatia given its persistent and high level of euroization and the resulting limited de-facto flexibility on the exchange rate side. Around 63% of deposits and 65% of loans to resident non-MFIs are denominated in foreign currency.

Fiscal consolidation but increased uncertainty

In 2017, Croatia exited the excessive deficit procedure after the general government balance had come in at -0.8% of GDP in 2016 while gross public debt still amounted to 84.2% of GDP. While the government has repeatedly committed to further fiscal consolidation, so far deficit reduction has mainly been achieved by economic growth and favorable debt repayment conditions. General government expenditures are still among the highest in CESEE at 48.4% of GDP in 2016. Fiscal risks originate from the debt crisis surrounding Agrokor and lawsuits connected to the so-called "Lex Agrokor" that barred bankruptcy procedures and allowed the appointment of a special commissioner to oversee the restructuring of the company.

Table 5

Main economic indicators: Croatia

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	-0.5	2.2	3.0	2.7	2.7	3.0	3.4	2.5	2.8
Private consumption	-1.6	1.1	3.3	3.0	3.0	3.4	3.6	3.4	3.8
Public consumption	-0.8	-1.4	1.3	-0.5	2.0	1.8	1.7	1.6	1.7
Gross fixed capital formation	-2.8	3.8	5.1	5.7	7.1	3.2	4.6	5.4	3.2
Exports of goods and services	6.0	9.4	5.7	6.9	3.8	5.7	6.8	8.6	3.6
Imports of goods and services	3.1	9.2	5.8	5.6	7.3	5.4	5.0	10.1	4.6
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-1.8	2.0	2.9	2.8	4.5	1.6	2.8	3.9	3.4
Net exports of goods and services	1.3	0.3	0.1	0.0	-1.8	1.4	0.6	-1.4	-0.6
Exports of goods and services	2.6	4.3	2.8	2.6	1.7	3.8	3.0	3.3	1.6
Imports of goods and services	-1.3	-4.0	-2.7	-2.6	-3.5	-2.4	-2.4	-4.7	-2.2
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	..	..	..	..	..	..	..	..	..
Unit labor costs in manufacturing (nominal, per hour)	-5.3	-3.7	51.4	42.6	55.1	58.3	50.9	7.2	-2.2
Labor productivity in manufacturing (real, per hour)	5.4	6.3	-31.4	-26.5	-33.4	-34.3	-30.5	0.3	6.7
Labor costs in manufacturing (nominal, per hour)	-0.4	2.3	4.2	4.8	3.3	3.9	4.9	7.6	4.4
Producer price index (PPI) in industry	-2.7	-3.9	-4.3	-4.7	-6.1	-4.6	-1.7	2.3	1.8
Consumer price index (here: CPI)	0.2	-0.3	-0.6	-0.5	-1.1	-1.1	0.2	1.1	1.1
EUR per 1 HRK, + = HRK appreciation	-0.7	0.3	1.1	0.8	0.9	1.1	1.3	2.0	1.0
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	17.5	16.4	13.3	15.6	13.0	11.0	13.5	14.1	11.1
Employment rate (%, 15–64 years)	54.6	56.0	56.9	55.0	57.4	58.4	56.8	55.9	59.2
Key interest rate per annum (%)	..	..	..	..	..	..	..	..	..
HRK per 1 EUR	7.6	7.6	7.5	7.6	7.5	7.5	7.5	7.5	7.4
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	3.2	5.1	4.7	3.4	4.6	4.3	4.7	3.7	2.9
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	4.8	6.5	4.1	3.7	5.9	5.4	4.1	6.2	2.2
Domestic credit provided by the banking system	0.0	-0.3	-0.4	-2.4	-2.6	-2.7	-0.4	-1.7	-0.1
<i>of which: claims on the private sector</i>	-1.6	-2.4	-2.9	-5.2	-4.8	-4.1	-2.9	-1.3	-1.2
<i>claims on households</i>	-0.4	-0.7	-2.4	-3.8	-3.4	-3.0	-2.4	-0.4	-0.3
<i>claims on enterprises</i>	-1.2	-1.7	-0.5	-1.4	-1.4	-1.1	-0.5	-0.9	-0.8
<i>claims on the public sector (net)</i>	1.6	2.2	2.5	2.8	2.2	1.3	2.5	-0.4	1.1
Other assets (net) of the banking system	-1.7	-1.1	1.0	2.1	1.3	1.6	1.0	-0.7	0.8
<i>% of GDP</i>									
General government revenues	43.1	45.2	47.6	..	..	..	..	..	..
General government expenditures	48.5	48.6	48.4	..	..	..	..	..	..
General government balance	-5.4	-3.4	-0.8	..	..	..	..	..	..
Primary balance	-1.9	0.2	2.4	..	..	..	..	..	..
Gross public debt	86.6	86.7	84.2	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	101.2	100.3	95.6	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	40.3	38.8	35.6	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-15.2	-15.8	-16.0	-17.3	-18.3	-15.1	-13.7	-18.5	-19.2
Services balance	17.1	18.2	18.9	3.7	18.1	43.7	6.1	3.1	19.2
Primary income	-2.0	-0.7	-3.4	-3.6	-3.3	-4.9	-1.6	-2.5	-3.3
Secondary income	2.1	2.9	3.0	1.7	4.3	2.4	3.3	3.4	4.6
Current account balance	2.0	4.6	2.5	-15.4	0.9	26.2	-6.0	-14.4	1.2
Capital account balance	0.4	0.7	1.3	1.2	1.2	1.0	1.8	0.6	0.4
Foreign direct investment (net) ¹	-1.6	-0.6	-4.2	-4.8	-2.4	-5.9	-3.7	-2.1	-1.1
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	108.0	103.0	90.9	99.7	97.0	93.6	90.9	94.7	86.1
Gross official reserves (excluding gold)	29.5	31.1	29.5	29.7	28.9	28.8	29.5	34.7	29.9
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	8.1	8.0	7.6	7.7	7.4	7.4	7.6	8.7	7.4
<i>EUR million, period total</i>									
GDP at current prices	42,982	44,082	45,832	10,209	11,395	12,685	11,544	10,724	11,939

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

6 Czech Republic: GDP growth is broad based

Private consumption as well as re-energized investment and net exports spur economic expansion

After real GDP growth in the Czech Republic had slowed down significantly in 2016, mainly due to slower absorption of EU funds, economic expansion edged up to 3.7% in the first half of 2017. The boost was broadly balanced, brought about by both domestic and foreign demand. On the domestic side, private consumption was the key driver, supported by sustained nominal and real wage growth in a low interest rate environment, persistent optimistic consumer sentiment and rising employment. The growth contribution of public consumption, however, remained moderate as in 2016. Contrasted with 2016, fixed investment rebounded noticeably in the first half of 2017 amid continued growth in external and domestic demand and still low domestic real interest rates. Also the contribution of net exports to real GDP growth strengthened somewhat in the first half of 2017 as growth of exports outpaced imports. Following a slowdown in the second half of 2016, exports bounced back, reflecting firm external demand in particular in the crucial automotive industry.

Subdued commodity prices helped maintain a solid positive trade and services balance, which was echoed also in a significant surplus of the current account balance. The latter was further aided by the favorable fiscal position. The budget is expected to remain in a moderate surplus also in 2017. On the revenue side this would be thanks to higher-than-expected tax revenues on the back of strong economic growth as well as some government measures (e.g. the launch of electronic sales registration). On the expenditure side, the fiscal performance will be supported by lower debt servicing costs. As a result of fiscal restraint, the debt ratio is expected to decline by about 1 percentage point of GDP this year.

The mirror image of the robust economic growth is a further tightening in the labor market. Employment has reached historical highs (more than 73%) while the unemployment rate is the lowest in the EU. Filling vacancies is thus becoming an increasing challenge for firms. Among industrial corporations, the perception of labor shortages as a constraint for production is reportedly at its peak since measurement started in 2005. Not surprisingly, the tight labor market is increasingly reflected in rising wage pressures. Correspondingly, growth in labor costs exceeded labor productivity growth in the manufacturing sector in the first half of 2017.

After a long period of subdued price increases, inflation has hovered in the upper half of the tolerance band of Czech National Bank's (CNB) target ($2\% \pm 1$ percentage points) since early 2017, reaching 2.4% in August. The CNB expects inflation to peak in the second half of the year and to decrease toward the target at the start of 2018. Inflation acceleration has been driven by the booming domestic economy plus some one-off effects: The already mentioned roll-out of electronic sales registration in December 2016 has induced noticeable price rises in nontradables such as housing, recreational, cultural and gastronomical services. Food prices have also gone up while growth in fuel prices slowed down recently on the back of moderating oil prices and an appreciating Czech koruna vis-à-vis the dollar. In light of recent and projected inflation developments, the CNB increased the two-week repo rate by 20 basis points to 0.25% in August 2017. This was the first adjustment of the key policy rate since November 2012 and the first hike since November 2007. Since the CNB removed the exchange rate floor in early April 2017, the Czech koruna has appreciated rather continuously by about 4% against the euro, without any interventions by the CNB.

CNB's first policy rate increase since 2007 amid accelerated inflation growth

Table 6

Main economic indicators: Czech Republic

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	2.7	5.3	2.6	3.2	4.0	1.6	1.7	4.0	3.4
Private consumption	1.8	3.7	3.6	3.8	4.1	3.5	3.0	3.7	3.8
Public consumption	1.1	1.9	2.0	2.2	2.8	1.9	1.2	2.8	1.8
Gross fixed capital formation	3.9	10.2	-2.3	0.4	-2.5	-3.5	-3.1	2.4	5.2
Exports of goods and services	8.7	6.0	4.5	6.0	8.3	1.8	2.2	7.4	3.9
Imports of goods and services	10.1	6.8	3.4	6.0	5.7	0.8	1.1	5.3	2.9
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	3.2	5.5	1.4	2.8	1.6	0.7	0.8	1.8	2.3
Net exports of goods and services	-0.5	-0.2	1.2	0.5	2.4	0.8	0.9	2.2	1.1
Exports of goods and services	6.6	5.0	3.7	5.1	6.7	1.4	1.7	6.2	3.2
Imports of goods and services	-7.1	-5.2	-2.5	-4.6	-4.3	-0.6	-0.9	-4.0	-2.1
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	0.4	-0.8	3.2	2.1	1.4	4.7	4.8	3.1	5.1
Unit labor costs in manufacturing (nominal, per hour)	-1.3	-1.0	0.8	-4.0	3.5	7.6	-3.4	5.6	3.0
Labor productivity in manufacturing (real, per hour)	4.9	4.2	2.2	3.4	0.9	1.6	2.8	3.8	7.5
Labor costs in manufacturing (nominal, per hour)	3.6	3.2	3.0	-0.8	4.3	9.3	-0.7	9.6	10.8
Producer price index (PPI) in industry	1.0	-2.5	-3.2	-4.0	-4.5	-3.0	-1.3	2.6	1.9
Consumer price index (here: HICP)	0.4	0.3	0.6	0.4	0.1	0.5	1.5	2.5	2.3
EUR per 1 CZK, + = CZK appreciation	-5.6	0.9	0.9	2.2	1.3	0.2	0.1	0.1	1.8
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	6.2	5.1	4.0	4.4	4.0	4.0	3.6	3.5	3.0
Employment rate (%, 15–64 years)	69.0	70.2	72.0	71.0	71.7	72.2	72.9	72.8	73.3
Key interest rate per annum (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CZK per 1 EUR	27.5	27.3	27.0	27.0	27.0	27.0	27.0	27.0	26.6
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	5.9	8.0	6.5	9.4	9.5	8.4	6.5	11.8	12.0
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	0.1	6.7	7.4	6.4	8.0	8.1	7.4	16.1	12.8
Domestic credit provided by the banking system	8.1	2.0	0.6	1.7	1.1	1.2	0.6	-2.4	-3.6
of which: claims on the private sector	2.9	4.6	5.2	5.8	5.6	5.3	5.2	6.2	6.0
claims on households	1.0	2.8	2.7	2.8	2.4	2.6	2.7	2.9	3.0
claims on enterprises	1.8	1.8	2.6	3.0	3.2	2.7	2.6	3.3	3.0
claims on the public sector (net)	5.2	-2.6	-4.6	-4.2	-4.5	-4.1	-4.6	-8.6	-9.6
Other assets (net) of the banking system	-2.3	-0.8	-1.5	1.4	0.4	-0.9	-1.5	-2.0	2.9
<i>% of GDP</i>									
General government revenues	40.3	41.1	40.1	..	..	..	..	..	..
General government expenditures	42.2	41.7	39.4	..	..	..	..	..	..
General government balance	-1.9	-0.6	0.7	..	..	..	..	..	..
Primary balance	-0.6	0.5	1.6	..	..	..	..	..	..
Gross public debt	42.2	40.0	36.8	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	64.0	58.6	56.5	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	30.1	30.4	31.1	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	5.1	4.1	5.2	7.5	6.7	3.8	3.2	7.8	6.0
Services balance	1.3	1.7	2.1	2.2	2.0	2.3	2.0	2.3	2.4
Primary income	-6.0	-5.6	-5.7	-0.5	-8.8	-7.2	-5.9	-0.4	-7.8
Secondary income	-0.2	0.0	-0.6	0.6	-0.9	-0.7	-1.1	-1.3	-1.2
Current account balance	0.2	0.2	1.1	9.9	-1.0	-1.9	-1.8	8.4	-0.6
Capital account balance	0.8	2.2	1.1	1.7	1.8	1.0	0.1	0.1	0.6
Foreign direct investment (net) ¹	-1.9	1.1	-3.0	0.9	-6.9	-4.3	-1.2	-5.4	-2.3
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	69.6	70.2	74.0	69.8	70.4	71.5	74.0	91.9	94.4
Gross official reserves (excluding gold)	28.4	35.0	45.9	37.4	38.6	41.7	45.9	68.7	68.6
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	4.5	5.6	7.6	6.0	6.3	6.9	7.6	11.3	11.3
<i>EUR million, period total</i>									
GDP at current prices	156,641	168,514	176,564	41,021	44,888	44,750	45,904	42,920	47,719

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

7 Hungary: EU funds and policy measures push up GDP growth

Notable acceleration of GDP growth in the first half of 2017

GDP grew by 3.6% year on year during the first half of 2017 (up from 2% in 2016). In line with previous expectations, the acceleration was attributable to the very sharp rebound of investment activity. This was most evident for public investment, which was presumably supported by stronger EU funds disbursement, but private investments also accelerated on the back of strengthening credit growth and galloping construction activity. Private consumption growth remained strong, although somewhat slower than in 2016, despite a steep rise in real wage growth and accelerating credit to households. Rather unexpectedly, public consumption contracted by a comparably large 3%, probably reflecting efforts to keep a lid on the budget deficit amid selected tax cuts (VAT, corporate income tax, family tax benefits), increased subsidies (e.g. for housing) and despite selected public sector wage hikes. Net exports shaved 0.3 percentage points off the overall growth rate, as the leap in domestic demand soaked in imports, with which the increase in export growth could not keep up.

Fiscal policy moving away from MTO

According to the European Commission's spring 2017 forecast, the budget deficit will likely rise to 2.3% of GDP in 2017 (from 1.8% in 2016) and further to 2.5% of GDP in 2018. Adjusted for changes in the output gap, the fiscal loosening estimated by the European Commission could be even larger (structural deficit up from 1.9% of GDP in 2016 to 3.4% in 2017 and 3.7% of GDP in 2018, i.e. moving away from Hungary's medium-term objective (MTO) of 1.5%). Therefore, in June 2017, when assessing the country's fiscal outlook, the Council of the European Union warned of risks of a significant deviation from the recommended fiscal adjustment toward the MTO in both 2017 and 2018. At the same time, the Council expressed its opinion that Hungary would need to undertake additional fiscal efforts already in 2017 to comply with its obligations under the Stability and Growth Pact. The Council also repeated its recommendations to improve competitiveness and potential growth, while strengthening the functioning of the labor market and the education system also remain on the agenda.

Credit growth continues to recover; inflation slower than previously expected

The Hungarian central bank (MNB) in late May 2017 announced modifications to its market-based lending (MBL) scheme. The modifications have allowed banks to make additional lending commitments and thus promote credit growth additionally and keep the growth of credits to SMEs in the upper part of the 5% to 10% range deemed as "sound and desirable" in the MNB framework. In addition, in the context of MBL, the MNB promotes lending to SMEs by progressive allowances on capital requirements, based on banks' fulfilment of their MBL commitments. In fact, credit growth to corporates accelerated gradually during the first seven months of 2017 and the share of corporates citing financial constraints as a factor limiting production continued following its decreasing trend. At the same time, lending to households also intensified and returned to positive territory in year-on-year terms by mid-2017. Following the spike to close to the MNB's 3% medium-term target during the first quarter of 2017, inflation decelerated to around 2% by mid-year, before rebounding to 2.7% in August. The MNB expects inflation to ease in the second half of 2017 and then remain at 2% to 2.5% until end-2018 and to climb gradually to the 3% inflation target by mid-2019 (later than previously expected). In response to the repeated delay in the expected achievement of the inflation target, the MNB in late September cut its overnight deposit rate by 10 basis points to -0.15%. It intends to maintain loose monetary conditions for an extended period and even loosen its stance further with nonstandard measures if inflation remains persistently below the target.

Table 7

Main economic indicators: Hungary

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	4.0	3.1	2.0	1.1	2.8	2.2	1.6	4.2	3.2
Private consumption	2.5	3.4	5.0	4.8	5.2	4.6	5.2	3.6	4.6
Public consumption	4.5	1.0	0.1	1.3	4.8	-1.2	-3.9	-3.9	-2.3
Gross fixed capital formation	9.9	1.9	-15.5	-10.2	-19.3	-9.9	-19.6	28.4	21.2
Exports of goods and services	9.8	7.7	5.8	4.6	10.3	5.2	3.1	9.4	3.5
Imports of goods and services	10.9	6.1	5.7	7.4	7.9	5.1	2.7	10.0	5.1
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	4.2	1.3	1.4	3.0	0.0	1.7	1.0	3.7	4.1
Net exports of goods and services	-0.2	1.8	0.6	-1.9	2.8	0.6	0.6	0.4	-1.0
Exports of goods and services	8.4	6.8	5.2	4.4	9.4	4.7	2.7	9.1	3.3
Imports of goods and services	-8.6	-5.0	-4.7	-6.3	-6.5	-4.1	-2.2	-8.7	-4.3
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	2.0	0.6	5.6	7.5	4.0	6.2	4.6	4.4	5.9
Unit labor costs in manufacturing (nominal, per hour)	-2.5	-0.1	8.6	8.9	6.7	10.5	8.4	7.2	9.7
Labor productivity in manufacturing (real, per hour)	6.0	4.1	-2.8	-3.5	-1.9	-3.7	-2.1	4.0	2.7
Labor costs in manufacturing (nominal, per hour)	3.5	4.0	5.6	5.1	4.6	6.4	6.2	11.6	12.7
Producer price index (PPI) in industry	-0.4	-0.9	-1.6	-1.5	-2.0	-2.5	-0.3	3.4	2.9
Consumer price index (here: HICP)	0.0	0.1	0.4	0.4	0.0	0.1	1.3	2.6	2.1
EUR per 1 HUF, + = HUF appreciation	-3.8	-0.4	-0.5	-1.0	-2.4	0.3	1.1	1.0	1.1
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	7.8	6.9	5.2	6.1	5.1	4.9	4.5	4.6	4.3
Employment rate (%, 15–64 years)	61.8	64.0	66.5	65.1	66.4	67.1	67.5	67.1	68.1
Key interest rate per annum (%)	2.4	1.6	1.0	1.3	1.0	0.9	0.9	0.9	0.9
HUF per 1 EUR	308.7	309.9	311.5	312.1	313.3	311.1	309.4	309.1	309.9
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	5.1	6.3	7.1	5.0	5.4	4.2	7.1	7.7	10.1
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	7.5	1.4	3.4	-1.2	-0.6	1.3	3.4	3.6	1.0
Domestic credit provided by the banking system	0.4	1.8	1.8	6.4	4.5	0.6	1.8	2.2	5.9
<i>of which: claims on the private sector</i>	-0.3	-7.4	0.1	-3.3	-2.8	-2.0	0.1	0.7	2.0
<i>claims on households</i>	-0.7	-4.4	-0.8	-2.2	-2.0	-1.4	-0.8	-0.2	0.2
<i>claims on enterprises</i>	0.3	-3.0	1.2	-0.9	-0.6	-0.4	1.2	1.0	1.9
<i>claims on the public sector (net)</i>	0.7	9.2	1.7	9.8	7.4	2.7	1.7	1.5	3.8
Other assets (net) of the banking system	-2.8	3.1	1.9	-0.2	1.4	2.3	1.9	1.9	3.2
<i>% of GDP</i>									
General government revenues	46.8	48.2	44.8	..	..	..	..	..	..
General government expenditures	49.5	50.2	46.7	..	..	..	..	..	..
General government balance	-2.7	-2.0	-1.9	..	..	..	..	..	..
Primary balance	1.3	1.5	1.3	..	..	..	..	..	..
Gross public debt	75.2	74.7	73.9	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	80.8	76.9	71.7	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	25.1	21.1	20.6	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	2.0	4.0	4.2	5.6	5.6	3.4	2.5	2.6	4.9
Services balance	4.4	4.9	6.0	5.3	6.6	7.3	4.8	5.5	5.7
Primary income	-4.2	-4.5	-2.5	-1.9	-2.8	-2.5	-2.7	-3.1	-4.2
Secondary income	-0.7	-0.9	-1.5	-1.8	-1.4	-1.3	-1.6	-1.5	-0.6
Current account balance	1.5	3.5	6.2	7.2	8.1	6.9	3.0	3.6	5.8
Capital account balance	3.7	4.7	0.1	0.4	0.2	-0.3	0.0	0.5	4.6
Foreign direct investment (net) ¹	-2.8	-1.0	-1.7	-0.9	2.4	-5.2	-2.8	-1.2	2.2
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	115.4	108.2	97.3	105.6	105.4	99.5	97.3	96.4	93.7
Gross official reserves (excluding gold)	32.9	27.6	21.7	25.0	22.3	21.1	21.7	21.2	20.0
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	4.8	4.0	3.2	3.6	3.3	3.1	3.2	3.1	2.9
<i>EUR million, period total</i>									
GDP at current prices	104,959	109,657	112,429	24,631	27,825	28,922	31,051	26,808	30,067

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

8 Poland: growth mainly driven by accelerating domestic demand

Surplus in the goods and services balance remains high

GDP growth accelerated to 4.3% in the first half of 2017. Total final demand growth accelerated to 5.3%, with real export growth slowing sharply to 6% and domestic demand growth speeding up to 5.0%, so that real import growth decelerated moderately to 7.5%. For the first time since 2014, foreign demand contributed less than domestic demand to annual GDP growth, while the net export contribution turned negative. In the first half of 2017, the goods and services surplus at 4.3% of GDP and the current account surplus at 0.3% of GDP were both lower by about 0.5 percentage points compared to the same period a year earlier, and the same applies to the capital account surplus at 0.7% of GDP. The main reason for the pick-up of domestic demand growth was the start of recovery in fixed investment, following severe contraction in 2016. In parallel, the strong inventory build-up continued. Private business investment was boosted by improved industrial confidence, the recent further increase of already high capacity utilization rates, the continued strong liquidity position plus low interest rates and the broadly stable profitability of enterprises. At the same time, labor cost increases exceeding productivity advances tend to erode profitability in manufacturing. Housing investment growth seems to have accelerated, judging from the number of dwellings under construction. Private consumption growth was even slightly higher than in the second half of 2016 and thus above GDP growth. This reflected the further improvement of consumer confidence, disappearing deflation expectations and the lagged effect of higher child benefits. Moreover, it was roughly in line with real wage sum growth, driven by both employment growth and stable real wage growth.

Inflation expected to remain moderate in the quarters ahead

Manufacturing ULC continued to increase more strongly than in the euro area in year-on-year terms in the first half of 2017. In addition, the Polish zloty's euro value was about 2.5% higher on average during the first half of 2017 than a year earlier. However, this rise was partly reversed in July and August. In August, annual headline inflation was positive (1.4% HICP, 1.8% national CPI), while core inflation stood at 1.2% (HICP, excluding energy and unprocessed food) and 0.7% (CPI, excluding energy and all food), with rising deflation in industrial goods and stable inflation in services. The Polish Monetary Policy Council (MPC), pursuing an inflation target of 2.5% (CPI), has kept its policy rate at 1.5% since March 2015. In its latest meeting on October 4, 2017, it expected inflation to remain moderate until the second half of 2018, with an only gradual rise in domestic inflationary pressure and stabilizing energy commodity prices.

Fiscal deficit expected to increase to close to 3% of GDP in 2017

For 2017, the European Commission forecasts the gross general government deficit to reach 2.9% of GDP, equal to the target in the government's Convergence Programme of April 2017 and higher than in 2016 (2.4% of GDP). The structural deficit target implies an even larger increase to 2.9% of GDP from 2.2% in 2016, while the European Commission forecasts 3.2% of GDP. While the revenue-to-GDP ratio is set to rise due to measures on indirect taxes, the expenditure ratio will rise far more by social transfers and by public investment. Against this background, the Council of the European Union saw a risk of deviation from the adjustment recommended for 2017 of 0.5% of GDP toward the medium-term budgetary objective of a structural deficit of 1% of GDP. Hence, it recommended that Poland should take action in 2017 and 2018 to pursue a substantial fiscal effort in 2018. European Commission staff projections expect general government gross debt to reach 54.6% of GDP by the end of 2017.

Table 8

Main economic indicators: Poland

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	3.3	3.9	2.6	2.5	3.0	1.8	3.1	4.2	4.4
Private consumption	2.4	3.0	3.8	3.2	2.8	4.9	4.4	4.9	4.8
Public consumption	4.1	2.4	2.8	4.8	3.2	3.3	0.6	1.1	2.6
Gross fixed capital formation	10.0	6.1	-7.9	-10.1	-4.5	-7.5	-9.2	-0.3	0.9
Exports of goods and services	6.7	7.7	9.0	7.2	13.9	6.5	8.6	9.0	3.0
Imports of goods and services	10.0	6.6	8.9	8.6	11.3	9.3	6.7	9.4	5.5
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	4.6	3.2	2.4	3.0	1.3	3.0	2.1	4.1	5.5
Net exports of goods and services	-1.3	0.6	0.3	-0.4	1.6	-1.2	1.1	0.1	-1.1
Exports of goods and services	3.1	3.7	4.5	3.7	6.9	3.3	4.0	4.8	1.7
Imports of goods and services	-4.4	-3.0	-4.1	-4.1	-5.3	-4.4	-2.9	-4.7	-2.7
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	0.6	-0.6	-0.7	-0.6	-0.6	-0.7	-1.0	-0.7	..
Unit labor costs in manufacturing (nominal, per hour)	2.0	1.0	2.9	3.5	2.3	4.4	1.5	2.6	3.4
Labor productivity in manufacturing (real, per hour)	2.5	2.9	0.9	0.1	0.8	-0.8	3.7	1.7	4.1
Labor costs in manufacturing (nominal, per hour)	4.7	3.9	3.9	3.7	3.1	3.5	5.2	4.3	7.6
Producer price index (PPI) in industry	-1.3	-2.1	-0.3	-1.5	-1.0	-0.2	1.6	4.1	2.7
Consumer price index (here: HICP)	0.1	-0.7	-0.2	-0.3	-0.4	-0.4	0.4	1.7	1.5
EUR per 1 PLN, + = PLN appreciation	0.3	0.0	-4.1	-4.0	-6.5	-3.5	-2.6	1.0	3.7
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	9.1	7.6	6.3	7.1	6.3	6.0	5.6	5.5	5.0
Employment rate (%, 15–64 years)	61.7	62.9	64.5	63.7	64.3	64.9	65.1	65.4	66.2
Key interest rate per annum (%)	2.4	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
PLN per 1 EUR	4.2	4.2	4.4	4.4	4.4	4.3	4.4	4.3	4.2
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	8.2	9.1	9.6	9.1	11.4	9.4	9.6	7.8	5.0
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	3.1	1.3	4.1	-1.1	4.3	2.7	4.1	5.1	0.1
Domestic credit provided by the banking system	9.5	9.9	8.7	11.5	10.8	8.7	8.7	4.6	3.2
of which: claims on the private sector	6.9	6.8	4.4	4.6	4.9	3.9	4.4	4.9	4.0
claims on households	3.2	3.7	2.9	2.5	2.7	2.8	2.9	2.5	1.7
claims on enterprises	3.7	3.1	1.5	2.1	2.2	1.1	1.5	2.4	2.3
claims on the public sector (net)	2.6	3.0	4.3	6.9	6.0	4.8	4.3	-0.2	-0.7
Other assets (net) of the banking system	-4.4	-2.1	-3.2	-1.3	-3.7	-2.0	-3.2	-1.9	1.7
<i>% of GDP</i>									
General government revenues	38.7	38.9	38.7	..	..	..	..	..	..
General government expenditures	42.3	41.6	41.2	..	..	..	..	..	..
General government balance	-3.6	-2.6	-2.5	..	..	..	..	..	..
Primary balance	-1.7	-0.9	-0.8	..	..	..	..	..	..
Gross public debt	50.2	51.1	54.1	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	45.2	46.3	49.4	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	34.9	35.4	36.4	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-0.8	0.5	0.7	1.2	1.7	-0.4	0.4	0.6	0.4
Services balance	2.2	2.5	3.3	3.2	3.7	3.3	3.1	3.6	4.0
Primary income	-3.4	-3.4	-4.0	-4.1	-3.6	-5.0	-3.2	-2.7	-4.9
Secondary income	-0.1	-0.2	-0.3	-0.5	0.0	-0.3	-0.5	0.1	-0.3
Current account balance	-2.1	-0.6	-0.3	-0.2	1.7	-2.5	-0.2	1.6	-0.8
Capital account balance	2.4	2.4	1.1	2.4	0.0	0.0	1.7	0.6	0.8
Foreign direct investment (net) ¹	-2.4	-2.1	-1.2	-3.9	-1.9	-0.7	1.3	-1.2	2.3
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	71.4	70.5	75.2	70.4	73.2	74.5	75.2	74.8	72.3
Gross official reserves (excluding gold)	19.3	19.5	24.6	19.8	22.4	22.6	24.6	23.4	21.4
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	5.0	5.0	6.1	5.1	5.7	5.7	6.1	5.7	5.2
<i>EUR million, period total</i>									
GDP at current prices	410,921	429,904	424,208	98,055	102,733	104,418	119,004	105,025	112,541

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

9 Romania: vivid GDP growth and increasing twin deficits

Private consumption drives growth, but not exclusively

Real GDP growth speeded up markedly in the first half of 2017, getting close to 6% annually. Growth of private consumption resurged, driven by additional stimulating fiscal and income policy measures, supportive labor market developments and reviving consumer lending. Brisk wage growth not only supported private consumption but also fueled further rising ULC in the manufacturing sector, despite considerable productivity gains. Moreover, following the adoption of various expansionary fiscal policy measures in this year's budget plan, the government made some adjustments in late summer (such as increasing the fuel excise duty) with a view to keeping the budget deficit below 3% of GDP this year. In June 2017, the Council of the European Union concluded that significant measures were needed as of 2017 to comply with the provisions of the Stability and Growth Pact, in light of a strongly deteriorating fiscal outlook.

While private consumption clearly dominated growth, other demand components developed largely favorably as well. A marked contraction in gross fixed capital formation in the second half of 2016 was followed by relatively high seasonally adjusted quarter-on-quarter growth rates in the first two quarters of 2017, resulting in a moderately positive year-on-year growth rate in the second quarter. Gross fixed capital formation grew in spite of further delays in absorbing EU structural and investment funds under the 2014–2020 programming period and overall weak public investment activity. Residential building construction was backed by swiftly growing housing loans, and equipment purchases rebounded in the industrial sector in the second quarter. The recovery also extended to loans to nonfinancial corporations. Meanwhile, exports continued to perform well, though some moderation was seen in the second quarter. Yet, as import growth remained at a high level, the contribution of net exports turned negative again in the second quarter of 2017.

Current account deficit widens, while financing structure deteriorates

The current account deficit increased by about 1 percentage point of GDP in the first half of 2017 compared to the first half of 2016. The deterioration was broad based, but the largest contribution to the widening current account gap emanated from the growing trade deficit. In parallel, the surplus in the capital account dropped sharply due to meager inflows from EU funds. As a result, the combined current and capital account balance turned negative, posting a deficit of 3.3% of GDP in the first half of 2017, thereby surpassing the level of net FDI inflows. As an external financing source, debt-creating inflows – namely net portfolio investments – gained increasing importance. External debt increased in absolute terms, but the external debt ratio declined because of favorable GDP developments.

Demand pressures leave footprint in inflation developments

CPI and HICP inflation rates went up in the course of 2017. The rise was more pronounced in monetary policy-relevant CPI terms, with annual CPI inflation reaching 1.4% in July before slowing slightly to 1.2% in August. Core inflation rose as well, indicating that demand pressures have started to affect prices to a more visible extent. The central bank (NBR) has kept its policy rate unchanged at 1.75%, but tightened the interest rate corridor on October 3, 2017, and made it symmetric by hiking the deposit facility rate by 25 basis points to 0.5% and cutting the lending facility rate to 3%. The NBR expects inflation to rise slightly faster in the coming months than projected in the August forecasting round. The August forecast had already put inflation at 3% in the first quarter of 2018 – a level that is above the target of 2.5%, but still within the 1 percentage point variation band.

Table 9

Main economic indicators: Romania

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	3.1	3.9	4.8	4.3	6.0	4.3	4.8	5.7	5.9
Private consumption	4.5	5.9	7.5	9.1	10.4	6.7	4.5	7.3	8.0
Public consumption	1.1	0.1	5.3	-0.4	1.9	1.8	14.6	4.4	1.9
Gross fixed capital formation	3.2	8.0	-3.1	1.0	6.0	-1.0	-14.2	-1.0	2.4
Exports of goods and services	8.3	5.3	8.1	5.3	8.6	7.9	11.2	10.5	6.5
Imports of goods and services	8.7	9.4	10.1	10.1	13.7	7.7	8.7	10.4	9.2
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	3.4	5.5	5.5	7.5	5.9	4.8	4.5	2.9	8.3
Net exports of goods and services	-0.3	-1.6	-0.7	-2.5	-2.3	0.4	0.7	1.0	-0.7
Exports of goods and services	3.2	2.2	3.4	1.7	4.0	3.3	4.2	5.8	2.7
Imports of goods and services	-3.5	-3.8	-4.1	-4.2	-6.2	-2.9	-3.5	-4.8	-3.5
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per person)	3.7	-3.5	5.4	4.9	8.6	2.1	5.4	9.9	7.6
Unit labor costs in manufacturing (nominal, per hour)	-0.6	6.9	9.9	10.1	12.6	9.2	7.7	7.9	4.3
Labor productivity in manufacturing (real, per hour)	5.8	-0.3	-0.2	-2.3	-1.7	1.2	1.8	6.7	11.2
Labor costs in manufacturing (nominal, per hour)	5.3	6.6	9.7	7.7	10.7	10.6	9.7	15.1	16.0
Producer price index (PPI) in industry	-0.1	-2.2	-1.8	-2.9	-2.6	-1.9	0.1	3.5	3.2
Consumer price index (here: HICP)	1.4	-0.4	-1.1	-2.0	-2.1	-0.1	-0.1	0.4	0.6
EUR per 1 RON, + = RON appreciation	-0.6	0.0	-1.0	-0.9	-1.2	-0.8	-1.1	-0.6	-1.2
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	7.1	7.1	6.1	6.8	6.1	5.9	5.6	5.6	5.0
Employment rate (%, 15–64 years)	61.0	61.4	61.6	59.8	61.8	63.1	61.6	61.2	65.5
Key interest rate per annum (%)	3.3	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8
RON per 1 EUR	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.6
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	8.4	9.3	9.7	9.9	13.1	12.2	9.7	12.2	9.0
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	11.9	5.5	10.8	7.0	11.3	13.7	10.8	11.0	8.0
Domestic credit provided by the banking system	-5.1	5.4	-2.8	2.8	2.7	-1.4	-2.8	1.0	-0.4
<i>of which: claims on the private sector</i>	-2.7	2.5	0.8	2.4	1.0	1.0	0.8	2.3	3.1
<i>claims on households</i>	-0.5	2.2	1.8	2.2	2.1	2.5	1.8	2.2	2.1
<i>claims on enterprises</i>	-2.3	0.3	-1.0	0.2	-1.1	-1.5	-1.0	0.1	1.0
<i>claims on the public sector (net)</i>	-2.4	2.9	-3.6	0.4	1.8	-2.3	-3.6	-1.4	-3.5
Other assets (net) of the banking system	1.7	-1.5	1.7	0.2	-1.0	-0.1	1.7	0.3	1.5
<i>% of GDP</i>									
General government revenues	33.5	34.9	31.0	..	..	..	..	..	..
General government expenditures	34.9	35.7	34.0	..	..	..	..	..	..
General government balance	-1.4	-0.8	-3.0	..	..	..	..	..	..
Primary balance	0.2	0.8	-1.5	..	..	..	..	..	..
Gross public debt	39.4	37.9	37.6	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	44.7	43.1	40.1	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	17.9	17.2	16.6	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-4.3	-4.9	-5.5	-5.7	-5.8	-5.0	-5.4	-5.9	-7.1
Services balance	3.9	4.2	4.5	5.6	5.0	4.1	3.9	5.2	4.9
Primary income	-1.3	-2.4	-2.8	-2.5	-4.8	-2.4	-2.0	-2.1	-4.6
Secondary income	1.1	1.7	1.4	1.7	1.5	1.7	1.0	0.8	1.6
Current account balance	-0.7	-1.2	-2.3	-1.0	-4.1	-1.6	-2.5	-2.1	-5.2
Capital account balance	2.6	2.4	2.5	4.0	3.2	2.5	1.0	0.5	0.5
Foreign direct investment (net) ¹	-1.8	-1.8	-2.3	-4.1	-3.1	-1.1	-1.5	-3.1	-1.3
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	62.0	56.6	54.5	56.3	55.9	56.5	54.5	53.3	53.3
Gross official reserves (excluding gold)	21.4	20.2	20.2	19.4	19.4	20.1	20.2	20.0	19.9
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	6.2	5.8	5.7	5.5	5.5	5.7	5.7	5.6	5.5
<i>EUR million, period total</i>									
GDP at current prices	150,488	159,978	169,567	32,594	39,733	46,453	50,787	36,323	43,202

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

10 Turkey: policy measures support economic growth, lira depreciation fuels inflation

Strong investment activity pushed up GDP growth

GDP growth started to gain momentum in the first half of 2017 (5.2% year on year) as net exports started to contribute positively to growth. Domestic demand, however, continued to deliver the largest growth contributions. Private consumption was supported by a modest uptick in employment (1.7% year on year), moderate wage growth and some fiscal measures such as the temporary VAT reduction on durable goods. Gross fixed capital formation exhibited a strong increase (6.2% year on year), benefiting inter alia from the newly established Credit Guarantee Fund. External demand started to support growth in the first half 2017 as exports increased by as much as 10.7%, not least due to the ongoing depreciation of the Turkish lira and in line with a slight upswing of the tourism sector. In contrast, import growth slowed down to 1.5% year on year – the lowest growth rate since 2015.

CBRT unassertive in reacting to rising inflation

Headline inflation came in at 8.5% at the end of 2016, clearly above the monetary policy target of 5% due to exchange rate pass-through and high inflation expectations. Between the start of January and the end of September 2017, the Turkish lira depreciated by 13% against the euro (1% against the dollar). Most recently, due to tensions between Turkey and U.S.A., the lira again came under pressure: It depreciated by 3% against the euro and by 4.8% against the U.S. dollar between September 28 and October 9, 2017. Price pressures increased in the review period partly due to temporary tax reductions on durable goods that boosted consumption. At the same time, soaring prices of unprocessed food generated additional price pressures, which brought CPI inflation to 11.2% in September. In August 2017, the central bank (CBRT) revised its end-year inflation forecast upward by 0.2 percentage points to 8.7% for 2017, while keeping the forecast for 2018 unchanged at 6.4%.

Despite stronger price rises, the CBRT has kept interest rates broadly unchanged in 2017, citing transitional and abating inflationary pressures. Accordingly, the benchmark interest rate stood at 8% since the latest hike in November 2016 (by 25 basis points), while the late liquidity window rate, i.e. the upper bound of the interest rate corridor, was raised by 125 basis points in two steps, to 12.25% (in March and April).

External imbalances on the rise again in tandem with growing exchange rate risks

Driven partly by strong depreciation, the trade deficit deteriorated somewhat, thus widening the four-quarter moving-average current account deficit to 4.2% of GDP in mid-2017 from 3.8% of GDP in 2016. Broadly stable net FDI inflows of around 1% of GDP kept the coverage of the current account deficit to close to 25%. Following a temporary slump in the fourth quarter of 2016, the traditionally sizeable portfolio inflows returned and increased to 6.3% of GDP in the second quarter of 2017. Gross external debt is slowly creeping up and stood at 50.7% of GDP as of mid-2017. At the same time, gross external financing needs remain elevated.

Annual credit growth has been on the rise since mid-2016, increasing to 14.4% in exchange rate adjusted terms in July 2017, which is slightly below the CBRT target rate of 15% (exchange rate-adjusted, 13-week moving average). Domestic credit to the private sector remains higher than deposits by a sizeable margin and this void has grown further, raising the loan-to-deposit ratio to 141% as of June 2017 (up from 136% at end-2016). In addition, exchange rate risks remained elevated as the indebtedness in foreign currency of the corporate sector stood at 45.3% of GDP by mid-2017 (although declining somewhat during 2017).

Table 10

Main economic indicators: Turkey

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	5.2	6.1	3.2	4.8	4.9	-0.8	4.2	5.2	5.1
Private consumption	3.0	5.4	3.7	2.5	5.2	0.5	6.3	3.6	3.2
Public consumption	3.1	3.9	9.5	12.4	15.0	5.8	6.1	9.7	-4.3
Gross fixed capital formation	5.1	9.3	2.2	6.2	2.0	0.3	1.2	3.0	9.5
Exports of goods and services	8.2	4.3	-1.9	1.9	-1.7	-9.4	2.5	10.9	10.5
Imports of goods and services	-0.4	1.7	3.7	2.8	7.1	2.1	2.9	0.7	2.3
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	3.7	6.5	4.1	5.0	5.8	1.1	5.1	4.4	4.1
Net exports of goods and services	1.8	0.5	-1.3	-0.3	-2.1	-2.5	-0.2	2.2	1.6
Exports of goods and services	1.7	0.9	-0.4	0.4	-0.4	-2.0	0.5	2.4	2.2
Imports of goods and services	0.1	-0.4	-0.9	-0.7	-1.7	-0.4	-0.6	-0.2	-0.6
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	..	..	..	..	..	..	..	..	..
Unit wage costs in manufacturing (nominal, per hour)	12.9	10.6	14.9	14.0	15.4	17.4	12.9	8.2	7.7
Labor productivity in manufacturing (real, per hour)	1.3	4.0	3.0	5.4	2.8	0.4	3.6	3.7	6.0
Gross wages in manufacturing (nominal, per hour)	14.3	15.0	18.3	20.2	18.5	17.8	16.9	12.2	14.1
Producer price index (PPI) in industry	10.2	5.3	4.3	4.7	3.2	2.9	6.4	15.0	15.5
Consumer price index (here: HICP)	8.9	7.7	7.7	8.5	6.7	7.9	7.6	10.0	11.6
EUR per 1 TRY, + = TRY appreciation	-12.9	-3.8	-9.6	-14.6	-9.8	-3.9	-10.2	-17.5	-17.0
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	10.1	10.5	11.1	11.0	9.6	11.4	12.2	12.9	10.3
Employment rate (%, 15–64 years)	49.5	50.2	50.7	49.4	52.0	51.1	50.1	49.5	52.2
Key interest rate per annum (%)	8.7	7.6	7.5	7.5	7.5	7.5	7.7	8.0	8.0
TRY per 1 EUR	2.9	3.0	3.3	3.2	3.3	3.3	3.5	3.9	3.9
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	11.8	16.2	17.9	13.2	12.0	7.7	17.9	18.2	19.7
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	-4.0	-2.3	1.9	-0.1	1.5	0.6	1.9	-2.3	-3.2
Domestic credit provided by the banking system	21.5	24.3	19.8	19.1	16.2	11.9	19.8	24.7	27.2
<i>of which: claims on the private sector</i>	20.8	23.6	19.4	17.8	15.1	10.4	19.4	24.3	26.0
<i>claims on households</i>	2.5	2.9	3.0	2.2	2.1	1.9	3.0	3.8	4.1
<i>claims on enterprises</i>	18.3	20.7	16.3	15.6	13.0	8.4	16.3	20.5	21.9
<i>claims on the public sector (net)</i>	0.7	0.7	0.4	1.3	1.1	1.6	0.4	0.4	1.1
Other assets (net) of the banking system	-5.7	-5.7	-3.8	-5.8	-5.6	-4.8	-3.8	-4.2	-4.3
<i>% of GDP</i>									
General government revenues	31.7	32.4	..	..	..	..	..	..	..
General government expenditures	31.6	31.1	..	..	..	..	..	..	..
General government balance	0.1	1.3	-0.9	..	..	..	..	..	..
Primary balance	2.3	3.3	1.1	..	..	..	..	..	..
Gross public debt	28.6	27.5	28.3	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	..	..	..	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	..	..	..	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	-6.8	-5.6	-4.7	-4.3	-5.5	-4.7	-4.4	-4.8	-6.8
Services balance	2.9	2.8	1.8	0.9	1.4	3.2	1.5	1.2	1.9
Primary income	-0.9	-1.1	-1.0	-1.0	-1.2	-1.0	-1.0	-1.2	-1.6
Secondary income	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.3	0.3
Current account balance	-4.7	-3.7	-3.8	-4.1	-5.1	-2.4	-3.6	-4.5	-6.3
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	-0.6	-1.5	-1.1	-1.0	-0.8	-1.2	-1.2	-1.1	-0.6
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	50.9	48.4	50.1	48.4	50.7	49.9	50.1	50.7	50.7
Gross official reserves (excluding gold)	12.5	11.1	11.2	11.0	11.9	11.5	11.2	10.8	10.4
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	5.4	5.1	5.4	5.1	5.7	5.6	5.4	5.0	4.7
<i>EUR million, period total</i>									
GDP at current prices	705,229	771,913	778,812	173,644	193,034	201,310	210,825	164,986	186,400

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)
 - = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

11 Russia: GDP growth back to modest levels, inflation down to post-Soviet low

Economic recovery supported by private consumption and fixed investment

After stabilizing in 2016, GDP expanded by 0.5% in the first quarter of 2017, and 2.5% in the second quarter, producing growth of about 1.5% in the first half of 2017. Recovering private consumption and fixed investment (3.5% and 4.3% in the first half, year on year) superseded net exports and the build-up of inventories (2016) as the driving forces of economic activity. While private domestic demand recovered, the impact of public consumption remained more or less neutral. As may be expected, the contribution of net exports to growth turned negative. Looking at the production side of GDP, industrial activity led the recovery (1.9% in the first eight months), while the protected agricultural sector as well as services lagged behind. The unemployment rate fell to 4.9% in August 2017.

Oil price-triggered revaluation of ruble and CBR's tight monetary policy drive down inflation

The economic upturn was certainly helped by the partial recovery of oil prices, which (on average) gained more than one-quarter in the first eight months of 2017 over their rather low level of a year before. However, the Russian ruble also revalued in this period (by about 15%). This revaluation as well as continued monetary tightening by the central bank (CBR) contributed to the historically low level of CPI inflation (3.3% at end-August 2017). The monetary authority resumed its cautious key policy rate cuts (in late April, mid-June and mid-September by a cumulative 125 basis points to 8.5%).

Higher oil price and expenditure restraint rein in fiscal deficit

Increasing revenues stemming from higher oil prices combined with upheld restraint in spending contributed to the decline of the federal budget deficit to 0.7% of GDP in the first eight months of 2017 (against over 2.8% in the corresponding period of 2016). The modest shortfall was fully financed through borrowing on the financial market. Thus, as of August, the government had neither resorted to the (fiscal) Reserve Fund nor to the National Wealth Fund (whose main purpose is to support the pension system) for budget finance in 2017. As of end-August, the Reserve Fund continued to stand at a low 1.1% of GDP, and the National Wealth Fund at 4.8% of GDP.

Current account surplus expands slightly, while capital outflows remain low; international reserves recover to pre-crisis level

The oil price-triggered recovery of exports (valued in U.S. dollars) was the key factor supporting Russia's current account surplus of 2.1% of GDP in the first eight months of 2017 (compared with 1.7% of GDP in the corresponding period of the previous year). Net private capital outflows reached 1.2% of GDP, largely connected to banks' stepped-up debt repayment activities, while the revival of the economy turned other sectors into net importers of capital. The country's international reserves reached EUR 360 billion by mid-2017, re-attaining the levels observed in the fall of 2014 prior to the then oil price plunge and Russian ruble crisis.

Bank profitability improving, but NPLs still high; recent bailout of two relatively large ailing banks

Given the country's yet weak economic growth and the still high ratio of NPLs (16.9% at end-July 2017, based on a broad definition including doubtful loans), lending only expanded very moderately by 1.6% in June 2017, while deposits grew by 6%. Recovering interest margins and the pick-up in economic growth have helped banks' profits recover from a modest level. Meanwhile, in early September the CBR nationalized the privately-owned banks Otkrytie and B&N, Russia's eighth- and twelfth-largest banks, respectively (together accounting for 5% to 6% of total sector assets). Both had been expanding aggressively, suffered from bad loans, and lately became subject to runs on their deposits.

Table 11

Main economic indicators: Russia

	2014	2015	2016	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17	Q2 17
<i>Year-on-year change of the period total in %</i>									
GDP at constant prices	0.7	-2.8	-0.2	-0.4	-0.5	-0.4	0.3	0.5	2.5
Private consumption	1.9	-9.7	-4.5	-4.2	-5.9	-4.8	-3.2	2.7	4.3
Public consumption	-2.1	-3.1	-0.5	-0.4	-0.5	-0.5	-0.5	0.4	0.5
Gross fixed capital formation	-1.8	-9.9	-1.8	-6.9	-1.4	-0.8	-0.2	2.3	6.3
Exports of goods and services	0.5	3.7	3.1	-0.3	4.9	4.2	3.7	7.1	3.3
Imports of goods and services	-7.3	-25.8	-3.8	-7.8	-4.6	-3.7	0.4	16.5	20.7
<i>Contribution to GDP growth in percentage points</i>									
Domestic demand	-0.7	-8.7	-2.1	-2.0	-2.8	-2.5	-1.1	1.5	4.6
Net exports of goods and services	1.7	6.1	1.5	1.1	2.2	1.8	1.0	0.0	-1.8
Exports of goods and services	0.1	1.0	0.9	-0.1	1.5	1.2	1.1	2.3	1.1
Imports of goods and services	1.6	5.1	0.6	1.2	0.7	0.6	-0.1	-2.3	-2.9
<i>Year-on-year change of period average in %</i>									
Unit labor costs in the whole economy (nominal, per hour)	..	..	..	..	..	..	..	..	..
Unit labor costs in industry (nominal, per person)	5.6	7.3	5.5	5.2	3.7	7.1	5.8	27.7	..
Labor productivity in industry (real, per person)	3.5	0.8	3.4	3.9	3.7	3.0	3.2	-0.3	..
Average gross earnings in industry (nominal, per person)	9.2	8.0	9.1	9.4	7.5	10.4	9.2	27.3	31.1
Producer price index (PPI) in industry	6.1	12.4	4.2	4.4	3.6	3.9	5.0	13.1	5.5
Consumer price index (here: CPI)	7.8	15.6	7.1	8.4	7.4	6.8	5.7	4.5	4.0
EUR per 1 RUB, + = RUB appreciation	-17.0	-25.0	-8.4	-13.8	-21.8	-2.3	6.5	31.9	18.1
<i>Period average levels</i>									
Unemployment rate (ILO definition, %, 15–64 years)	5.2	5.6	5.5	5.9	5.7	5.3	5.4	5.6	5.2
Employment rate (%, 15–64 years)	..	..	..	..	..	..	..	..	..
Key interest rate per annum (%)	7.9	12.6	10.6	11.0	10.9	10.4	10.0	10.0	9.4
RUB per 1 EUR	51.0	68.0	74.2	82.5	74.4	72.1	68.0	62.5	62.9
<i>Nominal year-on-year change in period-end stock in %</i>									
Broad money (including foreign currency deposits)	14.8	19.7	-0.9	15.9	14.3	5.7	-0.9	1.2	4.3
<i>Contributions to year-on-year change of broad money in percentage points</i>									
Net foreign assets of the banking system	18.3	18.2	-10.7	15.4	12.5	-1.1	-10.7	-8.7	-1.5
Domestic credit provided by the banking system	21.1	16.7	5.6	15.6	14.8	10.9	5.6	4.8	5.4
<i>of which: claims on the private sector</i>	30.2	10.6	-0.6	8.9	8.9	3.8	-0.6	1.4	4.1
<i>claims on households</i>	4.2	-1.6	0.2	-0.9	-0.3	-0.1	0.2	0.6	1.3
<i>claims on enterprises</i>	26.0	12.2	-0.8	9.8	9.2	3.9	-0.8	0.7	2.8
<i>claims on the public sector (net)</i>	-9.0	6.2	6.2	6.8	6.0	7.1	6.2	3.4	1.3
Other assets (net) of the banking system	-24.7	-15.3	4.2	-15.2	-13.1	-4.1	4.2	5.1	0.4
<i>% of GDP</i>									
General government revenues	33.8	32.3	32.2	..	..	..	..	..	..
General government expenditures	34.9	35.7	35.9	..	..	..	..	..	..
General government balance	-1.1	-3.4	-3.7	..	..	..	..	..	..
Primary balance	..	..	..	..	..	..	..	..	..
Gross public debt	13.0	13.2	12.9	..	..	..	..	..	..
<i>% of GDP</i>									
Debt of nonfinancial corporations (nonconsolidated)	..	..	..	..	..	..	..	..	..
Debt of households and NPISHs (nonconsolidated)	..	..	..	..	..	..	..	..	..
<i>% of GDP (based on EUR), period total</i>									
Trade balance	9.1	10.9	7.0	8.9	7.2	5.2	7.1	10.1	6.6
Services balance	-2.7	-2.7	-1.8	-1.8	-1.9	-2.0	-1.6	-1.5	-2.0
Primary income	-3.3	-2.7	-2.7	-1.4	-4.3	-2.4	-2.5	-1.5	-3.5
Secondary income	-0.4	-0.4	-0.5	-0.5	-0.4	-0.7	-0.4	-0.5	-0.4
Current account balance	2.8	5.0	1.9	5.1	0.6	0.1	2.6	6.6	0.7
Capital account balance	-2.1	0.0	-0.1	0.0	-0.4	0.0	0.1	0.0	0.0
Foreign direct investment (net) ¹	1.7	1.1	-0.8	3.1	-0.1	-0.6	-4.1	1.0	-1.2
<i>% of GDP (rolling four-quarter GDP, based on EUR), end of period</i>									
Gross external debt	31.5	38.8	41.7	38.3	42.0	41.3	41.7	39.0	35.1
Gross official reserves (excluding gold)	17.9	23.9	25.7	24.1	26.2	26.3	25.7	24.4	22.5
<i>Months of imports of goods and services</i>									
Gross official reserves (excluding gold)	10.4	13.9	15.0	14.2	15.0	15.1	15.0	14.6	13.4
<i>EUR million, period total</i>									
GDP at current prices	1558,123	1230,279	1172,299	228,146	274,771	315,170	354,212	321,352	344,577

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

¹ + = Net accumulation of assets larger than net accumulation of liabilities (net outflow of capital)

- = Net accumulation of assets smaller than net accumulation of liabilities (net inflow of capital)

Outlook for selected CESEE countries

Surprisingly strong rebound in CESEE-6, continued moderate growth in Russia^{1,2}

Economic growth in the CESEE-6 countries³ will rise to 4.1% per annum in 2017. We expect some moderation thereafter but GDP growth will be at or above 3% in all CESEE-6 countries in 2018 and 2019. The average growth rate will amount to 3.5% in 2018 and to 3.3% in 2019. Overall, strong domestic demand and export growth will drive up economic performance in 2017. Romania is expected to be the growth leader over the entire projection horizon. Our expectations are more or less in line with the forecasts of other institutions. As the economic outcome in the first half of 2017 was stronger than expected – particularly in the Czech Republic, Poland and Romania – the current projection was revised noticeably upward compared with our spring forecast. Export growth will also be stronger, driven by the upward revision of euro area import demand and higher world trade growth. Yet, a higher CESEE-6 growth forecast for 2017 will not translate into higher economic convergence with the euro area due to a stronger-than-expected euro area recovery. The growth differential will amount to 1.9 percentage points in 2017, 1.7 percentage points in 2018 and 1.6 percentage points in 2019.

Annual GDP growth in Russia will be 1.5% over the whole forecast horizon. The projection is unchanged compared to our spring forecast. The recovery is supported by improving domestic demand and accelerating export growth. The Russian economy is growing near to its potential, and achieving sustainably higher growth would require major structural reforms, which are not to be expected over the projection horizon.⁴

Table 1

OeNB-BOFIT GDP projections for 2017 to 2019 compared with other forecasts

	Euro-stat/ Rosstat	OeNB-BOFIT October 2017 forecasts			IMF October 2017 forecasts			wiiw July 2017 forecasts		
		2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Year-on-year growth in %										
CESEE-6	3.0	4.1	3.5	3.3	4.0	3.4	3.0	3.6	3.4	3.3
Bulgaria	3.9	3.4	3.2	3.1	3.6	3.2	2.9	3.5	3.5	3.6
Croatia	2.7	2.9	3.1	3.1	2.9	2.7	2.5	2.7	2.9	3.0
Czech Republic	2.5	3.5	3.4	3.0	3.5	2.6	2.3	2.7	2.7	2.4
Hungary	1.9	3.8	3.6	3.0	3.2	3.4	2.8	4.0	3.9	3.3
Poland	2.7	4.0	3.2	3.4	3.8	3.3	3.0	3.3	3.2	3.1
Romania	4.8	5.4	4.2	3.6	5.5	4.4	3.8	4.8	4.3	4.3
Russia	-0.2	1.5	1.5	1.5	1.8	1.6	1.5	1.3	1.6	1.8

Source: OeNB-BOFIT October 2017 projections, ECB, Eurostat, IMF, Rosstat, wiiw.

Note: 2016 figures based on seasonally adjusted data.

¹ Cut-off date for data underlying this outlook: October 2, 2017. The projections for the CESEE-6 countries were prepared by the OeNB, those for Russia were prepared by the Bank of Finland in cooperation with the OeNB. All projections are based on the assumption of a continued recovery in the euro area in line with the September 2017 ECB staff macroeconomic projections for the euro area. This implies real annual GDP growth of 2.2% in 2017, 1.8% in 2018 and 1.7% in 2019 in the euro area.

² Compiled by Antje Hildebrandt with input from Stephan Barisitz, Elisabeth Beckmann, Markus Eller, Martin Feldkircher, Mathias Lahnsteiner, Thomas Reiningger, Tomáš Slačik and Zoltan Walko.

³ CESEE-6: Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania.

⁴ The oil price assumption used by the Bank of Finland is based on the preceding ten-day averages of Brent futures. We expect the oil price to rise from USD 44 per barrel in 2016 to USD 51 per barrel in 2017 and further to USD 53 per barrel in 2019. The cut-off date for the oil price assumption was September 13, 2017.

1 CESEE-6: growth-friendly environment supports broad-based upswing

Economic growth is expected to amount to 4.1% in 2017 and moderate to 3.5% in 2018 and 3.3% in 2019. Growth will be strongest in Romania, reaching 5.4% annually in 2017. In all CESEE-6 countries, domestic demand will be an important growth engine over the entire period. Private consumption primarily benefits from favorable labor market developments, whereas investment activity profits from the new EU funding cycle and export growth from favorable euro area developments. In Bulgaria, Poland and, most strikingly, in Romania the growth contribution of domestic demand will exceed the contribution of foreign demand over the forecast horizon, whereas in the Czech Republic and Hungary export demand dominates. In Croatia the growth contributions of domestic and foreign demand are more or less balanced.

Accommodative monetary policy to continue over the projection horizon

Overall, monetary conditions are expected to remain accommodative over the projection horizon. The inflationary environment in the CESEE-6 is rather growth supportive. Some monetary tightening cannot be precluded in the CESEE-6 – and has already taken place in the Czech Republic in August – but the overall expansionary monetary stance will prevail over the projection horizon. Furthermore, lending to the household and corporate sectors is picking up, also supported by declining nonperforming loan (NPL) ratios across the region. Overall, the current lending environment would suggest a more a dynamic growth of credit for consumption and investment purposes over the projection horizon.

Fiscal policy continues to support economic growth

There are no signs of a substantially more restrictive fiscal policy stance in most CESEE-6 countries despite the overall positive economic environment. Recent expansionary measures will not be reduced. Moreover, we expect further expansionary fiscal measures in Hungary in light of the upcoming parliamentary election in spring 2018. In Croatia, immediate pressure to cut public expenditures has alleviated as the country exited the excessive deficit procedure early in 2017. The situation looks somewhat different for Romania, which has to struggle to keep the budget below 3% of GDP and will thus likely curtail fiscal spending over the projection horizon.

Strong private consumption growth over the next years

The overall growth-friendly environment in the CESEE-6 region will support private consumption over the projection horizon. Marked labor market improvements combined with optimistic consumer sentiment drive our forecast. Hence, private consumption growth in the CESEE-6 will pick up strongly against 2016. The boost in private consumption will be most impressive in Romania and Bulgaria. In 2018 and 2019, private consumption will lose some steam but continue to be a robust growth driver.

Public consumption growth will slow down in 2017 and have only a limited impact on GDP growth in the CESEE-6. It is noteworthy that in Hungary, Poland and Romania public consumption growth will be lower in 2017 than in 2016. The freeze of public wages in Poland and the strained budgetary situation in Romania are the main reasons for this development.

Investment growth turns around

Investment activity will make a turnaround in 2017 compared with 2016. We expect growth in gross fixed capital formation to amount to 5.2% on average in the CESEE-6 after a decline by almost 6% in 2016. As discussed in spring 2017, last year investment growth in the region suffered from the phasing out of the previous EU funding period. With the maturing of the new funding period, gross fixed capital formation will rebound significantly over the projection horizon. For instance in Hungary, investment growth will amount to around 20% in 2017 (after a drop of about 15% in 2016). According to the IMF,⁵ Hungary receives the largest share in percentage of GDP of the EU's structural and cohesion funds among the CESEE-6 countries (2007–2013 funding period, first year of allocation: about 25% of GDP; 2014–2020, first year of allocation: about 20% of GDP), which also reveals the region's overall dependency on EU funds. It is noteworthy that for almost all CESEE-6 countries the share of EU fund allocation as a percentage of GDP is smaller for the 2014–2020 funding period than for the previous period. However, a higher absorption rate is likely to compensate for the lower allocation of EU funds to the region as a whole. For the CESEE-6 aggregate, we expect further accelerating growth in gross fixed capital formation in 2018 and 2019, which is also supported by other factors – as discussed above – such as the overall favorable economic environment, binding capacity constraints, advantageous financing conditions and some fiscal leeway.

Accelerating export growth backed by robust euro area growth

Export growth will be strong in 2017, driven by the robust euro area demand for imports from outside the euro area and by improving global trade dynamics. For the CESEE-6, we expect exports to grow at an average rate of 6.2% in 2017. The deceleration compared with 2016 is due to weaker export growth in Poland (and also in Romania), which is attributable to base effects, currency appreciation (only in the case of Poland) as well as to higher unit labor costs (ULC). Euro area recovery is particularly relevant for the Czech Republic and Hungary. Their strong trade interlinkages with the euro area are reflected in dynamic export growth in 2017. In line with euro area import demand, we expect some moderation of export growth to 5.5% on average over the remainder of the projection horizon.

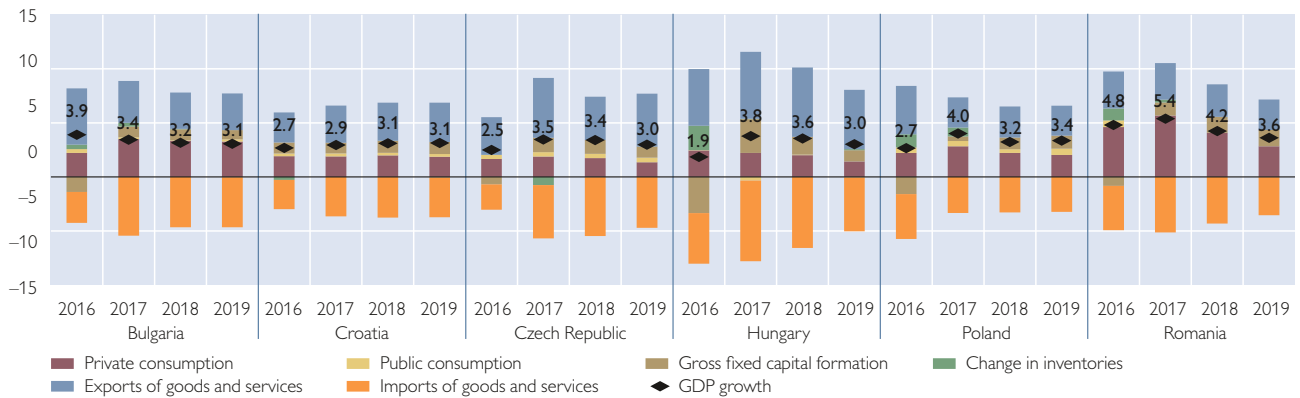
Import growth will accelerate in 2017 due to strong private consumption and growth in import-intensive exports. On average, import growth will accelerate by 7.8% in 2017 (after 7.5% in 2016). Only in Poland, import growth will weaken somewhat compared with the previous year. In Romania, import growth will accelerate by more than 10% in 2017, and some moderation will take place thereafter. The outcome of this is that the net contribution of exports will be highly negative in Romania (–1.8 percentage points in 2017 compared with –0.7 percentage points in 2016). Bulgaria will report a negative contribution of net exports as well (–1.6 percentage points). Only in the Czech Republic, net exports will contribute slightly positively to GDP growth over the projection horizon.

⁵ IMF. 2015. *Regional Economic Issues: Central, Eastern and Southeastern Europe. Reconciling Fiscal Consolidation and Economic Growth*. November 2015.

Chart 1

CESEE-6 GDP growth and contributions for 2016 to 2019

Percentage points, year-on-year GDP growth in %



Source: Eurostat, OeNB.

Risks to growth in the CESEE-6 countries: downside political risks dominate

Geopolitical tensions across the globe are considered to pose an eminent risk to our forecast and have intensified in some instances. Armed conflicts (e.g. in Russia and Ukraine, or in Syria) and numerous swelling conflicts (North Korea, Iran, Turkey) could affect the CESEE-6 region more strongly than currently expected, namely via the trade channel, rising oil prices or the elevated uncertainty of economic agents in general.

Uncertainties about the direction the current U.S. administration's, economic policy will take are prevailing. In this respect, a stronger insulation of the U.S. home market and a less expansive U.S. fiscal policy than originally envisaged add to downside risks for the highly integrated, manufacturing-based CESEE economies.

Focusing on Europe, challenging exit negotiations between the EU and the U.K. could adversely affect consumer and investor confidence as well as the EU's trade linkages with the U.K. At the same time, by inducing remigration, Brexit could alleviate pressure from CESEE-6 labor markets.

Further, the question of EU coherence is still in the spotlight of policy discussions and poses some risk to our forecast. Anti-EU sentiment, rising political populism and uncertainty about the direction the EU will take cloud our projections. Even though major elections in the EU (Netherlands, France, Germany) are over, political uncertainty prevails to some extent: Germany has not yet formed a new government, elections in Italy will only take place sometime before May 2018 and the referendum in Catalonia caused an unexpectedly sharp reaction by the Spanish government.

We currently consider anti-EU sentiment and political populism as tail risks, as they are also part of political reality in the CESEE-6 countries, albeit to varying degrees. Potential sanctions – for instance in the form of retained EU funds in case of noncompliance with EU requirements – are unlikely to be implemented over the projection horizon.

A major external economic risk for the CESEE-6 relates to economic developments in the euro area. For 2017, we see an upside risk, given that in September 2017 economic confidence increased to its highest value in the last ten years. Our risk

grading for 2018 and 2019 is more or less balanced: The positive momentum may continue – leading to higher euro area GDP growth in 2018 and 2019 than currently expected – while, for instance, a stronger-than-anticipated or even disorderly tightening of monetary conditions outside the CESEE-6 (particular in the U.S. and in the euro area) would counteract the overall positive assessment of global growth toward the end of our projection horizon.

One of the main domestic economic risks is associated with current labor shortages and rising ULC. A further tightening of the labor market would damage the international competitiveness of the CESEE-6. Furthermore, a stronger-than-expected rise of nominal wages could push up inflation beyond expectations, and monetary tightening could set in more forcefully than expected. By contrast, higher inflationary pressure can also pose an upward risk as continued low or negative real interest rates would support credit dynamics and alleviate currency appreciation. Some risks are also related to the absorption of EU funds over the projection horizon. While some CESEE-6 countries still have much room for reaching higher absorption rates, other countries with already high absorption rates risk being less successful in making use of EU funds. Hence, we regard the risks as being more or less balanced at the regional level.

2 Projections for Bulgaria, Croatia, the Czech Republic, Hungary, Poland and Romania

Bulgaria: economic growth pushed upward by strong private consumption

Real GDP is expected to increase by 3.4% in 2017 (up by 0.5 percentage points compared with our spring forecast) and by somewhat more than 3.0% annually in the next two years. With that, we expect that the Bulgarian economy grows at similar rates as in the past two years. Very positive private consumption dynamics in the first half of 2017 (surpassing the already elevated levels of 2016) are the main reason for this upward revision.

Private consumption continues to decisively impact economic developments until the end of the forecasting horizon for several reasons. First, labor market conditions have substantially improved (with the highest employment rate in the past two decades). Second, consumer confidence has not really deteriorated despite political turbulence (early parliamentary elections in March 2017). Third, the new government in place announced several measures to strengthen households' income (such as significant hikes in minimum pensions and teachers' wages). As one of its main priorities, the new government expressed running a successful EU presidency in the first half of 2018. Still, policy preferences among the government coalition partners vary considerably (pro-EU and pro-market versus nationalist and interventionist) such that renewed political instability cannot be excluded from the second half of 2018 onward. Hence, we expect that public consumption will not continue to widen at a similar pace in 2018, but that it might rise again somewhat in 2019. It should be noted that the currency board arrangement in place since 1997 (backed by a comparatively large share of foreign exchange reserves) will continue to serve as a stability anchor and contribute to fiscal prudence.

Domestic demand returns as a decisive GDP growth driver not only due to buoyant private consumption, but also due to a pronounced rebound in investments. The positive performance of gross fixed capital formation observed in the first half of 2017 is expected to continue for the remainder of 2017, given a gradual

upturn in capacity utilization, industrial confidence and lending to enterprises. These positive trends could well carry over to the next two years, not least endorsed by the expected acceleration of EU fund absorption in the current EU programming period.

On the back of improved external demand conditions and another very positive summer tourism season, export dynamics are expected to remain favorable. Export growth could decelerate somewhat over the forecasting horizon because of a possible base effect in tourism. However, the significant rise in imports (mirroring the expansion of domestic demand) will outweigh the favorable export performance. Consequently, the GDP growth contribution of net exports is expected to move into negative territory for a prolonged period.

Croatia: recovery continues despite uncertainty

GDP growth picked up further in the first half of 2017, coming to 2.8% year on year in the second quarter of 2017. The recovery is projected to continue; however, we revise our GDP forecast for 2017 downward by 0.2 percentage points to 2.9%. This moderate revision is related to the debt crisis of Croatia's largest private corporation, Agrokor, which led to a sharp drop in consumer confidence in April 2017 and increased uncertainty for the investment outlook. GDP growth is projected to accelerate somewhat in 2018 and 2019, with private consumption and gross fixed capital formation being the main drivers of growth.

Private consumption increased by a record 3.8% annually in the second quarter of 2017 despite the sharp drop in consumer confidence in spring. Recent consumer sentiment shows signs of recovery, and consumption will benefit from further public sector wage increases and the continued effect of tax cuts in the second half of 2017. Therefore, the strong recovery of private consumption in 2016 is set to continue in 2017 and to peak in 2018. Croatia successfully exited the excessive deficit procedure in the first half of 2017, which increased the government's spending leeway. We project that higher public consumption in the first half of 2017 will lead to an overall expansion in public consumption of 1.4% in 2017. The National Reform Programme of April 2017 emphasizes fiscal consolidation goals, which we project to constrain public consumption.

Gross fixed capital formation continued its strong recovery in the first quarter of 2017 but slowed down in the second quarter. We project a moderate impact on investment related to problems in the Agrokor group in 2017 but an overall continuation of the recovery over the forecast horizon. The projected improvement is grounded in an increased utilization of EU funds, the continuation of the expansionary monetary policy stance and improvements in business confidence indicators. Yet, political tensions with neighboring Bosnia and Herzegovina surrounding the construction of the Pelješac Bridge may delay one of the biggest investment projects in the country.

By end-August 2017, tourist arrivals had gone up by 14% compared with end-August 2016. On the back of a record tourist season, interventions of the Croatian National Bank on the foreign exchange market against a strengthening of the Croatian kuna and improved growth prospects of the main trading partners, annual export growth will amount to around 7% over the projection horizon. In the first half of 2017, imports grew by 7.1% year on year. The growth in private consumption will reinforce strong import growth, which we project to come in at almost 8% in

2017 and decelerate somewhat over the projection horizon. Altogether, we expect a moderate negative contribution of net exports to growth over the projection horizon.

Czech Republic: economy will remain on solid growth path

In light of the strong economic performance in the first six months of the year, we expect real GDP growth to accelerate to 3.5% in 2017 (from 2.5% in 2016) and to slow down gradually to levels just above 3% in the medium term. Economic growth will be driven predominantly by robust domestic demand, especially by private consumption.

Private consumption growth, averaging 3.5% annually over the forecast horizon, is set to remain the key driver of economic expansion. This reflects optimistic consumer sentiment as well as buoyant growth of real disposable income amid low interest rates and a tight labor market. However, the positive impact on disposable income is partially offset by rising domestic prices. According to the Czech central bank, inflation will stay in the upper half of the tolerance band for the rest of 2017, return to the 2% target at the start of 2018 and hover just below the target in the medium term. In its latest forecast in August 2017, the Czech National Bank assessed that the Czech economy would remain slightly above its potential output level over the monetary policy horizon. In addition, it saw as the main risk to its forecast the path of the exchange rate, which may appreciate more slowly than forecast due to an overboughtness of the Czech koruna market. Hence, overall, risks are slightly inflationary. Therefore, the board of the Czech National Bank has suggested to further raise key interest rates over the next two years. The envisaged monetary policy tightening might be accelerated or brought forward if GDP growth turns out to be higher than the Czech central bank expected, as it happened in the second quarter of 2017, and/or if the appreciation of the Czech koruna slows down. In this context, we project private consumption growth to reach almost 4% in 2017 before it slackens somewhat in 2018 and further in 2019 amid slowing wage growth and tightening monetary policy. Growth in government spending is forecast to stay broadly stable at slightly above 2% over the forecast horizon.

After last year's contraction, fixed investment will bounce back strongly in 2017. Apart from the base effect, the rebound will be driven by a recovery in private investment amid still low interest rates and strong domestic and external demand. In addition, gross fixed capital formation will benefit from a revived drawdown of EU funds. While fixed investment growth will remain buoyant, it will gradually slow down over the forecast horizon, contributing on average about 1.2 percentage points annually to GDP growth.

The expansion in exports rebounded in the first half of 2017 and is projected to remain robust in the quarters ahead. However, it will be counteracted by an appreciating Czech koruna, at least to the extent that the appreciation is not hedged. The Czech koruna is expected to keep appreciating in the medium term, fostered by real economic convergence, a positive interest rate differential relative to the euro area and the ECB's loose monetary policy. Against this background, the expansion of exports is projected to gradually slow down from just short of 7% in 2017 to below 6% in 2019. Strongly import-intensive exports will also drive a significant rebound of imports. In addition, averaging some 6.5% over the forecast horizon, import growth will be boosted also by robust growth in private consumption and investment. Against this background, the relatively significant

contribution of net exports to GDP growth in 2017 (0.6 percentage points) will be neutralized in 2018 before turning slightly positive again in 2019.

Hungary: GDP growth decelerates slowly from 2017 peak

Following relatively weak growth in 2016 we continue to expect GDP growth to sharply accelerate to close to 4% in 2017. Data for the first half of 2017, with year-on-year growth at 3.7%, support our expectation. While we leave our overall GDP forecast from spring 2017 unchanged, the forecast growth composition changed strongly following developments in the first half of 2017.

The unexpectedly sharp rebound of investments in the first half of 2017 has made us revise our forecast for gross fixed capital formation in 2017 substantially upward. Public sector investments are apparently boosted (from their very weak base) by a recovering EU funds inflow. The extension of housing subsidies in 2016 started to show in housing construction data during the first half of 2017, with recovering lending to households boding well also for our growth outlook. High capacity utilization in industry, accelerating lending to corporations, strong business confidence and the gradual decrease in the tax burden of corporations all support business investment. We expect investment growth to moderate substantially in 2018 as base effects will no longer play a role and fiscal and monetary stimuli will be gradually phased out in 2019.

Despite a steep rise in real wage growth and the accelerating growth of lending to households, private consumption growth slowed down somewhat during the first half of 2017, albeit from a strong base. Moreover, households may have spent an increasing part of their income on housing construction rather than on consumption. Therefore, we have revised markedly downward, though to still healthy levels, our full-year forecasts for private consumption in 2017 and 2018. Overall, minimum wage hikes in 2017 and in 2018 (to a lesser extent), increasing labor shortages across the economy, further public sector wage increases, new elements of family tax benefits and housing subsidies in the 2018 budget, continued selective VAT rate cuts and strengthening credit growth remain supportive factors. As these stimuli gradually fade away, however, growth rates should moderate over the forecast horizon.

Government consumption turned out clearly worse than expected during the first half of 2017, leading to a substantial downward revision to our full-year forecast. However, given the loosening measures already contained in the 2018 budget and the likelihood of additional spending ahead of the spring 2018 parliamentary elections, we expect public consumption to strengthen in the second half of 2017 and the first half of 2018. We expect stagnation thereafter, as fiscal policy will reorientate toward deficit containment against a slowing economic background.

Taking into consideration developments during the first half of 2017, we have revised downward export and import growth rates and – on the back of stronger-than-previously-assumed domestic demand – now expect a higher negative contribution from net real exports in 2017. We expect export growth to remain roughly unchanged in 2018 and import growth to decelerate along weakening domestic demand, thus diminishing the negative growth contribution of net real exports.

Poland: declining economic growth in 2018 despite accelerating investments

GDP growth will accelerate to 4% in 2017 after 2.7% in 2016. The expected decline in 2018 to 3.2% will mainly result from a slowdown in private consumption growth. While the contribution of domestic demand to GDP growth will decline in 2018 compared with 2017, it will remain higher than the stable contribution of exports (including exports to Germany) – a constellation set to emerge in 2017 for the first time since 2014.

Strong private consumption growth in 2017 will decelerate in 2018 as the sizeable positive base effect of the substantial rise in child benefits in particular for lower-income households in the second half of 2016 fades out. In addition, from October 2017 onward, a lower statutory retirement age will apply. Moreover, the government's convergence program envisages not only further measures with respect to indirect taxes, but also a general freezing of the wage bill for central government institutions in 2018. However, private consumption growth will remain strong, exceeding GDP growth on the back of improved consumer sentiment and strong wage and employment growth. Furthermore, interest rates on loans for consumption purposes are historically low. From a more forward-looking perspective, the uncertainty related to the future relation between the U.K. and the EU might dampen further labor emigration from Poland to the U.K. somewhat. This could help soften emerging bottlenecks of labor supply and twist labor market dynamics from wage to employment growth. Furthermore, remittances from the U.K. would be negatively affected. Any possible effects caused by Polish workers leaving the U.K. as a result of the Brexit negotiations are not expected to materialize before 2019. Public consumption growth will slow in 2018, factoring in the partial wage freeze in the public sector.

Overall, we expect gross fixed capital formation to expand by slightly above 2% in 2017 and accelerate to almost 6% in 2018. Corporate investments will benefit from stronger demand (both domestic consumption and foreign demand), higher capacity utilization and the favorable financing situation with respect to both own funds and external funds. Investment by both public enterprises and the public sector itself (in particular local governments) will continue to rebound in line with an increasing absorption of funds under the new EU medium-term budget. Moreover, there will be higher expenditures for military acquisitions. Housing investment will continue to expand at a rather moderate pace, as income growth and the state-subsidized housing program for young people remain supportive factors, while a further tightening of supervisory regulations concerning mortgage loans will put a lid on growth.

After its sharp slowdown during the first half of 2017, real export growth is expected to recover in the second half of the year, given the relatively strong growth of euro area imports from outside the euro area. However, both the rise of manufacturing ULC and the appreciation of the Polish zloty hold back export growth so that it will not exceed 5.5% in 2017. The contribution of net exports to GDP growth will turn negative in 2017 for the first time since 2014 due to strong import growth related to high domestic demand. In 2018, in line with stable export growth and moderately decelerating domestic demand growth, import growth will slow somewhat, but the contribution of net exports to GDP growth will remain negative.

Romania: growth projected to moderate

After climbing to 5.7% year on year in the first half of 2017, we expect economic growth in Romania to decelerate. Due to higher-than-expected growth in the first half of 2017, we revise our projection for 2017 upward to 5.4%. This implies a moderation of growth from mid-2017, as positive effects from stimulating fiscal and income policies on booming private consumption taper off. Moreover, some (small) corrective measures (such as rising the fuel excise duty) aimed at keeping the budget deficit below 3% of GDP have been taken and are becoming effective in the second half of 2017. Looking beyond the current year, we see growth at 4.2% in 2018 and 3.6% in 2019.

After decelerating in the second half of 2017, private consumption will pick up again in early 2018, as public wage increases were postponed from July 2017 to January and March 2018. Tightening labor market conditions, as evidenced by a markedly falling unemployment rate, together with further minimum wage hikes will keep wage growth in the private sector at an elevated level, though rising inflation will result in some deceleration in real terms over the forecast horizon. The upward trend in consumption loans will very likely support private consumption in 2018 and 2019.

Banks' improved lending capacities will contribute positively to the growth of gross fixed capital formation, in particular with regard to private investments. Domestic credit to nonfinancial corporations already picked up in the first seven months of 2017, while the growth of housing loans decelerated slightly to a still supportive 10% year on year. Positive economic sentiment will likely outweigh the effects of gradually rising nominal interest rates. Public investment is still somewhat uncertain, as the budget for 2018 is still unknown and subject to considerable uncertainty. Shifts from investments to wages as well as the underutilization of budgeted investment funds during the next fiscal year might continue if the government aims to contain the budget deficit below 3% of GDP and sticks to its plans to increase public wages and cut income tax.

We expect continued robust export growth with a slight deceleration over the forecast horizon due to unfavorable ULC developments. Alongside decelerating domestic demand, import growth will also come down gradually from its currently very high levels. The negative growth contribution of net exports will increase in 2017 before shrinking somewhat in 2018 and 2019.

3 Russia: domestic demand and exports recover

Russian GDP rose at an annual rate of 1.5% in the first half of 2017, supported by a higher oil price than expected in our last projection round. In the period from January to August, the average price of Urals grade crude oil was up 27% in annual terms at USD 50 per barrel. According to market expectations, oil prices should remain around current levels until the end of the projection horizon. Both Russia's domestic and export demand have expanded in 2017, but they triggered a rebound of imports greater than the increase in domestic production. As the outlook for the Russian economy, including the expected oil price trajectory, has not changed substantially since spring 2017, the forecast for Russian GDP growth remains at 1.5% annually for the period from 2017 to 2019. The Russian economy is growing at a pace near its potential, and achieving sustainably higher growth would require major structural reforms, which are currently not in sight.

Russia's revival is supported by improving domestic demand. Household consumption increased by nearly 3.5% year on year in the first half of 2017 and the continuing increase of retail sales points to further growth in the upcoming months. Consumption is anticipated to continue to recover moderately, supported by higher real wages, gradually reviving credit demand and improving consumer confidence. However, growth is restrained by the uncertain economic outlook. Fixed investment rose by nearly 4% year on year in the first half of 2017 according to preliminary data. A gradual recovery of investment should continue, as capacity utilization is already high and business confidence has improved. However, investment growth will be moderate due to the difficult business environment and, in some cases, restricted financing possibilities.

According to current budget plans, Russia will continue to curb the public sector deficit gradually in the coming years to just above 1% of GDP in 2019. Thus, public sector expenditures should not grow in real terms from 2017 to 2019, even though inflation has slowed down notably close to the Bank of Russia's target of 4%. The central bank has signaled that it will continue its moderately tight monetary policy and may gradually lower its key interest rate further from its current level of 8.5% in the coming months if inflation pressures remain subdued. This could support demand recovery without endangering macroeconomic stability.

Russia's foreign trade has recovered briskly throughout 2017. The volume of exports increased by 7% and that of imports by nearly 17% year on year in the first quarter of 2017, and preliminary data point to continued robust growth in recent months. Export growth is expected to slow down as export volumes of oil and natural gas are already at historically high levels, and the stronger Russian ruble erodes the competitiveness of other exports. With recovering demand and the stronger Russian ruble supporting the import rebound more robustly than expected in the previous baseline forecast, the 2017 projection for import growth has been revised sharply upward (to 15%). Growth is expected to settle gradually to 6% in 2018 and 2019 as imports climb closer to pre-crisis levels and the impact of the appreciation of the Russian ruble wanes.

Risks to the forecast for Russia

A key short-term uncertainty related to the Russia forecast is oil price developments. A higher-than-expected oil price could boost growth by improving export revenues, whereas a drop in the oil price would have an opposite effect. A new oil price plunge (rather unlikely) could even abort Russia's economic recovery. On the other hand, GDP growth could receive a temporary boost if, ahead of the presidential election in March 2018, public spending were raised by more than planned although this could increase Russia's fiscal vulnerabilities in the medium term. A stronger orientation of recovering demand toward domestic production instead of imports – along the lines of protectionist policy goals – might also produce faster short-term GDP growth. On the negative side, the recent problems of some large Russian banks may increase the uncertainty related to the Russian economy, although that effect should be mitigated by the stabilizing measures taken by the Bank of Russia. Finally, the easing or intensification of geopolitical tensions might lead to positive or negative deviations from the baseline forecast.

Studies

Migration intentions in CESEE – a descriptive analysis

Anna Katharina
Raggl¹

Against the background of high emigration from Central, Eastern and Southeastern Europe (CESEE) in the past few decades, we study the current migration intentions of individuals in ten CESEE countries using individual-level data from the 2014 wave of the OeNB Euro Survey. Apart from the overall share of people that intend to leave their home countries, we identify the gender, age and education profiles of these prospective migrants. Using population pyramids for visualization, we compare the current population structure with a hypothetical one that would arise if all people planning to emigrate would in fact do so. We find that, on average, 11.4% of individuals aged 25 to 39 intend to leave their CESEE home countries, a share that represents a lower-bound estimate. Migration intentions vary considerably across countries; in general, they appear to be more common among men and among individuals with a relatively low level of education.

JEL classification: F22, J11, O52

Keywords: migration intentions, population pyramids, CESEE

The countries of Central, Eastern and Southeastern Europe (CESEE) are currently suffering the strongest declines in working-age populations in Europe. This is attributable not only to unfavorable demographic developments, but also to high emigration (IMF, 2016). In particular skilled emigration can have adverse effects on the sending region of migrants, potentially provoking skill shortages, which impair productivity growth and convergence (IMF, 2016; IMF, 2017).² It has been shown that emigrants from CESEE are younger and better educated than the remaining population, and that large-scale emigration has caused declines in the supply of skilled labor (“brain drain”) and increases in fiscal burdens due to higher dependency ratios (Atoyan et al., 2016).

Against this background, it is of particular interest to assess possible future patterns of emigration from these countries and the sociodemographic profiles of prospective emigrants. The economic literature that attempts to assess future migration can be divided into two strands: the first uses historical data to project or forecast future migration; the second addresses the issue by working with migration intentions on the basis of micro-level data (Zaiceva and Zimmermann, 2008). This is also the approach followed in this study. The advantage of this method is that individual-level characteristics – to the extent that they are available in the data – can be included in the analysis. Furthermore, apart from the sheer number of individuals with migration intentions, sociodemographic profiles can also be assessed. A drawback of this approach is, however, that it is unclear to what extent people will realize migration intentions (see section 1 for a discussion).

The literature on migration intentions in CESEE is scarce, and, if available, it focuses mainly on the impact of the 2004 EU enlargement (Zaiceva and Zimmermann, 2008) and/or on Eastern European countries only (Liebig and Sousa-Poza, 2004). We can contribute to the literature by using recent and coherent individual-level data from ten

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² In this context, see also Schreiner (2008) for a study on the development of net migration in CESEE in the course of EU accession.

selected CESEE countries. Specifically, we use individual-level data from the 2014 wave of the OeNB Euro Survey, which covers six EU and four non-EU CESEE countries, to study the level of migration intentions in the ten economies. We descriptively compare the age, education and gender profiles of individuals that intend to emigrate with those of individuals without migration intentions. For the graphical representation of our findings, we use population pyramids that allow the visualization of gender, age and education profiles. In addition, we indicate in the pyramids the share of individuals with migration intentions in each subgroup. That allows a comparison of population pyramids showing the status quo and *hypothetical* pyramids that would emerge if *all* migration intentions were realized. These hypothetical pyramids do not represent forecasts of future population sizes and structures. Rather, they should be seen as thought experiments based on given data, as there is no way to assess how many of those individuals with migration intentions will actually emigrate from CESEE.

The data suggest that, on average, 11.4% of 25- to 39-year-olds in the ten selected CESEE countries intend to emigrate. Due to the nature of the data, we can assume that this is a lower-bound estimate of actual migration intentions. Migration intentions are very heterogeneous across countries and higher for men than for women. They are less common among older cohorts, where the gender gap is narrower. Interestingly, we do not find evidence for an above-average desire to emigrate among the highly skilled. On the contrary, the share of individuals in CESEE that intend to emigrate is highest among the low skilled and lowest among highly skilled young people. This finding holds not only for the CESEE average, but also for all countries except for Hungary and Serbia.

This paper is structured as follows: Section 1 introduces the data source and sections 2 and 3 discuss the descriptive results for the region as a whole and for the individual countries. Section 4 concludes. Three annexes provide an overview of the basic shapes of population pyramids, a comparison of the results with other data sets as well as additional figures and tables.

1 Data

We rely on data from the OeNB Euro Survey, an individual-level data set the Oesterreichische Nationalbank (OeNB) started to compile in 2007 in ten CESEE countries: six EU countries (Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania) and four non-EU countries (Albania, Bosnia and Herzegovina, FYR Macedonia, Serbia). The survey collects unique information about people's (euro) cash holdings, saving behavior and debt, and about respondents' economic opinions, expectations and experiences. The samples consist of 1,000 randomly selected respondents per country and represent the entire population over the age of 14.³ The samples are representative with respect to age, gender and regional distribution. In the 2014 wave, respondents were asked whether they or a member of their household had the intention to move abroad within the next 12 months.⁴

³ Samples are generally selected via a multistage stratified random sample procedure. An exception is Bulgaria, where a variant of random quota sampling is applied. For more information on the sampling design of the survey, please refer to Brown and Stix (2015).

⁴ The precise wording of the question was: "I would like to ask your opinion about the housing situation in [your country]. Please tell me whether you agree or disagree with the following statements on a scale from 1 (strongly agree) to 6 (strongly disagree). I intend/a member of my household intends to move abroad within the next 12 months." Unfortunately, this question was not included in the more recent waves of the survey.

The choice of responses is based on a Likert-type scale (“*strongly agree*,” “*agree*,” “*somewhat agree*,” “*somewhat disagree*,” “*disagree*” and “*strongly disagree*”). Individuals that responded either “*strongly agree*” or “*agree*” were categorized as having the intention to emigrate.⁵ In addition, a number of socio-economic characteristics are available in the data, most importantly gender, age and education.⁶

Using data based on the question on migration intentions involves several difficulties. First, the question addresses not only the migration intentions of respondents, but also those of other household members (see footnote 5). This can lead to an overestimation of migration intentions, especially for older cohorts, as, for example, parents might talk about their children’s migration intentions. In addition, the socio-economic profile of the respondent does not necessarily correspond to that of the prospective migrant. In order to limit biases due to this allocation problem, we restrict much of the interpretation to individuals aged 25 to 39, as in this age group people are less likely to have children old enough to have migration intentions.⁷ Second, it is possible that other household members intend to leave together with the respondent; in this case, we might underestimate actual migration intentions. That, together with the rather strict definition of the variable, suggests that our estimates for the young cohorts are the lower bounds of actual intentions. Third, the question does not address whether individuals intend to migrate permanently or just for a short period, and we cannot distinguish between temporary and permanent migration. Fourth, it is not straightforward how migration intentions translate into actual behavior.⁸ The empirical literature indicates, however, that migration intentions are strong predictors of actual migration. Dustmann (2003), for example, studies return migration of migrants in Germany and shows that about 25% of those who indicate the intention to return to their country of origin actually move. Similarly, Van Dalen and Henkens (2008) find for the Netherlands that emigration intentions serve as good proxies for actual migration: 24% of those who report migration intentions actually leave the country. They also show that those who stayed despite having previously said they intended to leave do not differ in terms of the characteristics observed from those who moved. More recently, Creighton (2013) shows for Mexico that the intention to emigrate to the U.S.A. predicts subsequent migration (this holds also for intermunicipal and interstate migration).⁹

⁵ Arguably, also individuals that “*somewhat agree*” could be included in the group of individuals that have migration intentions. However, to avoid overestimation we decided not to include this response.

⁶ Education is retrieved based on ISCED 1997 categories (also “*don’t know*” and “*no answer*” are possible responses), which are combined into three groups: low (primary), medium (lower and upper secondary, post-secondary but nontertiary) and high education (first and second stage of tertiary).

⁷ According to UN data (United Nations, 2014), mothers’ mean age at first birth in 1995 (or the closest available year) ranged between 22.2 in Bulgaria and 25.0 in Hungary. Therefore, parents in the 25 to 39 years age group in the survey year are not likely to have children old enough to intend to emigrate.

⁸ Zaiceva and Zimmermann (2008) argue that the gap between intentions and behavior increases with entry barriers in the destination countries and information deficiencies of the prospective migrants.

⁹ See also Manski (1990), Gordon and Molho (1995) and Docquier et al. (2014) for further reference.

2 Migration intentions in CESEE: the region as a whole

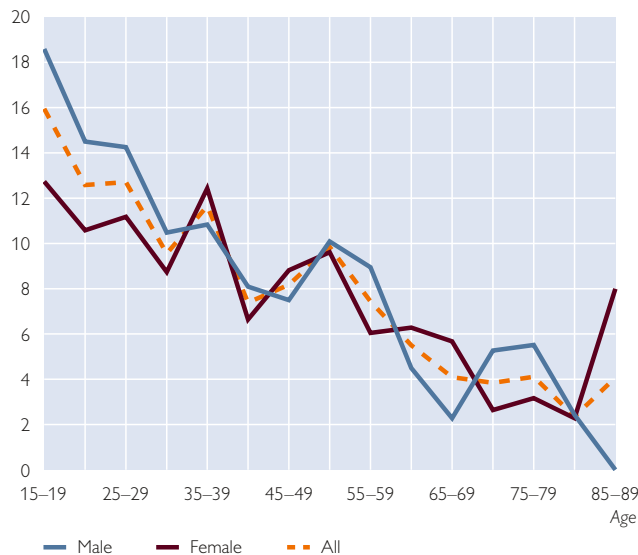
In all ten CESEE countries taken together, 8.9% of respondents state that they or a member of their household have the intention to move abroad within the next year.¹⁰ Chart 1 shows the intention to move abroad by age and by gender- and education-specific subgroups.¹¹ As expected, migration intentions decline with age: Approximately 1 in 6 individuals between 15 and 19 intends to move abroad (16.0%), 1 in 8 among those aged 20 to 29 (12.6%), and 1 in 12 among the 30- to 64-year-olds (8.6%). Due to the framing of the question in the survey, it is likely that the typical age of an individual with the intention to emigrate is overestimated among older cohorts and the decline in the share can be expected to be steeper than displayed in the chart. Among the younger cohorts (aged 25 to 39), men are more likely to have migration intentions (12.0%) than women (10.8%). This finding is predominantly driven by the low- and medium-skilled male population. The distinction by education level shows that the pattern of migration intentions declining with age prevails in all skill groups. The dimension of education is of particular interest when seeking to answer the question of whether economies are affected by brain drain, i.e. increased emigration of the highly skilled. For low-skilled, young individuals, the number of observations is very low, however (see the figures in annex 3 for a graphical representation at the country level).

Chart 1

CESEE average: migration intentions by age groups

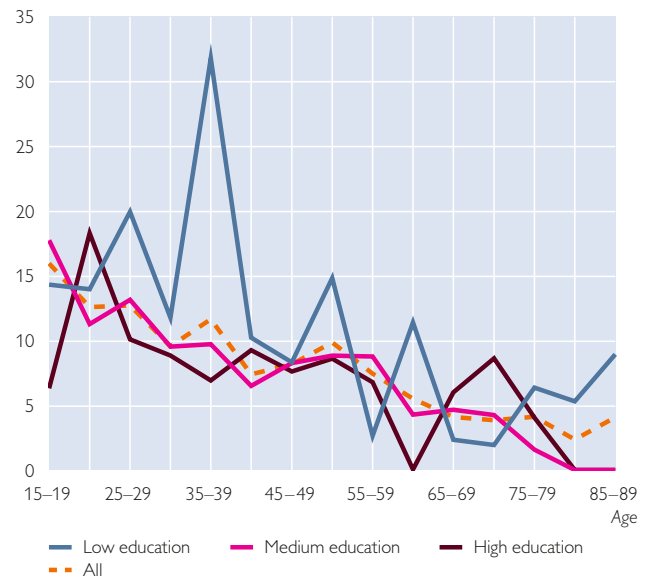
By gender

Share of respondents with migration intentions in next 12 months (%)



By education

Share of respondents with migration intentions in next 12 months (%)



Source: OeNB Euro Survey (2014).

Note: Due to a lack of sufficient observations for the age group 90--94, the respective data are not included in the charts.

¹⁰ All CESEE averages are calculated based on a pooled data set of all ten countries under the application of (individual) survey weights, which are needed for data representativeness with respect to gender, age and regional distribution. The reported means represent averages for a "typical" CESEE country, not an overall average of the CESEE region. In other words, the results are not weighted by population size, as that would imply that all figures were strongly driven by Poland, the largest country in the sample.

¹¹ Due to space limitations, additional figures and tables with breakdowns by age, education and gender are not included in the study but are available from the author upon request.

Thus, these estimates have large standard errors and low precision. The spike for low-skilled 35- to 39-year-olds in chart 1 is likely due to this imprecision. The low number of low-skilled individuals in the sample also implies that the respective share contributes only to a limited extent to the overall mean.

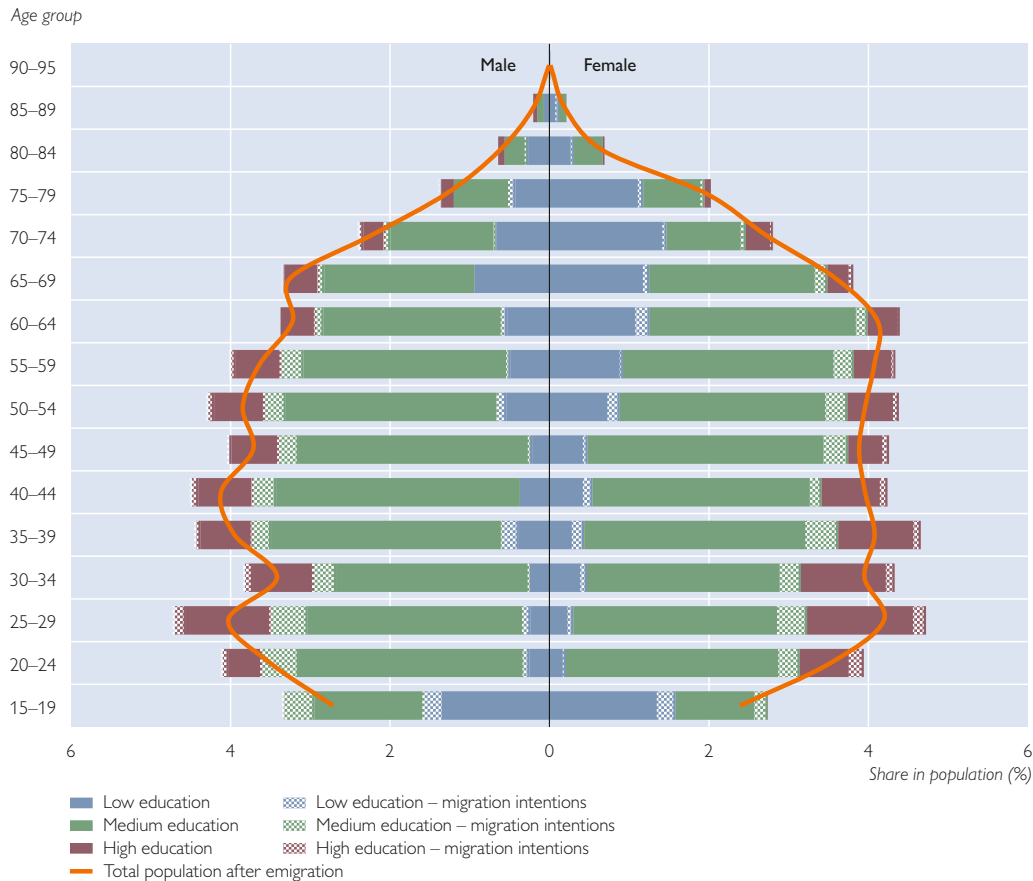
Aggregated over all age groups, low-skilled individuals have an above-average likelihood of having the intention to emigrate. 10.0% of low-skilled individuals intend to emigrate; this value is higher than the overall average of 8.9% and higher than the share of medium- (8.7%) and high-skilled (8.6%) individuals intending to emigrate. Because the skill level of the respondent does not necessarily correspond to that of the prospective migrant, this breakdown by education can be biased. In particular, if parents talk about the migration intentions of their – on average better educated – children, the level of education of the potential migrants could be underestimated. In order to reduce this bias, we concentrate on the younger age groups. On average, 11.4% of the population aged 25 to 39 intend to emigrate from a CESEE country. Previous research suggests that approximately one-quarter of migration intentions are realized (see section 1). If this realization ratio held for CESEE countries as well, an average CESEE country could lose approximately 2.9% of its young working age population within one year – a non-negligible effect. Among the young individuals with migration intentions, the difference in migration intentions across education levels is even more pronounced than among the overall population: 22.6% of low-skilled individuals aged between 25 and 39 intend to emigrate, while only 10.8% and 8.9% of medium and highly skilled in the same age group do. The group of highly educated individuals has the lowest migration intentions. Especially when in their mid-twenties and thirties, people's, especially women's, aspiration to leave the country is low. Hence, the data do not indicate evidence for a severe brain drain in an average CESEE country.

Chart 2 presents similar information by means of a population pyramid. The size of the bars indicates the share of each subgroup in the total population. The subgroups are defined by gender, age, education and migration intentions. The vertical axis represents 16 five-year age groups, and the colors of the bars indicate the level of education. For each age, gender and education group, the shaded parts of the bars highlight the share of individuals that have the intention to emigrate. Finally, the orange line indicates a hypothetical population pyramid for an average CESEE country that would be expected if migration intentions were actually realized, *ceteris paribus*. The hypothetical pyramid does not take into account return migration by previous migrants or immigration from other countries. It merely displays what the pyramid could look like if all individuals with migration intentions left the country immediately and contemporaneously.

The pyramid for CESEE can be described as a constrictive population pyramid¹² (see annex 1 for a discussion of typical shapes of population pyramids). In the reproductive age groups, the age groups are of similar sizes, whereas in the cohorts above and below reproductive age, the age groups are smaller. The shape of the

¹² All population pyramids based on OeNB Euro Survey data are compared with pyramids based on data from the Wittgenstein Centre (www.wittgensteincentre.org/dataexplorer/), which rely on more exhaustive data, include individuals aged 0 to 15, and allow a more precise assessment. All conclusions with respect to the pyramids' shape, broad education tendencies, etc. are cross-checked with this alternative data source. The Wittgenstein data do not contain information on migration intentions of individuals, however, and an indication of those is a novelty that the OeNB Euro Survey data allow.

Chart 2

CESEE average: population by education level and migration intentions (2014)

Source: OeNB Euro Survey (2014).

pyramid clearly indicates that there are more women than men in the region.¹³ This finding is not new and attributed predominantly to the higher life expectancy of women but also to gender differences in past migration behavior. Due to the former, the man shortage increases with age: Among younger cohorts, there are more men, because the gender ratio at birth is 106 male newborns per 100 female newborns (data for Europe, United Nations, 2010). The pyramids also highlight the improving overall level of educational attainment, as the share of individuals with a low level of education is declining and the share of people with higher education is increasing, especially among women. The shaded parts of the bars indicate for each subgroup the proportion of individuals who intend to emigrate. These parts are larger on the left side of the pyramid, as more men than women intend to emigrate, and they are larger for younger cohorts and among the less well educated. Under the assumption that individuals with migration intentions

¹³ To verify this finding, we compare the gender shares based on OeNB Euro Survey data with data from the UN Population Prospects (2015 Revision). According to the UN, the average gender ratio in the ten CESEE countries, calculated as the proportion of males over females, was 0.924 in 2015. When calculating the ratio based on OeNB Euro Survey data for 2014, the gender ratio is 0.921 and therefore virtually equivalent. An additional comparison to IIASA-VID data leads to similar results.

(or a representative sample of them) left the country, our data suggest that the remaining population would be relatively better educated; it would be older and the share of women would be higher.

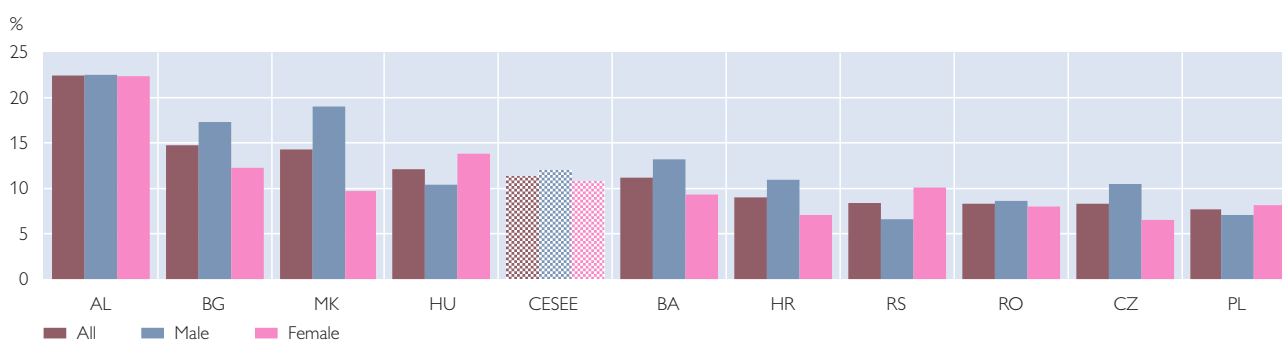
3 Migration intentions at the country level

Chart 3 and table A1 in annex 3 display the shares of young individuals that have the intention to emigrate for all ten CESEE countries in the sample and for various subgroups.¹⁴ The frequency of migration intentions in the population is heterogeneous across countries and across different sociodemographic groups. While more than 20% of young Albanians intend to leave the country, only approximately 8% of young people do so in Poland, the Czech Republic or Serbia. At 10.0%, the average share of young individuals with emigration intentions in EU CESEE countries is lower than in non-EU CESEE countries, where 14.0% of 25- to 39-year-olds plan to emigrate.

The figures in charts A2 and A3 in annex 3 display the corresponding population pyramids for the six EU CESEE and the four non-EU CESEE countries.¹⁵ Like the pyramid for the CESEE average, the country-level pyramids have a constrictive shape: the size of young cohorts is relatively smaller than the size of the cohorts of reproductive age, which indicates aging and declining populations.¹⁶ The pyramids further show that the improvement of educational attainment across generations found for the CESEE average is broad-based across countries. In all countries, the share of individuals with primary education only is relatively higher among older age groups, and the share of individuals with tertiary education is relatively higher among younger cohorts. This finding is more pronounced among non-EU

Chart 3

Share of individuals with migration intentions in 25 to 39 years age group by gender



Source: OeNB Euro Survey (2014).

¹⁴ The pyramids in annex 3 show that the number of young individuals with a low level of education is relatively small in most countries. The shares of migration intentions among young, low skilled individuals is thus based on a relatively small population and even a high share is likely to represent relatively few individuals and contribute little to the overall average.

¹⁵ In annex 2, we compare the country-level results with other evidence from the literature. Although such a comparison is difficult, the correlation between our results and those from the literature is high.

¹⁶ The constrictive shape is even more pronounced when the pyramids are designed for the full population, i.e. including 0- to 14-year-olds (using Wittgenstein data). This holds for all ten countries.

countries, but also CESEE EU countries show significant improvements in education attainment.

Migration intentions in the full population vary between 16.7% in Albania and 5.5% in Romania. Due to the aforementioned reasons, we focus on migration intentions among the young, i.e. the 25 to 39 years age group. Our data suggest that in all countries with the exception of Poland, migration intentions are more common in the 25 to 39 years age group than in the 40 to 64 years age group. Migration intentions among the young are highest in *Albania*. The proportion of 25- to 39-year-olds wishing to emigrate is 22.5%. More specifically, 34.8% of those with a low level of education, 14.9% of those with a medium level of education and 16.2% of those with a high level of education intend to emigrate. Contrary to our findings for most other countries, for *Albania* we find no evidence for a gender gap in migration intentions, and the relative frequency of migration intentions does not differ between men and women. *Bulgaria* exhibits the highest share of young individuals with migration intentions (14.8%) among the six EU countries and the second-highest in the sample. Based on our data, a considerable gender gap exists, and young men are more likely to have migration intentions (17.3% as compared to 12.3% for women). The share of young individuals with migration intentions among the low skilled is considerably higher (25.3%) than among the medium (14.1%) or highly skilled (13.3%). In *FYR Macedonia*, the share of young people that intend to migrate is very similar to that found in *Bulgaria* (14.3%), but the gender gap is even more pronounced, and it is the largest gap in the sample based on percentage points as well as in relative terms. While 19.1% of young men have migration aspirations, only 9.8% of women do. Migration intentions among the medium and highly skilled range between 12.0% and 13.8%, whereas a larger share of low-skilled individuals intend to emigrate (17.9%).

Migration intentions in *Hungary* are also above the CESEE average. 12.1% of 25- to 39-year-olds intend to emigrate (13.8% of women and 10.4% of men in this age group). The gender gap in *Hungary* is reverse compared to that observed in the CESEE average, where the share of men with migration intentions is higher than that of women. The case of *Hungary* is striking not only because of the reverse gender gap, but also because migration intentions in the country are more common among the highly skilled than among those with a low or medium level of education. 17.7% of highly skilled young people in *Hungary* intend to emigrate, a share that is considerably above that of those with a low and medium level of education (12.3% and 10.1%, respectively). For *Serbia*, too, the data suggest that among the highly skilled, emigration aspirations are more common than among lower-skilled individuals, and that migration intentions among young women are relatively higher than among young men.

In *Bosnia and Herzegovina* and in *Croatia*, the share of young individuals with migration intentions is just below the CESEE average. 11.2% and 9.0% of those aged 25 to 39 intend to emigrate, and relatively more men belong to this group of prospective migrants. In *Bosnia and Herzegovina*, we find that migration intentions are most common among those with low levels of education, whereas in *Croatia*, those with medium levels of education are most inclined to migrate.

In *Serbia*, *Romania* and the *Czech Republic*, the average shares of individuals with migration intentions are at similar levels (8.4%, 8.3% and 8.3%, respectively), but rather heterogeneous for different subgroups. While in *Serbia* migration intentions

are more common among young women and among the highly educated, the reverse is true for the Czech Republic: Migration intentions are more prominent among young men, and only 2.0% of the young and highly skilled intend to emigrate vis-à-vis 32.1% of the low and 9.6% of the medium skilled. In Romania, no significant gender gap is found and migration intentions are most common among those with a medium level of education.

The lowest share of migration intentions in the sample is found in *Poland*, where 7.7% of young individuals intend to emigrate. The prospective migrants have predominantly a medium level of education, and only 2.2% of those with a high level of education intend to emigrate.

These descriptive results indicate that a realization of migration intentions in CESEE, i.e. the actual emigration of all individuals with migration intentions or of a representative sample thereof, would lead to a shrinking population that would be relatively older; also, the share of women and the level of education would be relatively higher. Exceptions to this finding are Hungary, Serbia and Poland, where men are less likely to emigrate. These countries would see a relative increase in the male population. In addition, in Hungary and Serbia, migration intentions are relatively more frequent among the highly skilled, and emigration of those with migration intentions would result in a decline in the educational attainment level of the remaining population.

4 Conclusions

Using individual-level data for ten CESEE countries from the 2014 wave of the OeNB Euro Survey, we find that, on average, 8.9% of the population intend to emigrate within the next year. Among 25- to 39-year-olds, for whom we obtain more reliable statistics than for older age groups, migration intentions are more widespread: 11.4% of the younger population in an average CESEE country intends to leave. Across countries, considerable heterogeneities exist: Migration intentions are more common in non-EU CESEE countries than in EU CESEE countries. The country where migration intentions among young individuals are highest is Albania: more than 22% of young Albanians intend to emigrate. Countries with comparably low rates of people planning to emigrate are Poland, the Czech Republic, Romania and Serbia.

On average, migration intentions are higher among men (12.0%) than among women (10.8%), and this pattern is observable also in most individual countries. Exceptions to this finding are Hungary, Poland and Serbia. In these three countries, more young women than men state that they intend to emigrate. In Albania and Romania, we find virtually no gender differences with regard to migration intentions.

Using the full CESEE sample, we find no general evidence for above-average migration intentions among the highly skilled. On the contrary, the highest share of individuals with migration intentions is found in the group of low-skilled individuals. In the Czech Republic and in Poland, only 2.0% and 2.2% of young, highly educated people intend to leave the country. Also in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia and Romania, rates of highly skilled people wishing to emigrate are lower than those of people with a lower level of education. In Hungary, by contrast, migration intentions among the young and highly educated are highest in the sample: 17.7% intend to migrate, a share that is considerably above that of people with low and medium education levels.

Likewise, for Serbia, the data suggest that the desired emigration of highly skilled people is above that of lower-skilled individuals.

Our data suggest that assuming that all individuals that have the intention to emigrate (or a representative sample thereof) would leave CESEE, on average, the remaining population would be relatively older, the share of women would increase and average educational attainment in the population would improve.

This study assesses individual characteristics of prospective migrants in order to learn about possible demographic consequences of future migration. It relies solely on descriptive methods, and does not inform about possible underlying reasons for migration intentions. People might aspire to emigrate because of a lack of economic opportunities, due to network effects or pull factors from possible destination countries. A thorough assessment of the drivers of migration intentions is a particularly interesting path of further research. Starting out with the descriptive analysis in this study, a follow-up study will address the issue of the drivers of migration intentions based on the same data source.

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Annex 1: basic shapes of population pyramids

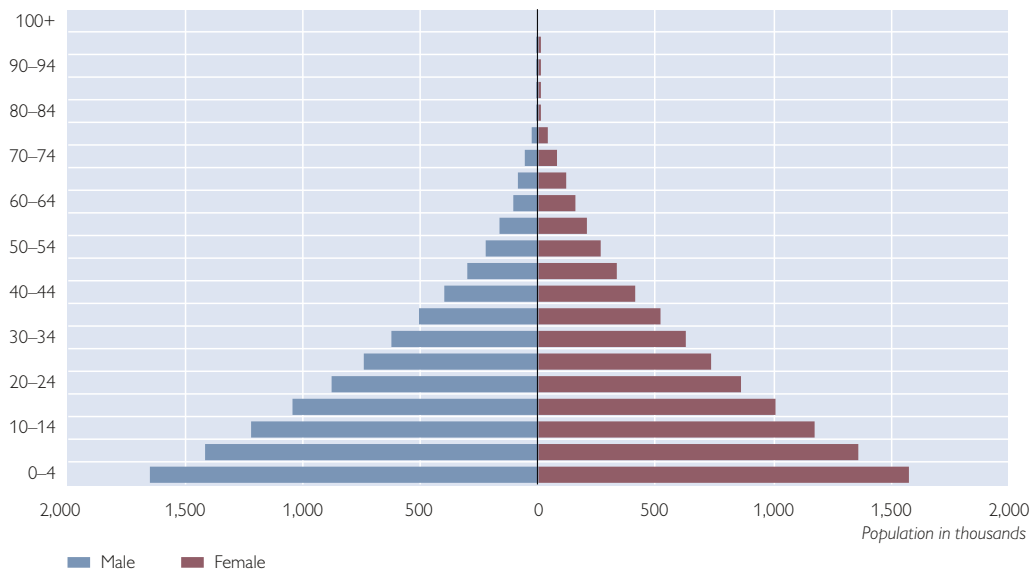
Population pyramids are common graphical representations of the age and gender structure of a population. In addition, other characteristics can be visualized in the pyramids, most prominently educational attainment (Lutz et al. 2014). The

Chart A1

Basic shapes of population pyramids

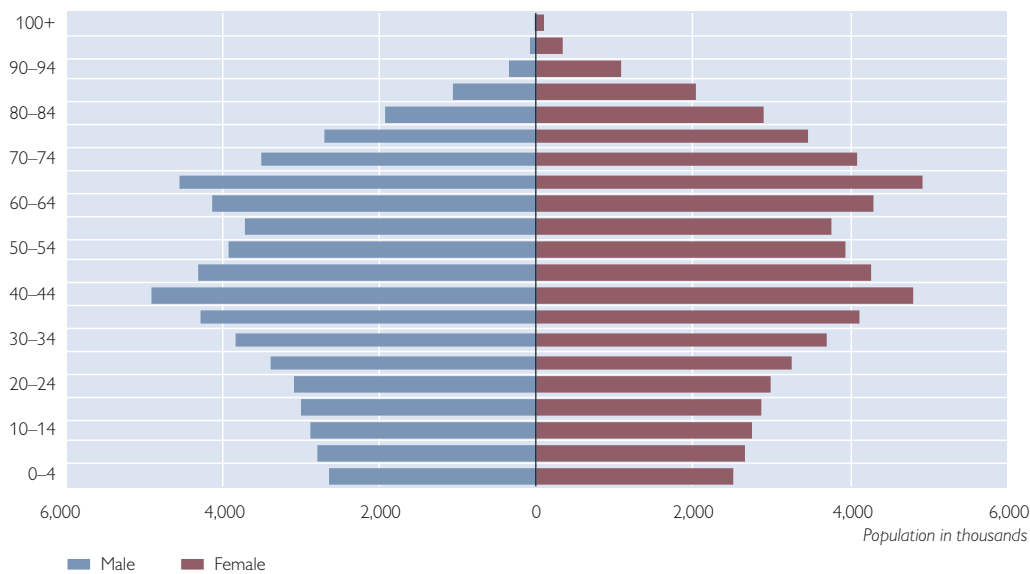
Expansive: Burkina Faso, 2015

Age group



Constrictive: Japan, 2015

Age group

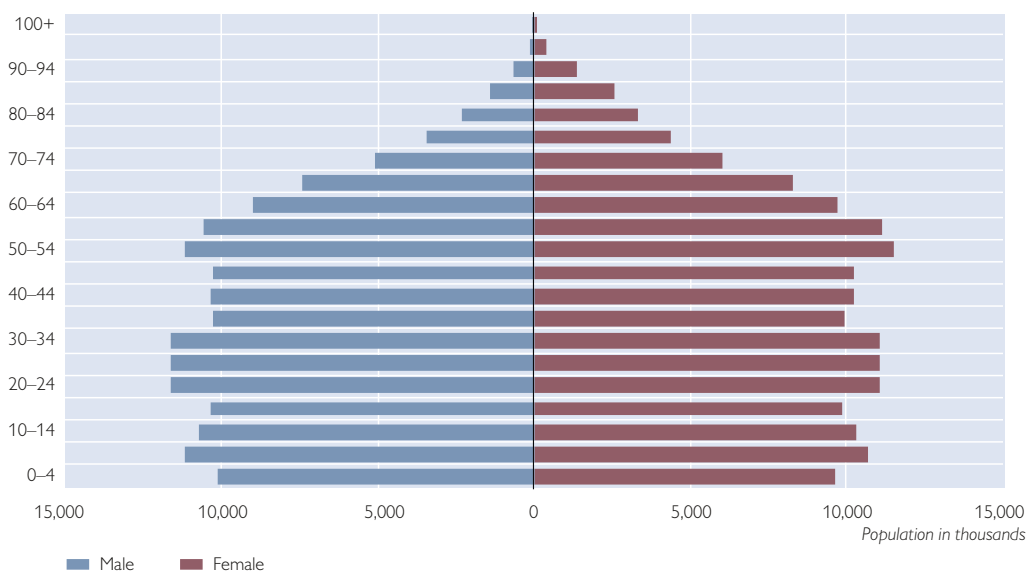


Source: Wittgenstein Centre.

Basic shapes of population pyramids

Stationary: U.S.A., 2015

Age group



Source: Wittgenstein Centre.

overall shape of population pyramids depends on a country's fertility and mortality rates. The following three prototypical shapes are typically distinguished.¹⁷

Expansive (expanding) pyramids represent populations that are young and growing. They have a triangular shape typical of pyramids, with a wide base and a narrow top. Usually, the number of individuals in each age group is larger than in the age group above. Expansive population pyramids are characteristic of developing countries with high birth rates and relatively low life expectancies.

Constrictive (contractive, contracting) pyramids represent populations that are aging and shrinking. They often have an inverted shape, with small proportions of young people. Constrictive population pyramids are characteristic of countries with low birth rates and/or very high levels of social and economic development.

Stationary (stable) pyramids represent populations that are not growing. They have a rectangular shape, with the base being of a similar width as the middle, representing the reproductive-age population, and declining population sizes at the top. Stationary population pyramids are characteristic of developed countries with low birth rates and high life expectancies.

Irregularities at the sides of the pyramids indicate special occurrences in countries, e.g. wars, baby booms or large-scale emigration.

¹⁷ For a good summary, see e. g. Korenjak-Černe et al. (2008).

Annex 2: comparison with other data sources

Docquier et al. (2014) use data from representative Gallup polls for 138 countries between 2007 and 2013 and report desired migration rates for all of our ten countries. The Gallup question is formulated more broadly (*“Ideally, if you had the opportunity, would you like to move permanently or temporarily to another country,…”*), and sets no time limit for the planned migration. Possibly for these reasons, and the fact that we aimed at obtaining lower bound estimates, the desired emigration rates reported by Docquier et al. (2014) are higher than those based on OeNB Euro Survey data. The correlation of results, however, is very high (0.76, all age groups). According to both data sources, Albania and FYR Macedonia are the two countries that exhibit the highest shares of migration intentions, and the Czech Republic and Croatia are two countries with particularly low shares. The results differ significantly only for Romania, for which Gallup poll data indicate considerably higher rates of migration intentions. This may be attributable to the data corresponding to the period prior to 2014, the year in which Romanians gained unrestricted access to the labor markets in all EU countries.

Taleski and Hoppe (2015) provide another source for comparison, which is based on data collected by the Friedrich Ebert Stiftung in eight Southeastern European countries between 2011 and 2015, six of which are also covered by OeNB data. According to them, between 67% (Albania, 2011) and 27% (Croatia, 2012) of 14- to 29-year-olds answer the question whether they intend to leave with *“very”* or *“somewhat.”* It is likely that our stricter definition of migration intentions (with respect to the re-coding of the Likert-type responses) can explain a part of the difference in levels. Qualitatively, the results are similar: For the six countries covered in both data sources, the correlation coefficient is very high (0.85).

Liebig and Sousa-Poza (2004) use survey data collected under the 1995 International Social Survey Programme (ISSP). The data cover 23 countries, among them four CESEE countries. Based on this data source, the emigration intentions in 1995 were higher and more diverse across the four countries. In Bulgaria, one-third of respondents (33.1%) answered the question *“Would you be willing to move to another country to improve your work or living conditions?”* with *“very willing”* or *“fairly willing.”* According to OeNB Euro Survey data from 2014, less than 10% of respondents answered in a similar way in Bulgaria. In Poland, almost one in four people (23.1%) was *“very willing”* or *“fairly willing”* to move abroad in 1995, while our data source from 2014 suggests that only 8.4% have the intention to emigrate. Migration intentions in the Czech Republic and Hungary in the 1995 data are considerably lower and closer to OeNB data estimates. Overall, the correlation coefficient based on the four countries included in both data sources is 0.69.

It is particularly difficult to compare the migration intentions found on the basis of the OeNB Euro Survey to those based on other sources, because the wording of the questions differs across surveys, and so does the time of the survey and the underlying population. The three sources for comparison confirm, however, that our data of the desired migration rates indeed appear to be lower-bound estimates. In spite of this level difference, the correlation between our estimates and other sources is high.

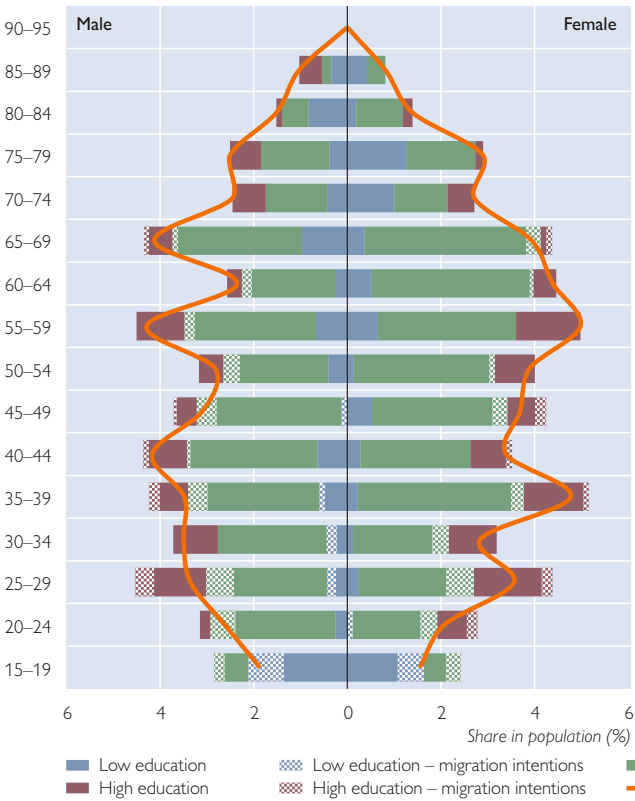
Annex 3: additional charts

Chart A2

CESEE EU countries: population by education level and migration intentions (2014)

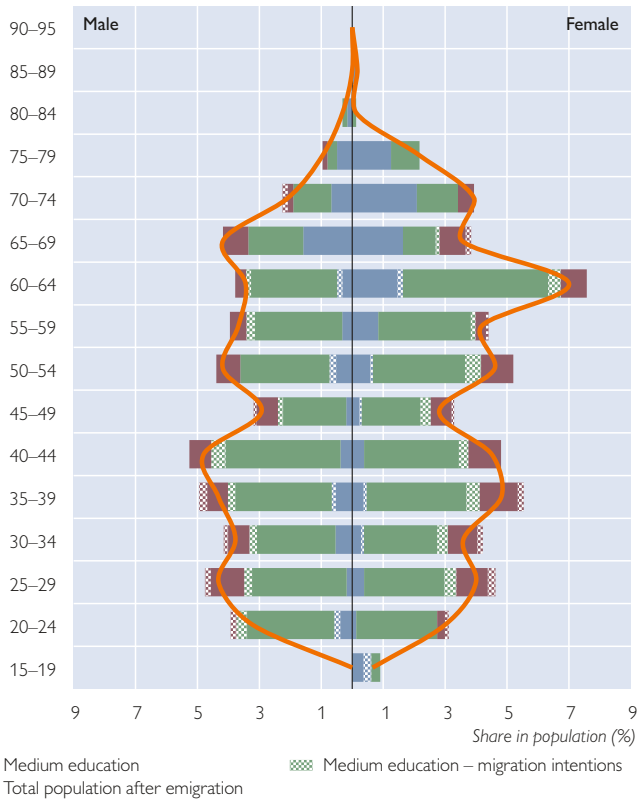
Bulgaria (N=890)

Age group



Hungary (N=953)

Age group

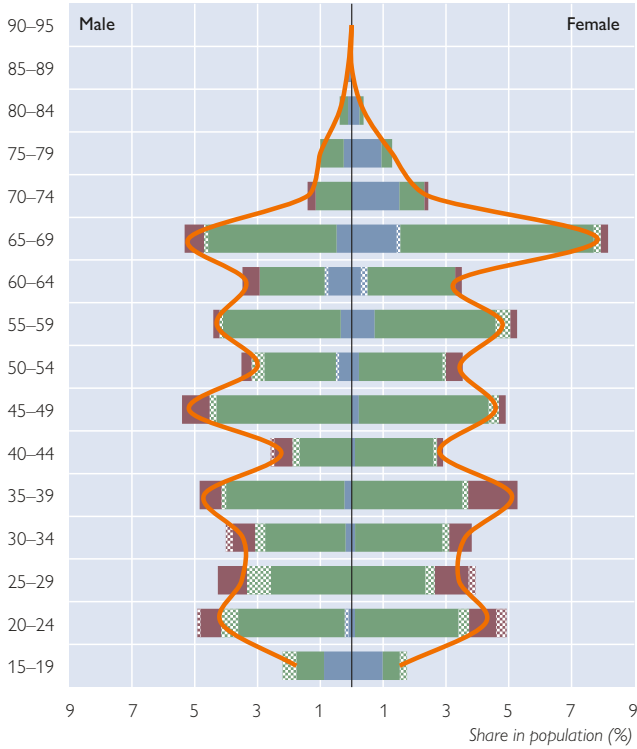


Source: OeNB Euro Survey (2014).

CESEE EU countries: population by education level and migration intentions (2014)

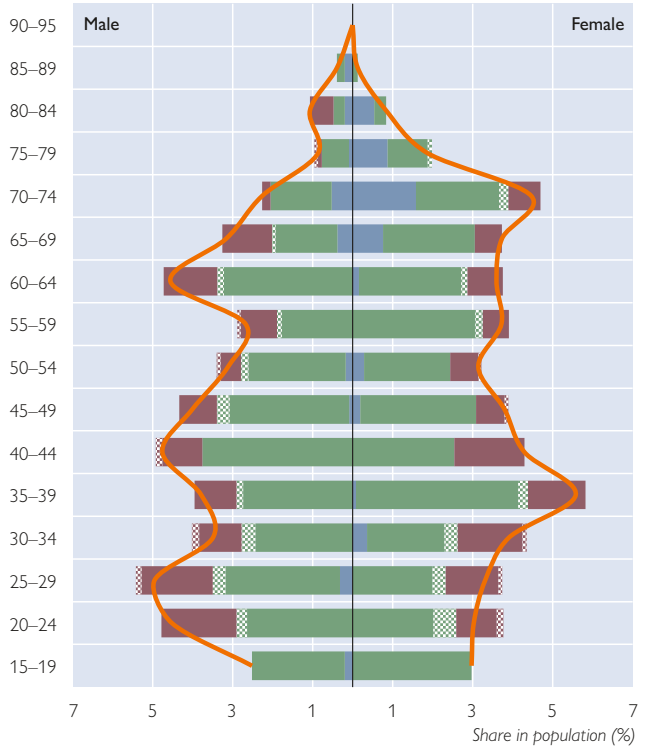
Croatia (N=912)

Age group



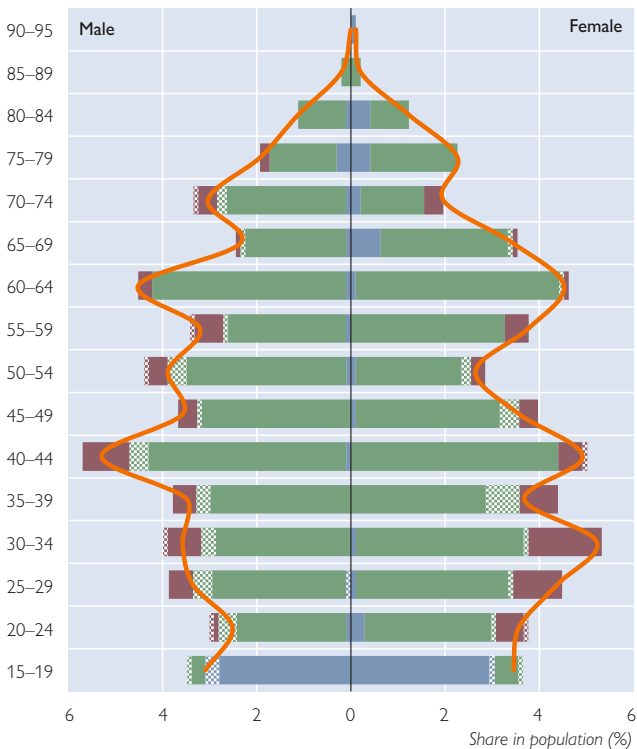
Romania (N=864)

Age group



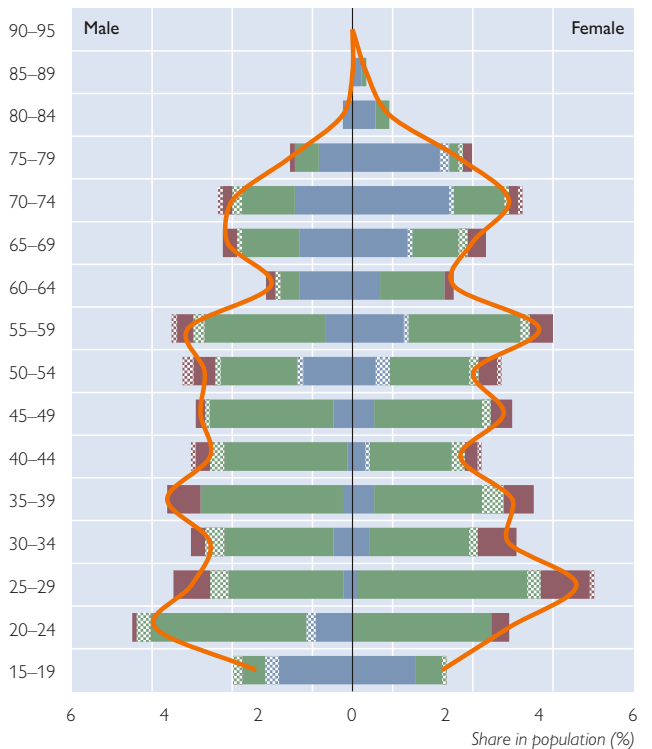
Czech Republic (N=988)

Age group



Poland (N=862)

Age group



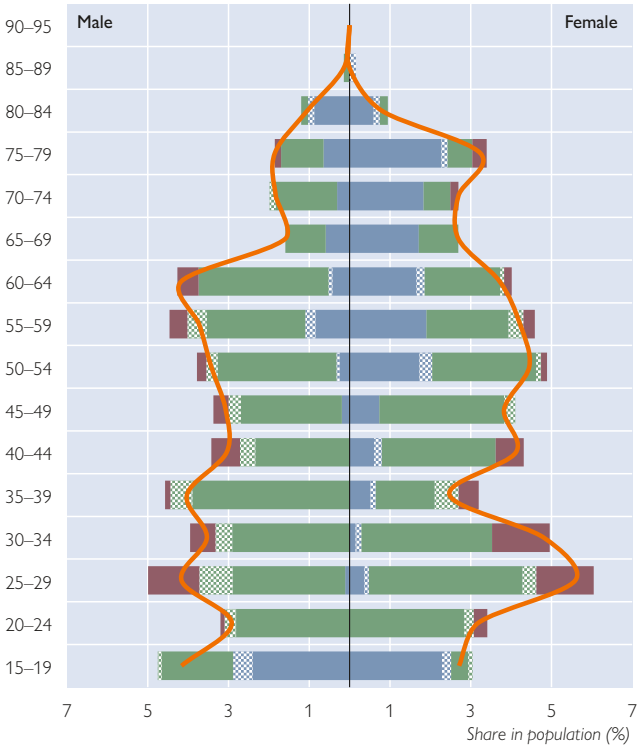
■ Low education ▨ Low education – migration intentions ■ Medium education ▨ Medium education – migration intentions
■ High education ▨ High education – migration intentions — Total population after emigration

Source: OeNB Euro Survey (2014).

Non-EU CESEE countries: population by education level and migration intentions (2014)

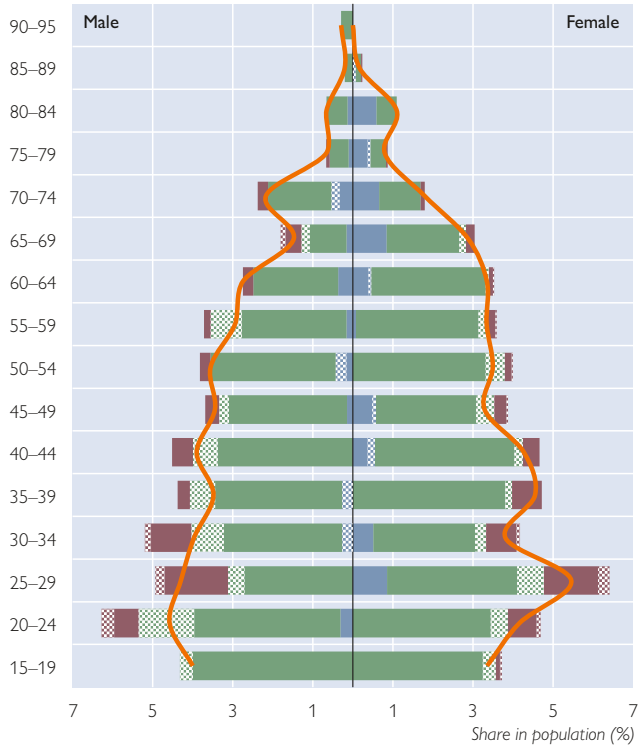
Bosnia and Herzegovina (N=831)

Age group



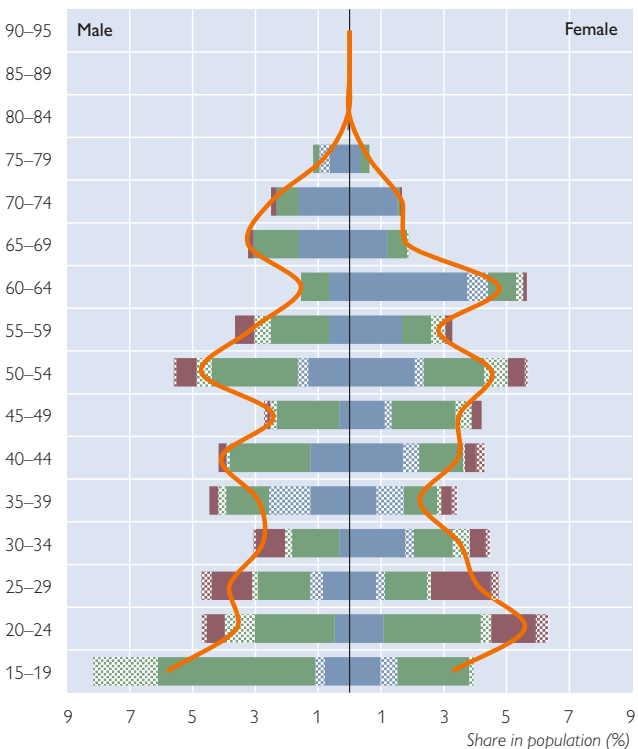
FYR Macedonia (N=972)

Age group



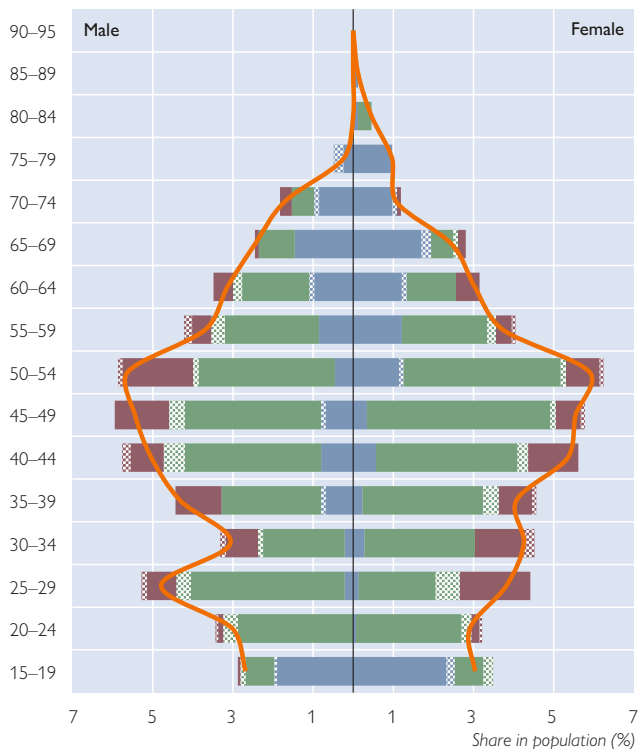
Albania (N=964)

Age group



Serbia (N=906)

Age group



■ Low education ▨ Low education – migration intentions ■ Medium education ▨ Medium education – migration intentions
■ High education ▨ High education – migration intentions — Total population after emigration

Source: OeNB Euro Survey (2014).

Table A1

Share of individuals with migration intentions by subgroups

Country	Age group	All	Gender		Education		
			Male	Female	Low	Medium	High
		%					
Albania	25–39	22.46	22.53	22.40	34.84	14.89	16.18
Bulgaria	25–39	14.77	17.29	12.29	25.33	14.12	13.25
FYR Macedonia	25–39	14.28	19.06	9.75	27.94	13.80	11.89
Hungary	25–39	12.13	10.39	13.80	12.28	10.07	17.71
CESEE	25–39	11.38	11.97	10.83	22.58	10.83	8.85
Bosnia and Herzegovina	25–39	11.21	13.20	9.32	25.83	13.05	0.00
Croatia	25–39	9.04	10.97	7.09	0.00	9.85	7.25
Serbia	25–39	8.40	6.63	10.11	6.10	8.40	9.02
Romania	25–39	8.33	8.64	8.04	0.00	9.80	6.09
Czech Republic	25–39	8.31	10.49	6.52	32.10	9.58	1.98
Poland	25–39	7.68	7.11	8.20	0.00	9.82	2.16

Source: OeNB Euro Survey (2014).

The New Silk Road, part II: implications for Europe

Stephan Barisitz,
Alice Radzyner¹

Through the New Silk Road (NSR) initiative, China increasingly invests in building and modernizing overland and maritime infrastructures with a view to enhancing the overall connectivity between China and Europe. The NSR runs through a number of Eurasian emerging markets and extends to Southeastern Europe (SEE), where Chinese investments include the modernization of ports and highspeed rail and road projects to speed up the transport of goods between China and Europe (e.g. port of Piraeus, rail connection to Budapest). Participation in the NSR will probably stimulate SEE's economic expansion and may even contribute to overcoming its traditional peripheral position in Europe. Ideally, SEE will play a role in catalyzing a deepening of China-EU economic relations, e.g. by facilitating European exports to China and other countries along NSR trajectories, which would boost growth in Europe more widely. In the long run, these developments might also influence the EU's political and economic positioning on a global scale.

JEL classification: F15, F34, N75, R12, R42

Keywords: New Silk Road, One Belt, One Road, connectivity, trade infrastructure, economic corridors, regional policy, Southeastern Europe (SEE), China, EU-China relations, China-EU relations, China-EU trade, EU-China trade, EU candidate countries

This paper is the second of a set of twin studies on the New Silk Road (NSR).¹ While part I shows how the NSR is developing through the growing number of Chinese projects in several Eurasian and Asian emerging markets, part II focuses on Southeastern Europe (SEE), where Chinese investments seem to be paving the way toward the heart of the continent.

We feel that our brief discussion of concrete projects can provide valuable geo-economic and geopolitical insights that help us understand the motives, goals and implications of this major endeavor. As far as we know, no other study has yet analyzed the NSR's impact on Europe from a project-oriented perspective. Part II argues that trade facilitation that is, or may be, brought about by major infrastructural improvements, largely driven by Chinese investors, should have significant economic policy implications: first, for SEE and second, for the EU in the sense that it should strive for synergies with existing European connectivity initiatives.

Part II is structured as follows: Section 1 focuses on Europe and the NSR as well as on incentives and (controversial) institutional conditions for investments under the NSR or One Belt, One Road (OBOR) initiative. It discusses advantages and possibly problematic aspects from the viewpoint of the EU, China and SEE. Section 2 provides a discussion of the most important infrastructural links in SEE and the way these connect the region to the heart of Europe. Section 3 lists the relevant Chinese NSR projects in each SEE country and discusses their economic weight by comparing project volumes with the respective country's FDI inflows. Section 4 summarizes, draws some conclusions and offers an outlook for possible geopolitical developments.

¹ This paper is the second of a set of twin studies on the New Silk Road. Part I is also authored by Stephan Barisitz and Alice Radzyner and is entitled "The New Silk Road, part I: a stocktaking and economic assessment" (published in: OeNB. 2017. Focus on European Economic Integration Q3/17).

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1 China's growing presence in Southeastern Europe

Under the heading of “reviving the ancient Silk Road,” Chinese investments in the EU continue to grow rapidly. Chinese FDI has spread all across Europe and into various sectors, mainly the finance, infrastructure, engineering and energy sectors. In 2015, Chinese investments in Europe were concentrated mainly in the United Kingdom, Italy, France and Germany. Between 2010 and 2015, Chinese investments amounted to an average of EUR 4 billion to EUR 8 billion per year in these countries. However, particularly in the past two years, links between China and SEE have intensified, not just in financial and economic but also in diplomatic terms.

Geographically, SEE (particularly Greece and the Western Balkans) constitutes the final part of China's new Maritime Silk Road (MSR, reaching Europe via the Suez Canal and the port of Piraeus, see map 1). SEE exports to China increased seven-fold between 2004 and 2014 (in U.S. dollar terms), from around USD 320 million in 2004 to more than USD 2.2 billion in 2014. SEE imports from China more than doubled from USD 5 billion in 2004 to over USD 11 billion in 2014. The share of imports from China rose from 3.4% of total SEE imports in 2004 to 4.6% in 2014 (Levitin, 2016, p. 5).

With a view to extending the NSR into the Balkans, China primarily invests in regional infrastructure, such as ports, railroads and highways. This strategy relies on the assumption that the countries in the region (including the Western Balkans) will catch up significantly, integrate into the EU and thus build a bridge for Chinese companies to the main EU markets.

In 2012, one year before the OBOR initiative was launched, the People's Republic of China set up the so-called “16+1 format.” This initiative aims at intensifying and expanding China's cooperation with 11 EU Member States (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) and five Balkan non-EU Member States (Albania, Bosnia and Herzegovina, FYR Macedonia, Montenegro and Serbia) in the fields of transport, finance, science, education and culture. The 16+1 format is coordinated by the Secretariat for Cooperation between China and Central and Eastern European Countries, which in turn is part of the Department of European Affairs at the Ministry of Foreign Affairs of the People's Republic of China.

Since the first summit that brought together the prime ministers of all the 16+1 countries (“16+1 summit”) in 2012, China's economic presence in Central, Eastern and Southeastern Europe (CESEE) has progressively increased. At the fifth 16+1 summit in Suzhou in November 2015, it was confirmed that an investment fund of USD 10 billion was earmarked for various projects in CESEE in the coming years. 16+1 cooperation³ is being increasingly institutionalized, with plans for setting up a permanent business council and the signing of a number of high-profile bilateral memoranda of understanding (MoUs). In June 2015, the European Commission signed an MoU on the so-called EU-China Connectivity Platform, aimed at coordinating the European Commission's Trans-European Networks strategy with new OBOR projects.

³ 16+1 cooperation also includes regular platform meetings at the technical level on topics other than infrastructure and technology, including agriculture, health, tourism and education (including student exchange programs) and comprises, for example, a Young Leaders program, an expert advisory committee on the construction of transport networks between China and CESEE, a research fund on the relations between China and CESEE, a special tourist products promotion event, academic exchange between research institutes, the founding of think tank cooperation centers, etc.

From the EU's point of view, Europe, being the western endpoint of all major routes of the NSR, conceivably stands to gain from increased trade possibilities with a number of Eurasian countries; enhanced trade corridors with improved infrastructure are opening up new destinations for European exports. The EU countries generally welcome Chinese investments as these are financed by Chinese institutions and banks and thus do not generate costs for European institutions.

Among the 16+1 countries, the EU Member States – mainly those in Central and Eastern Europe (CEE) – arguably have a wider range of financing options for large investments of this sort. For SEE, where most countries (with the exception of Bulgaria and Romania) are not EU Member States, the situation is slightly different. Despite the funding possibilities offered to non-EU Member States by EU sources and international financial institutions (e.g. the Western Balkans Investment Framework), a financing gap remains (Radzyner et al., 2011). Investments from Chinese firms therefore benefit candidate countries which cannot access large EU structural funds until they join the EU, but which are aware that their national and international infrastructure and transport links must be improved in order to make progress toward EU accession. Compared with the relatively slow process of project preparation and other institutional obstacles that must be overcome when applying for EU funding, Chinese investments appear to be a competitive alternative, as they come with streamlined approval processes, state-backed financing and rapid implementation (Sanfey et al., 2017). The direct spillovers of these investments to the local economies may be limited (see section 3), but the SEE countries' participation in the NSR initiative will probably stimulate the region's economic growth and may even contribute to overcoming its traditional peripheral position in Europe. For China, therefore, investing in SEE is a win-win situation: As a consequence of catching up, the purchasing power of the population in SEE will increase, and as the gap in labor costs between China and SEE is narrowing too, Chinese manufacturers may find it cheaper to locate their production facilities closer to their destination markets in the EU (Hollinshead, 2015; Needham, 2014). Evidence has shown that with the CESEE region being seen as the "outskirts" of the EU, Chinese analysts treat the EU as an "external factor operating in the region" (Kaczmarek, 2014; Levitin, 2016; Pepe, 2017). This may point toward the fact that China's knowledge of European integration is possibly somewhat incomplete, which in turn translates into another advantage China would gain from investing in the region, namely that it would acquire knowledge about how to act in a highly regulated market such as the EU.⁴ Politically, Chinese investors show more readiness to get involved in countries with higher political instability and to take up the role of a neutral force and reliable business partner.

In addition, the non-EU Member States in CESEE may also be attractive to Chinese investors, partly because they could enable them to bypass EU trade laws, including antidumping regulations or even environmental rules that apply to EU Member States. However, the same is true for CESEE EU Member States, where Chinese projects often undermine the EU's internal market rules (e.g. the Budapest-Belgrade railway project tender did not comply with EU rules). The

⁴ This is one of the reasons why Austria has been given the role of observer – along with the EU – in the 16+1 initiative; more precisely, China is interested in keeping Austria close owing to Austria's bank exposure in CESEE, its financial expertise and expertise in financial law as well as its interlinkages with CESEE with regard to telecommunication and railway connections.

European Commission has expressed its concern about increasing trade and investment in areas which fall under EU competences, particularly for those CESEE countries which are closing agreements without consulting the EU beforehand (see i.a. Yalcin et al., 2016). Yet, the consequences are by no means of sizeable significance to China: Even though, after five years of careful investigations, the European Commission asked the China Ocean Shipping (Group) Company (COSCO), which is now the principal owner and manager of the Piraeus Port Authority (PPA), to reimburse the Greek government the money saved on the original deal, China did not abandon its strategy (Guillot, 2017). The fact that Chinese investors tend to ignore EU rules and regulations adds to the existing frictions in trade relations between the EU and China (Ma, 2012). European investors still face major barriers on Chinese markets, such as i.a. equity caps, forced technology transfers and licensing restrictions. Once the conditions for European investors in China improve, it can be expected that Chinese FDI will generally be welcomed more openly in Europe.

A good example of preferential conditions that are created through bilateral relations can be found in Serbia, which is the main beneficiary of Chinese investments in SEE, namely Pupin Bridge⁵ in Belgrade. China and Serbia signed a strategic partnership agreement in 2009, which laid the formal basis for a large number of infrastructure, energy, car manufacture and other projects (see below), including Pupin Bridge. Chinese companies are now entitled to participate in Serbia's planned privatization process, in which more than 500 companies (in particular, the national railway company) are listed for a sell-off. This partnership gives Chinese companies access to a free trade area of 800 million potential consumers via free trade agreements that Serbia has concluded with the EU, the Central European Free Trade Agreement (CEFTA) and the European Free Trade Association (EFTA). Serbia thereby receives the financial and technical assistance it needs from a trusted partner on a preferential basis and China gains valued access to Central European markets (Hollinshead, 2015).

While the local Serbian labor force could in theory benefit from such work-intensive projects, Chinese companies usually employ their own workers and rely on local resources to a limited extent only. Pupin Bridge, for instance, was constructed between April 2011 and December 2014, under the responsibility of the China Road and Bridge Corporation (CRBC). The CRBC workforce consisted of 200 (predominantly male) Chinese workers, who were accommodated in a dormitory next to the bridge, given that the concrete had to be laid as quickly as possible and workers had to work flexible shifts on a 24/7 basis. Due to the fact that the work location was isolated, compliance with health and safety regulations was seen as "highly problematic" (Hollinshead, 2015). The prevailing conditions may have contradicted Serbian labor, health and safety regulations. However, the volatility of the Serbian government and the long and difficult processes arising from stiff bureaucracy hindered any action against these conditions. In any case, the local economy did not benefit greatly in terms of employment or consumption – at least

⁵ Formerly also known as "Bridge of Friendship" or (colloquially) "Chinese bridge." Pupin Bridge is a road bridge over the Danube, located upstream of Belgrade's city center and connecting the neighborhoods of Zemun and Borča. The bridge itself is 1,507 m long, but including access roads its total length is 21.6 km. Since its opening, travel time from Borča to Zemun has been reduced from 60 minutes to 10 minutes.

in the short run. Once the infrastructure network (including railways, roads and motorways) between Piraeus and Budapest is in operation, this may change, of course.

All in all, “(...) fast, unbureaucratic funding from China is attractive. And SEE countries also do not shy away from not taking national rules or EU trade agreements too seriously.”⁶ Given the primary objective of this study as well as its length limitations, the ways in which EU regulations are being bypassed unfortunately cannot be analyzed in much depth. However, numerous analysts have observed this development and further research should be undertaken to find out just to what extent EU trade regulations and tendering and procurement procedures have been ignored so far.

What is clear from these observations is that the EU will need to intensify its relationship building with SEE and China with a view to effectively using SEE’s potential and fulfilling interests common to all parties involved. When looking at the activities carried out under the 16+1 cooperation framework i.a. in education, culture, research and development, it becomes clear that the OBOR initiative already goes beyond mere economic investments. The authorities involved should make use of this framework of “soft power”⁷ to intensify future cooperation. The EU is China’s main trading partner and China is the EU’s second most important trading partner after the U.S.A. With the uncertainties regarding the current U.S. administration’s stance on U.S.-Chinese trade relations as well as trade negotiations with the EU, a further improvement of Sino-European cooperation becomes all the more relevant.

2 Infrastructural links and Chinese investments

As mentioned above, a strong network of ports, logistical centers and railroads will allow Chinese goods to be transported more rapidly to Western Europe and will thus intensify east-west trade. With sea shipping or the MSR being the cheapest (though not the quickest) route from the Far East to Europe, a major building block for Chinese investments consisted in buying into the Greek port of Piraeus, the first major European container port for ships entering the Mediterranean from the Suez Canal. But before we look in more detail at the Piraeus project, two other NSR corridors that link, or are intended to link, China with Europe should be introduced briefly. They are both land corridors and thus form part of the Silk Road Economic Belt (SREB). First, the *New Eurasian Land Bridge* passing through Moscow, Warsaw and on to Duisburg already exists and is being used (particularly its rail connection, the Trans-Eurasia-Express; see part I).⁸ Second, the *China-Central Asia-West Asia Economic Corridor* may not only become a gateway for oil and gas (see part I) but may also link up with Europe via Turkey, once respective infrastructure connections are built (Grübler and Stehrer, 2017, p. 5).

Actually, the MSR and its extension (China-Suez Canal-Piraeus-Belgrade-Budapest) and the *New Eurasian Land Bridge* (China-Kazakhstan-Russia-Belarus-EU) may directly link up with the Pan-European transport corridors⁹ established or projected by the EU and its neighboring countries:

⁶ Quote from Radzyner, A., 2017.

⁷ “Soft power refers to the use of a country’s cultural and economic influence to persuade other countries to do something, rather than the use of military power” (Cambridge Dictionary, 2017).

⁸ There are extensions of this route to London and Madrid.

⁹ The concept of Pan-European transport corridors was developed in the 1990s and has been further refined in recent years (see also Zepp-Larouche et al., 2014).

- the MSR could connect to Pan-European transport corridor X (branch B): Thessaloniki-Belgrade-Novı Sad-Budapest, and
- the New Eurasian Land Bridge could link up with Pan-European transport corridor II: Nizhny Novgorod-Moscow-Minsk-Warsaw-Berlin.

The cooperative modernization of these largely rail-dominated connections leading from the southeast and the east into the heart of Europe could contribute to boosting trade and connectivity both between China and Europe and with numerous neighboring emerging markets.¹⁰

Back to the MSR and the Piraeus project: COSCO took over 67% of the Greek state-owned Piraeus Port Authority (PPA) in August 2016, making COSCO the controlling shareholder, holding shares with a total value of EUR 368.5 million. COSCO now has management and operation rights to run the PPA until 2052 and it has already turned the port into a well-functioning and profitable enterprise that is now called the “Gateway to Europe.” COSCO has also agreed to carry out further investments of EUR 355 million (Hellenic Shipping News, April 25, 2016; Channel News Asia, August 11, 2016). Transit time between Shanghai and Piraeus is about 22 days, which is 10 days shorter than the route between Shanghai and the northwest European ports of Rotterdam and Hamburg (Levitin, 2016, p. 2). Consequently, the duration for transporting goods from China to Europe has been reduced by one and a half weeks (Marchand, 2015, p. 67). In view of this cut in transit time, Beijing has already announced its plans to buy into other SEE ports such as Thessaloniki, Greece, or Bar, Montenegro.

Many projects financed and carried out by Chinese investors consist of modernizing or extending railroads, the most prominent one being the rail connection between Budapest and Belgrade¹¹ (budget: EUR 1.5 billion to EUR 2 billion). Decided upon in 2013, the project reduces the travel time between the two cities from 8 hours to 2.4 hours. The plan is to further extend the route to Skopje, FYR Macedonia, and Athens, Greece. In the Balkans, the NSR will thus pass through the existing Pan-European transport corridor X, which links Central Europe to the Aegean Sea via Hungary, Serbia, FYR Macedonia and Greece and is being modernized step by step. Highways and railroads are also being extended to the Adriatic coast and its ports (e.g. the highway between Belgrade and Bar). Beside rail, road and sea transport, Chinese companies seem to be looking into air links as well. Most recently, the China Everbright Group bought the operating company of Tirana International Airport.

3 Weighing the economic relevance of Chinese projects in SEE

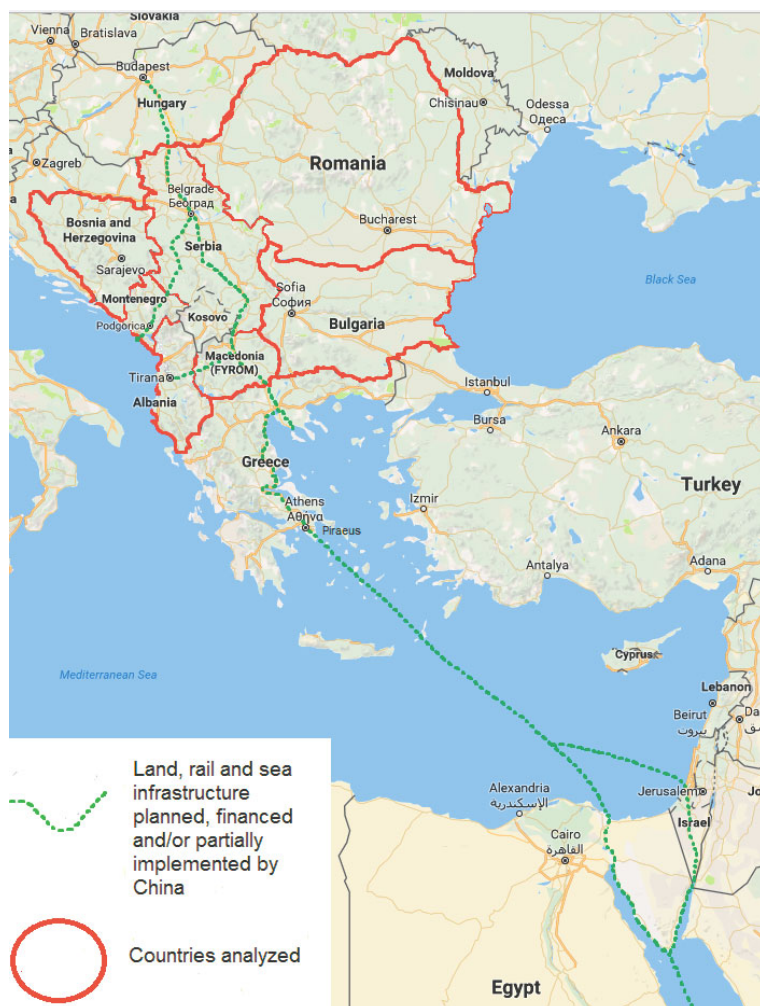
Roads, railroads, ports and airports in SEE are being built or modernized rapidly with Chinese investments, without facing many obstacles, and the list of Chinese-financed projects is getting longer by the day. This raises the question of how important these investments are for the local economies in SEE. Table 1 below lists major projects financed and carried out by Chinese investors in Albania, Bosnia and Herzegovina, Bulgaria, FYR Macedonia, Montenegro, Romania and Serbia. The

¹⁰ As explained in part I and below (see table 1), Chinese firms are already investing in highspeed rail links along European sections of these partly overlapping corridors (between Belgrade and Budapest, and between Kazan and Moscow) as well as in other railroad and highway modernization projects in SEE.

¹¹ See numerous press articles i.a. Hungary today (April 13, 2016), Chinadaily (September 10, 2016) and The Economic Times (November 25, 2015).

Map 1

The New Silk Road: Southeastern Europe and the Mediterranean



Source: Authors' elaboration. Original map from Google Maps.

list of projects is not comprehensive, as information coverage in the literature and online is incomplete, but it features the main Chinese-financed projects in the region. Not all projects listed are explicitly mentioned to be financed under the NSR initiative, but we argue that since they are cofinanced by Chinese institutions and carried out in NSR-relevant countries, they are to be analyzed in the context of the NSR. For each project identified, table 1 includes a short project description (column 2) and an estimation of the total annual cost per project (column 3) and per country (column 4).

Usually, projects are funded with loans from the state-owned Export-Import Bank of China (China EXIM Bank) that cover about 85% of the required capital, with the rest being financed by the local government or other local investors. Loans typically have a long maturity of about 20 years and low interest rates (at approximately 2%). Based on the average gross FDI inflows¹² for the actual project duration (column 5) and for the period under observation, i.e. between 2012 and mid-2016 (column 6), we estimated the listed projects' annual share in total gross FDI inflows for each observed SEE country (column 7).

The table shows that Chinese investments certainly cannot be ignored, since

their shares within total gross FDI inflows amount to as much as 8% in Serbia, 10% in Albania, 26% in Montenegro and in Romania, and 48% in Bosnia and Herzegovina. Interestingly, the projects identified in Bosnia and Herzegovina and in Romania, where the calculated figures are high, are mainly related to energy infrastructure rather than transport infrastructure. In the case of FYR Macedonia, the share of Chinese projects in total gross FDI inflows by far exceeds 100% (189%). This is attributable to the fact that the identified Chinese-financed projects were scheduled for two to three years only, hence we consider them one-off investments which largely exceed the size of other investments (outliers).

The spillovers of these projects to the respective local economies may, however, be limited considering the fact that Chinese investors very often employ their own workers and rely on local resources only to a limited extent (see section 1).

¹² Foreign direct investment: liabilities. Source: IMF International Financial Statistics.

Table 1

Economic relevance of major Chinese-funded projects in SEE

Country	Project description	Estimated annual cost per project assuming that usually 85% are financed by China (China EXIM Bank) ¹	Estimated total annual cost for Chinese-financed projects per country	Average gross FDI inflows over duration of project, where applicable	Average gross FDI inflows from 2012 to mid-2016 ²	Average share of Chinese-financed projects in total gross FDI inflows per project year ³	
		EUR				%	
Albania	· Section of Pan-European transport corridor VIII from Durrës in Albania to FYR Macedonia · Estimated duration: four years · Estimated cost: EUR 200 million	42,500,000	77,775,000	n.a.	770,967,774	10	
	· Industrial park in Durrës · Estimated duration: three years · Estimated cost: EUR 100 million	28,050,000					
	· Tirana International Airport: state-backed financial firm China Everbright Group bought 100% of the shares of airport operator · Approximate cost: EUR 85 million · Duration: ten years (scheduled to open in 2027)	7,225,000					
Bosnia and Herzegovina	· Expansion of a 450 MW coal power plant in Tuzla by a consortium of Gezhouba Group and the Guangdong Electric Power Design Institute (both China) · Duration: 2014–2018, approximately five years · Cost: EUR 668 million (varies according to sources)	113,560,000	428,768,333	250,000,000 (2014–2018)	261,290,320	48	
	· Banja Luka-Split motorway section, 93 km · Estimated duration: 2015–2019, approximately five years · Cost: EUR 600 million	127,500,000					210,000,000 (2015–2019)
	· Banovići thermal power plant, 350 MW · Duration: mid-2016–2018, approximately three years · Cost: EUR 400 million	113,333,333					200,000,000 (2016–2018)
	· Stanari thermal power plant, 300 MW · Duration: May 2013 to September 20, 2016, approximately four years · Cost: EUR 350 million	74,375,000					240,000,000 (2013–2016)
Bulgaria	· Car assembly plant in Lovech for low-cost vehicles for the EU market; joint venture between Litex Motors (Belgium) and Great Wall Motors (China) · Operational since February 2012. By January 2015, the company had a production output of 5,000 vehicles per year and by mid-2016, it had 14 dealerships in 12 cities. · Duration: approximately one year · Cost: EUR 100 million	100,000,000	170,250,000	1,430,000,000 (2012)	1,600,000,000	3	
	· Sofia West Airport (cargo airport): a state-owned Chinese construction company increased the airport's capital to extend the current 2.5 kilometer runway, build a cargo and passenger terminal and add two train stations to link up to the railroad to Greece · Duration: 2016–2019, approximately four years · Cost: EUR 165 million	41,250,000					1,600,000,000 (2016–2019)
	· Turning the Bulgarian Black Sea port of Burgas into a logistics hub for trading goods with CESEE partners · Duration: 2016–2021, approximately five years · Cost (investors: the Chinese firms Alibaba and Porter City Holding): EUR 20 million	4,000,000					1,600,000,000 (2016–2021)
	· New "economic city" near Plovdiv (investor: the Chinese firm Porter City Holding) to create a distribution hub for the transport of Chinese goods to Europe and the Middle East · Duration: 2016–2019, approximately four years · Cost (investor: the Chinese firm Porter City Holding): more than EUR 100 million	25,000,000					1,600,000,000 (2016–2019)

Source: Authors' compilation and calculations.

¹ For some of the projects, the duration had to be estimated. If applicable, this is indicated in the table. Similarly, project costs may vary across the different sources (indicated where applicable) and, where data are not available, project costs have been estimated by the authors based on comparable projects.

² Calculations based on IMF International Financial Statistics; average USD/EUR rate for the period from January 1, 2012 to June 30, 2016 (EUR 1=USD 1.24) converted from ECB Statistics.

³ Column 7: For Serbia, Bosnia and Herzegovina, and Montenegro, the figure was calculated based on the exact period of project implementation, since project start and end dates are known. For all other countries, the share is estimated on the basis of average gross FDI inflows between 2012 and mid-2016.

Economic relevance of major Chinese-funded projects in SEE

Country	Project description	Estimated annual cost per project assuming that usually 85% are financed by China (China EXIM Bank) ¹	Estimated total annual cost for Chinese-financed projects per country	Average gross FDI inflows over duration of project, where applicable	Average gross FDI inflows from 2012 to mid-2016 ²	Average share of Chinese-financed projects in total gross FDI inflows per project year ³
		EUR				%
FYR Macedonia	· Greenfield production plant for Chinese products (industry branch still unclear), estimated to create 1,400 jobs · Estimated duration: two years · Cost: EUR 140 million	59,500,000	393,805,000	n.a.	208,064,520	189
	· Pan-European transport corridor X: railway modernization · Estimated duration: 2.5 years · Estimated cost: EUR 500 million	170,000,000				
	· Motorway construction between Kičevo and Ohrid and between Miladinovci and Štip · Estimated duration: three years · Cost: EUR 580 million	164,305,000				
Montenegro	· Pan-European transport corridor XI: modernization of the section from Bar (Montenegro) to Boljare (Serbia) by the China Road and Bridge Corporation (CRBC) · Duration: May 2013 to May 2019, approximately four years · Cost: EUR 809.6 million	137,632,000	222,632,000	400,000,000 (2015–2019)	362,903,230	26
	· Renewal of the Montenegrin ship fleet · Duration: one year, 2012 · Cost: EUR 100 million	85,000,000		500,000,000 (2012)		
Romania	· Rovinari thermal power plant, 500 MW unit · Duration: 2015–2018/2019, approximately 3.5 years · Cost: EUR 1 billion	242,857,142	742,023,808	n.a.	2,806,451,610	26
	· Mintia-Deva thermal power plant, modernization · Estimated duration: three years · Cost: EUR 250 million	45,833,333				
	· Tarnița-Lăpușești hydro power plant expansion · Estimated duration: five years · Cost: EUR 1 billion	170,000,000				
	· Cernavodă nuclear power plant, units 3 and 4 · Duration: six years, start in 2016 · Cost: EUR 2 billion	283,333,333				
Serbia	· Belgrade-Budapest 370 km highspeed railway line · Duration: November 17, 2014 to June 2017, approximately three years. · Cost: EUR 800 million for the 184 km Serbian stretch alone (total cost: EUR 1.5 billion)	170,000,000	481,666,666	1,760,000,000 (2014–2017)	1,416,129,030	8
	· Pupin Bridge, constructed under the responsibility of the China Road and Bridge Corporation (CRBC) · Duration: April 2011 to December 2014, approximately four years · Estimated cost: EUR 170 million in total (varies according to sources)	48,166,666		1,430,000,000 (2011–2014)		
	· Kostolac thermal power plant, 350 MW unit · Duration: December 14, 2014 to December 12, 2019, five years · Estimated cost: EUR 650 million (varies according to sources)	110,500,000		1,520,000,000 (2014–2019)		
	· Pan-European transport corridor XI: modernization of the sections leading to Montenegro · Duration: May 2015 to May 2019, four years · Cost: EUR 900 million	153,000,000		1,500,000,000 (2015–2019)		

Source: Authors' compilation and calculations.

¹ For some of the projects, the duration had to be estimated. If applicable, this is indicated in the table. Similarly, project costs may vary across the different sources (indicated where applicable) and, where data are not available, project costs have been estimated by the authors based on comparable projects.

² Calculations based on IMF International Financial Statistics; average USD/EUR rate for the period from January 1, 2012 to June 30, 2016 (EUR 1=USD 1.24) converted from ECB Statistics.

³ Column 7: For Serbia, Bosnia and Herzegovina, and Montenegro, the figure was calculated based on the exact period of project implementation, since project start and end dates are known. For all other countries, the share is estimated on the basis of average gross FDI inflows between 2012 and mid-2016.

In general, it is still too early to assess the impact of these investments on the local economies given that the majority of projects have not yet been completed. At a later stage, the effect may have to be measured in qualitative rather than in quantitative terms. Also, in addition to the projects listed in table 1, many projects are currently being planned, which means that the figures calculated here will presumably increase considerably. For instance, Albania and Montenegro have voiced interest in participating in the future Adriatic-Baltic-Black Sea Seaport Cooperation, initiated by the 16+1 framework. This initiative will involve ports on the Adriatic, Baltic and Black Seas as well as along inland waterways and aims at widening the scope of practical cooperation between China and CESEE, promoting sustainable development and creating more synergies between OBOR and other development strategies of the CEE countries and the EU's Trans-European Transport Network (Secretariat for Cooperation between China and Central and Eastern European Countries (China-CEEC), 2016).

4 Summary and conclusions

In times of political uncertainty and rising nationalism in Europe, particularly those SEE countries that still have a long way to go before they join the EU will continue to look for quicker and easier financing alternatives before EU accession. Welcoming Chinese investments is part of this approach. Through the New Silk Road (NSR) or One Belt, One Road (OBOR) initiative, China and Europe are increasingly being linked together through the building or modernization of infrastructural trajectories which include rail, road, port, airport, pipeline, energy and communication infrastructure and logistics. With extensive financial support and experience being injected from China, roads, railroads and ports are being built or modernized in SEE in little time and without being held up by bureaucratic and legal obstacles; not to mention the fact that certain competition, tendering and procurement procedures as well as national safety and labor laws seem to be partly bypassed. In the future, more research will be needed to analyze these developments and to look deeper into the extent to which EU trade laws, tendering procedures and national regulations have been ignored so far.

This study lists the most important Chinese-financed projects in SEE and shows that the economic weight of these investments in the receiving countries cannot be ignored. In fact, the shares of Chinese-financed projects within total annual gross FDI inflows are as high as 8% in Serbia, 10% in Albania, 26% in Montenegro and Romania and even 48% in Bosnia and Herzegovina. Since Chinese investors often employ their own workers and preferably rely on their own resources, the direct spillovers of these projects to the local economies may be limited.

Nevertheless, we will be able to witness tangible effects of the NSR initiative for the SEE region in the near future: The modernization of rail and road infrastructures alone helps speed up the transport of persons and goods, which obviously not only benefits the NSR but also the SEE economies. SEE's participation in the NSR initiative will probably stimulate the region's economic growth and may even contribute to overcoming its traditional peripheral position in Europe. In fact, strengthened economic cooperation can only benefit all countries involved. From an EU perspective, access to EU funding for candidate and potential candidate countries will have to be improved so that investments from China are not considered attractive merely because financing

alternatives are lacking. Moreover, the EU will need to work together with SEE and China to effectively use SEE's potential in a way to fulfill common interests and deepen EU-China relations. The OBOR initiative, for instance, goes beyond mere economic investments and translates into a framework for “soft power” not least through the 16+1 initiative's wide range of activities.

This becomes even more important in a context where the U.S. administration has taken a protectionist stance on U.S.-Chinese trade relations and left open the future of trade negotiations with the EU. China and Europe now have the possibility to redefine their partnership and move closer together. In fact, the EU is China's biggest trading partner and China is the EU's second most important trading partner after the U.S.A. China and the EU are currently speeding up their negotiations on trade liberalization, given that European investors still face major barriers on Chinese markets. Once the conditions for European investors in China improve, Chinese FDI in Europe will also be welcomed more openly. From this point of view, the further enhancement of the NSR may truly become a turning point in China-EU trade and political relations.

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Stephan Barisitz,
Mathias Lahnsteiner

Ukraine has been undergoing a reform process, and the banking sector is certainly among the areas that have seen remarkable progress. The authorities started to tackle related-party lending (a long-standing structural impediment), resolved many under-capitalized banks and managed to restore a degree of confidence in the sector, as witnessed by the stabilization of deposits. As part of the banking sector clean-up, the country’s largest credit institution was nationalized. This step contributed to considerable changes in the ownership structure, with the share of the state in total assets rising to about 50%. After the severe recession of 2014–2015, macroeconomic stabilization achieved with international support in 2016, if sustained, could pave the way for a resumption of lending. Yet, nonperforming loans (NPLs) have skyrocketed, credit risk is still very high, related-party lending is still a problem, resistance to reform remains stubborn, and economic recovery fragile, subject to political uncertainty. Further sound economic policies, progress with structural reforms (in particular with regard to the rule of law and corruption) and efforts to reduce NPLs appear essential to make a sustained banking recovery possible.

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What drives Austrian banking subsidiaries’ return on equity in CESEE and how does it compare to their cost of equity?

Manuel Gruber,
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Paul Stockert

This short study analyzes the relative profitability of Austrian banking subsidiaries in Central, Eastern and Southeastern Europe (CESEE) using two separate approaches. First, we address the subject from an accounting point of view based on a DuPont analysis. We dissect the return on (the book value of average) equity (ROE) to highlight how profit and loss drivers as well as financial leverage affected this profitability metric from 2004 to 2016. This prepares the ground for our second part, where we switch to a market perspective for the period from 2006 to 2016 to deduce the cost of (average) equity (COE) of these subsidiaries from the Capital Asset Pricing Model (CAPM) in order to compare the model-based profits that would be expected (i.e. demanded) by investors to those that have actually been realized. The analysis is complemented by a similar exercise for a peer group consisting of listed CESEE banks.

We find that the ROE dropped substantially during the global financial crisis and only started to recover in 2016. An accounting-based DuPont analysis reveals that – over the entire analyzed time span – this was primarily caused by a rise in risk costs at the onset of the global financial crisis and their strong improvement in 2016, as well as a continuous reduction of financial leverage. The negative contribution of a lower operating income margin and positive effects of an improved cost-income ratio roughly canceled each other out. We also provide a (cautious) medium-term outlook for the future development of the ROE of Austrian banking subsidiaries in CESEE, which is likely to depend on the balance between the weakened net interest income and reduced credit risk costs (that still have to prove their sustainability). When switching to a market perspective and the question of the subsidiaries’ COE,

we find that the latter is substantially lower than often assumed, but still too high to be fully compensated by realized profits (except in 2016). In aggregate, other CESEE peer banks fared better, which was mostly due to their higher profitability. These results call for continued and persistent efforts to further improve Austrian banking subsidiaries' risk-return profile in CESEE.

Published in *Financial Stability Report 33*.

Event wrap-ups

The OeNB's 81st East Jour Fixe: Nonperforming loans in CESEE – macro- economic dimension and resolution strategies¹

Compiled by
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On September 18, 2017, the Oesterreichische Nationalbank (OeNB) hosted its 81st East Jour Fixe. Organized at irregular intervals since 1991 by the OeNB's Foreign Research Division, the East Jour Fixe provides a platform for national and international experts to discuss topics related to Central, Eastern and Southeastern Europe (CESEE). The 81st East Jour Fixe discussed nonperforming loans (NPLs), a highly topical issue which has moved center stage in the European policy discussion after the global financial crisis.

In her introductory statement, *Doris Ritzberger-Grünwald*, Director of the OeNB's Economic Analysis and Research Department, pointed out that the debate on NPLs involves many major institutions – such as the Bank for International Settlements (BIS), the European Bank for Reconstruction and Development (EBRD), the European Central Bank (ECB), the European Union (EU) and the International Monetary Fund (IMF) – as well as regulators at the national level and the banking industry. Many related initiatives, such as the Vienna Initiative 2.0, have been launched since the crisis. Ritzberger-Grünwald emphasized that the OeNB's Foreign Research Division has also contributed importantly to the ongoing debate by producing various research papers and country studies. Turning to the dimension of NPLs, she noted that Cyprus, Greece, Italy, Ireland as well as Portugal currently post the highest NPL ratios in the euro area. While the situation looks more favorable in most CESEE countries, some of them (e.g. Bulgaria, Croatia and Romania) still record elevated NPL ratios. Still, NPL ratios have decreased in most CESEE countries since the crisis. Regarding the economic impact of NPLs, Ritzberger-Grünwald stressed that bad credit quality may be both a stumbling block to economic development and a threat to financial stability. In this respect, NPLs may influence individual country ratings, as has been the case in various instances recently. She also highlighted that there is still a lack of comparable data on NPLs, which would be needed to effectively tackle the problem.

Session 1, chaired by *Doris Ritzberger-Grünwald*, focused on definitions of NPLs, NPL developments and macroprudential responses to NPLs. Stephan Barisitz, Senior Economist at the OeNB's Foreign Research Division, discussed the problems related to comparable analytical NPL definitions. According to Barisitz, the quantitative NPL criterion used by the IMF – classifying loans as NPLs if principal or interest payments are 90 days or more overdue (“90 days+”) – should be extended by additional qualitative criteria. He concluded that the CESEE countries largely comply with the usage of primary elements of classification (such as the “90 days+” rule) for defining NPLs but the treatment of secondary elements, e.g. the treatment of collateralized loans, in defining NPLs still differs across countries. However, national NPL definitions are slowly converging at least in the CESEE countries and in the euro area, thereby increasing the usefulness of NPL data for banks and policymakers.

¹ The presentations and workshop program are available at www.oenb.at/en/Monetary-Policy/Research/workshops.html.

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Reiner Martin, Deputy Head of the ECB's Macro-Financial Linkages Division, stated in his presentation that the resolution of NPLs in the euro area has been slow, in particular in countries with high NPL levels. He explained that NPLs negatively affect banks' profitability and capital as well as economic growth in general. Moreover, high NPL levels are also an issue for the entire euro area due to cross-border spillovers, e.g. via bank lending or trade. Furthermore, NPLs can have a negative impact on monetary policy transmission. Martin raised the question why the market has failed to solve the NPL problem and gave several reasons such as asymmetric information or an oligopsonic market structure. Subsequently, he discussed the advantages and disadvantages of a wide range of policy responses available to tackle the stock of NPLs, ranging from internal workouts, asset protection schemes, securitization and asset management companies to direct sales. Martin concluded by emphasizing that structural reforms, e.g. the compilation of standardized NPL data, are critical to resolving the NPL problem in the euro area.

Miquel Dijkman, Coordinator at the Financial Sector Advisory Center (FinSAC) of the World Bank Group, focused on recent developments and the resolution of NPLs in CESEE. He found that the stock of NPLs in CESEE has decreased since 2015. Dijkman argued that financial sector regulation in CESEE has become more proactive as policymakers realized that banks will not be able to cope with the NPL problem on their own. Furthermore, banking regulation in CESEE is also supported by regulatory changes in the EU, e.g. by the ECB's "Guidance to banks on non-performing loans." Regarding the more practical work of the FinSAC, he highlighted recent technical assistance projects in Albania, Slovenia and Ukraine. These projects cover e.g. the operationalization of the above-mentioned Guidance with regard to small and medium-sized enterprises (SMEs) in Slovenia, the development of a debt resolution program in cooperation with the Albanian authorities or the drafting of a law for multi-creditor debt restructuring in Ukraine. Summing up, Dijkman mentioned three lessons learnt from the World Bank's experience with tackling NPLs: first, the urgency of addressing the challenges related to structurally increasing NPLs are usually underestimated; second, NPLs are complex and call for a comprehensive approach; and third, an extensive restructuring of corporate borrowers is needed to effectively resolve the problem of NPLs.

In the ensuing discussion, participants objected to the notion that the problem of NPLs is mainly attributable to loans that should not have been granted in the first place and that result from bad business decisions. Therefore, it would be challenging to solve this issue *ex ante*, via regulatory measures, rather than letting the government step in *ex post*. One remark touched the issue of moral hazard that arises if banks know that the government will assume responsibility and therefore grant loans that actually should not be granted.

Furthermore, the question arose why the secondary market works better in the U.S.A. than in the EU. Several reasons were given for this phenomenon, e.g. the better comparability of NPL data available in the U.S. secondary market, the different treatment of NPLs in accounting and the fact that banks can exit the market more easily in the U.S.A. Finally, the question was raised why Romania had been able to successfully reduce its stock of NPLs. Apparently, in this specific case, peer pressure on banks largely contributed to the positive NPL developments.

Session 2 discussed the determinants and economic impact of NPLs both from a microeconomic and a macroeconomic perspective and was chaired by

Helene Schuberth, Head of the OeNB's Foreign Research Division. *Elisabeth Beckmann*, Senior Economist at the OeNB's Foreign Research Division, presented joint work with *Helmut Stix*, Senior Expert at the OeNB's Economic Studies Division, addressing the following questions: how do household, loan and bank characteristics affect households' repayment difficulties and how do these three dimensions interact? For their empirical analysis, Beckmann used data from the OeNB Euro Survey and merged these survey data with variables measuring bank proximity, bank concentration and credit supply. She concluded that household, loan and bank characteristics can indeed explain repayment difficulties. Accordingly, income and income shocks are the most important determinants of households' NPLs but bank relations and bank proximity were found to also affect the probability of arrears. Furthermore, Beckmann explained that loans issued prior to 2008 are more frequently in arrears and that exchange rate shocks increase the probability of arrears.

Peter Grasmann, Head of Unit, EU/Euro area financial system, DG for Financial Stability, Financial Services and Capital Markets Union of the European Commission, provided a short overview of the current situation concerning NPLs in the EU. He first discussed the main causes of the emergence of NPLs, pointing out that high and rising NPL levels are often country-, sector- or lender-specific. Grasmann discussed the main areas where reforms would be necessary to tackle the problem of NPLs and highlighted that the resolution of NPLs always implies an allocation of losses. He also pointed to negative spillovers of NPLs via the banking sector or economic developments, even for countries that do not have high NPL ratios. Despite contagion risks, many areas in need of reforms, e.g. insolvency regimes, fall under the responsibility of individual countries. Turning to EU Member States' achievements in bringing down NPL stocks, he explained that the situation has improved somewhat, driven by economic recovery, proactive policies by banks and policy measures taken by the Member States, the ECB's Single Supervisory Mechanism (SSM) and the European Commission. The Ecofin Council e.g. adopted the EU action plan on NPLs in July 2017. This ambitious plan comprises a number of actions to be taken by various public stakeholders in Europe.

Finally, *Tomislav Ridzak*, Director of the Financial Stability Department at the Croatian National Bank, talked about the case of Agrokor and its impact on Croatia's banking system and economy. Following a brief presentation of the overall economic development in Croatia – the economy continues to grow, particularly the tourism sector, and the use of EU funds is increasing – he explained that the NPL ratio has increased considerably since the crisis (peaking in 2015 at 17%). However, loan quality in Croatia has been improving since 2015, and the NPL ratio currently stands at 13.2%. Turning to Agrokor, Ridzak argued that the financial problems in the Agrokor Group may have a stronger adverse effect on economic growth than currently projected but that stronger-than-expected growth in the exports of tourist services will compensate for such an effect. By way of conclusion, he pointed out that the main risks to Croatia's GDP growth projections are balanced over the forecast horizon of 2017 and 2018.

The subsequent discussion touched on the specific problems of the highly indebted banking sector in Cyprus. Against the background of the country's very large banking sector (in relation to GDP) and the high financing needs, bailing out the banking sector was not feasible for the state – a situation which was comparable to that of Iceland. With reference to the role of Russia in the Cypriot banking

sector, participants explained that Russians rather acted as depositors than borrowers. With regard to Croatia, Ridzak clarified that the impact of Agrokor on NPLs should already have subsided. Furthermore, Ridzak highlighted that most of Agrokor's debt is foreign debt originating from foreign banks or foreign investors.

Session 3, chaired by *Michael Würz*, Head of the OeNB's Financial Stability and Macroprudential Supervision Division, focused on progress in NPL resolution. *Ines Rocha*, Associate Director of the Financial Institutions Department at the European Bank for Reconstruction and Development (EBRD), emphasized the work of the Vienna Initiative 2.0, recommending the Vienna Initiative's website, which provides in-depth information on NPLs. Rocha gave an overview of NPL dynamics in the CESEE region and presented a snapshot of developments in the NPL market in CESEE, pointing to high NPL volumes in Romania up to 2016 and increasing NPL volumes in Croatia since mid-2016. She elaborated on the different layers of intervention under the Vienna Initiative 2.0 and its NPL action plan. In general, the Vienna Initiative 2.0 is principally concerned with an impediment assessment of NPLs, a review of out-of-court restructuring, considerations of reforms to civil procedure and insolvency law, educating judges on the topic of loan restructuring, and knowledge sharing. When summarizing best practices with regard to NPL resolution, Rocha highlighted the need for clarity on bank secrecy rules, adequate provisioning policies, accurate collateral valuation, investor-friendly licensing requirements, the removal of tax disincentives and the training of judges.

Imre Balogh, CEO and Executive Director at DUTB, Slovenia's bank asset management company, discussed Slovenia's experience with NPL resolution. Putting NPLs into the context of Slovenia's boom and bust story, Balogh highlighted, in particular, excessive credit growth and the build-up of corporate indebtedness in the period before 2008. After 2008, public debt in Slovenia increased and NPLs rose. He went on to present comprehensive facts and figures on Slovenia's bank rehabilitation process, which involved i.a. state capital injections and the establishment of DUTB, which is fully owned by the government. He pointed out that as of November 2013, corporate exposures transferred to, or merged into, DUTB consisted of 60% of NPLs of domestic corporates. After providing some details on DUTB's portfolio structure, Balogh shared his views on corporate governance issues at DUTB and highlighted the importance of credibility for his institution.

Subsequently, *Anete Daukste*, Associate Director at KPMG AG's Global Portfolio Solutions Group, dealt specifically with the question how markets for NPL sales have developed in CESEE. She pointed out that Romania has managed to reduce its NPL volume most significantly, as banks successfully have sold sizeable loan portfolios. She went more into detail by pointing to some key transactions relevant for Romania. In her view, one reason for the vivid NPL market activity in Romania has been peer pressure. While NPL volumes are largest in Poland, transactions primarily took the form of industrialized small-scale NPL sales. It is worth noting that more recently secondary NPL sales have increasingly gained importance. Greece and Ukraine are generally seen as interesting new markets. Daukste also presented an overview of how supportive KPMG considers the NPL sales infrastructure in CESEE and elaborated on different strategic options of balance sheet optimization.

In the ensuing discussion, one topic of interest was the statistical treatment of NPLs after banks sell them to an investor. Experts explained that NPLs exit banks' balance sheets once they are sold and are not recorded as distressed assets at the buying institution. However, irrespective of the statistical treatment of NPLs, the fact remains that the corresponding delinquent borrowers are still present in the economy. Another issue under discussion was that a frequent impediment for more active NPL markets in smaller countries is the size of NPLs in absolute terms, as due diligence costs in preparation of NPL transactions are high. Moreover, difficulties in selling cross-border portfolios stem from legal differences between various jurisdictions.

In his concluding remarks, *Thomas Richardson*, Director at the Joint Vienna Institute, recalled the crucial importance of tackling the problem of NPLs: NPLs have a particularly strong adverse economic impact on SMEs because they largely depend on bank financing and, moreover, are very employment intensive. Furthermore, a high stock of NPLs in the banking sector can have negative repercussions on the monetary transmission mechanism.

The main takeaways of the OeNB's 81st East Jour Fixe are the following: efficient oversight and accounting standards are important for resolving the problem of NPLs; the valuation of collateral needs to be improved; the judicial system is crucial for bringing down NPL stocks and requires well-qualified staff; more efforts are needed to gain access to better and more comparable data; and finally, asset management companies seem to be an efficient option for dealing with NPLs as they can make use of economies of scale and have a certain bargaining power.

22nd Global Economy Lecture: David Dorn on “The rise of the machines – how computers have changed work”

Compiled by
Maria Silgoner

On October 11, 2017, the Oesterreichische Nationalbank (OeNB) hosted the 22nd Global Economy Lecture¹, which was delivered by David Dorn, Professor of International Trade and Labor Markets at the Department of Economics, University of Zurich. Professor Dorn’s research covers the interlinkages between trade, technology and the labor market. His lecture investigated how rapid technological progress and automation have fundamentally affected the patterns of employment and unemployment levels, and how they have contributed to income inequality.

Professor Dorn started from the observation that the labor share, i.e. the fraction of aggregate income obtained through labor, has been declining over the past decades in developed countries. This trend is frequently interpreted as “the end of labor,” a result of rapid technological change with cheap robots increasingly substituting human labor. Professor Dorn mitigated these concerns by addressing the issue from several angles:

- While technological change is certainly rapid today, its speed is not without historical precedents, and it does not automatically translate into fast productivity growth. Actually, growth of real GDP per capita has declined steadily over the past decades. This reflects Robert Solow’s (1987) famous statement, “You can see the computer age everywhere but in the productivity statistics.”²
- Based on the example of spinning techniques in the textile industry, Dorn illustrated that several historical automation episodes had caused concerns about huge job losses. However, such technological innovations never led to massive unemployment; instead, they fundamentally changed the structure of the labor market. New jobs emerged as a result of both the new technologies (e.g. machine engineering and maintenance tasks) and declining production costs that freed financial resources for other commodities.
- Professor Dorn put the substitutability of labor by machines into perspective by emphasizing that computers are good at routine jobs, but struggle with non-routine tasks and are bad in fine motor skills, visual recognition and social interaction.

This is why the last stages of production still largely rely on human labor today. Even if jobs are lost through automation, adjustment to this circumstance can take various forms that do not necessarily imply unemployment. For example, young people may increasingly target jobs with high employment prospects, while older workers would automatically drop out of the labor market in weaker segments as they retire. Policymakers should thus focus on equipping future generations with the necessary skills in problem solving, interpersonal relations and information technologies.

According to Professor Dorn, we should therefore not fear massive job losses because of automation. However, he sees great challenges in the distributional effects of technological change. While routine occupations may suffer, demand for skilled non-routine jobs (managers, engineers, software developers) increases.

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

² *Solow, R. 1987. We’d better watch out. New York Times Book Review. July 12. 36.*

Low-skilled non-routine tasks, such as cleaning, should remain broadly unaffected. As a result, we already observe a polarization of employment and wage dynamics, as it is actually the middle-skilled (and middle-paid) segment that has the poorest prospects. Furthermore, adverse effects may be concentrated on the eldest age cohort. Unfortunately, the effectiveness of retraining measures for older workers have turned out to be rather limited.

For a written version of Professor Dorn's contribution, see Dorn, D. 2015. The Rise of Machines – How Computers Have Changed Work. UBS Center Public Paper no. 4.

Statistical annex

Statistical annex

This section provides tables detailing selected economic indicators for Albania, Bosnia and Herzegovina, FYR Macedonia, Kosovo, Montenegro, Serbia and Ukraine, i.e. CESEE countries not covered in the “Recent economic developments and outlook” section.

Conventions used

.. = data not available

Discrepancies may arise from rounding.

Table 1

Gross domestic product

	2010	2011	2012	2013	2014	2015	2016
	<i>Annual real change in %</i>						
Albania	3.7	2.5	1.4	1.0	1.8	2.2	3.4
Bosnia and Herzegovina	0.8	0.9	-0.9	2.4	1.1	3.1	3.2
Kosovo	3.3	4.4	2.8	3.4	1.2	4.1	3.4
FYR Macedonia	3.4	2.3	-0.5	2.9	3.6	3.8	2.4
Montenegro	2.5	3.2	-2.7	3.5	1.8	3.4	2.5
Serbia	0.6	1.4	-1.0	2.6	-1.8	0.8	2.8
Ukraine	4.1	5.4	0.2	0.0	-6.6	-9.8	2.3

Source: wiiv.

Table 2

Industrial production

	2010	2011	2012	2013	2014	2015	2016
	<i>Annual real change in %</i>						
Albania	36.2	19.0	15.7	28.2	1.5	-2.1	-16.6
Bosnia and Herzegovina	4.3	2.4	-3.9	5.2	0.2	3.1	4.4
Kosovo ¹	1.8	-5.7	14.9	6.5	-1.3	5.0	3.5
FYR Macedonia	-4.9	6.9	-2.7	3.2	4.8	4.9	3.4
Montenegro	17.5	-10.2	-7.1	10.6	-11.4	7.9	-3.7
Serbia	1.2	2.5	-2.2	5.4	-6.4	8.3	4.7
Ukraine	11.2	8.0	-0.7	-4.3	-10.1	-13.0	2.8

Source: wiiv.

¹ According to gross value added data.

Table 3

Average gross wages – total economy

	2010	2011	2012	2013	2014	2015	2016
	<i>Annual change in %</i>						
Albania	-3.6	4.9	2.9	-3.2	25.3	2.8	-2.1
Bosnia and Herzegovina	1.1	4.4	1.5	0.1	-0.1	0.0	0.9
Kosovo ¹	16.2	21.7	1.7	0.6	16.9	7.2	3.0
FYR Macedonia	1.0	1.2	0.2	1.2	1.0	2.7	2.0
Montenegro	11.2	1.0	0.7	-0.1	-0.4	0.3	3.6
Serbia	7.5	11.1	8.9	5.7	1.2	-0.5	3.8
Ukraine	17.5	17.6	14.9	7.9	6.6	20.5	23.6

Source: wiiw.

¹ Average net monthly wages.

Table 4

Unemployment rate¹

	2010	2011	2012	2013	2014	2015	2016
	<i>%</i>						
Albania	14.0	14.0	13.4	15.9	17.5	17.1	15.2
Bosnia and Herzegovina	27.2	27.6	28.0	27.5	27.5	27.7	25.4
Kosovo	45.1	44.8	30.9	30.0	35.3	32.9	27.5
FYR Macedonia	32.0	31.4	31.0	29.0	28.0	26.1	23.7
Montenegro	19.6	19.7	19.7	19.5	18.0	17.6	17.4
Serbia	19.2	23.0	23.9	22.1	18.9	17.7	15.3
Ukraine	8.1	7.9	7.5	7.2	9.3	9.1	9.3

Source: wiiw.

¹ Labor force survey, period average.

Table 5

Industrial producer price index

	2010	2011	2012	2013	2014	2015	2016
	<i>Period average, annual change in %</i>						
Albania	0.3	2.6	1.1	-0.4	-0.5	-2.1	-1.6
Bosnia and Herzegovina	1.0	5.5	0.4	-1.8	-0.5	0.6	-2.1
Kosovo ¹	4.1	4.6	1.9	2.3	1.6	2.7	-0.1
FYR Macedonia	8.7	11.9	1.4	-1.4	-1.9	-3.9	-2.4
Montenegro ¹	-0.9	3.2	1.9	1.6	0.1	0.3	-0.1
Serbia	12.7	12.7	6.8	2.7	1.3	1.0	0.0
Ukraine	20.9	19.0	3.7	-0.1	17.1	36.0	20.5

Source: wiiw.

¹ NACE 1 classification.

Table 6

Consumer price index

	2010	2011	2012	2013	2014	2015	2016
	<i>Period average, annual change in %</i>						
Albania	3.6	3.4	2.0	1.9	1.6	1.9	1.3
Bosnia and Herzegovina	2.1	3.7	2.1	-0.1	-0.9	-1.0	-1.1
Kosovo	3.5	7.3	2.5	1.8	0.4	-0.5	0.3
FYR Macedonia	1.6	3.9	3.3	2.8	-0.3	-0.3	-0.2
Montenegro	0.5	3.3	4.0	1.8	-0.5	1.4	0.1
Serbia	6.1	11.1	7.3	7.7	2.1	1.4	1.1
Ukraine	9.4	8.0	0.6	-0.3	12.1	48.7	13.9

Source: wiiv.

Table 7

Trade balance

	2010	2011	2012	2013	2014	2015	2016
	<i>% of GDP</i>						
Albania	-25.5	-27.1	-23.2	-20.4	-22.2	-22.5	-24.3
Bosnia and Herzegovina	-29.3	-30.8	-30.5	-27.4	-29.7	-26.0	-24.6
Kosovo	-39.6	-42.5	-40.5	-37.5	-37.0	-36.3	-38.3
FYR Macedonia	-21.6	-25.2	-26.5	-22.9	-21.7	-20.2	-18.8
Montenegro	-40.7	-39.9	-43.5	-39.5	-39.8	-40.4	-43.9
Serbia	-15.9	-16.4	-17.8	-12.1	-12.3	-11.9	-10.2
Ukraine	-6.8	-10.6	-12.0	-11.6	-5.3	-3.8	-7.4

Source: wiiv.

Table 8

Current account balance

	2010	2011	2012	2013	2014	2015	2016
	<i>% of GDP</i>						
Albania	-11.3	-13.2	-10.2	-9.3	-10.8	-8.6	-7.6
Bosnia and Herzegovina	-6.0	-9.5	-8.7	-5.3	-7.3	-5.5	-4.5
Kosovo	-11.7	-12.7	-5.8	-3.4	-6.9	-8.6	-9.2
FYR Macedonia	-2.0	-2.5	-3.2	-1.6	-0.5	-2.1	-3.1
Montenegro	-22.9	-17.7	-18.7	-14.5	-15.2	-13.3	-19.0
Serbia	-6.8	-10.9	-11.6	-6.1	-6.0	-4.7	-4.0
Ukraine	-2.1	-6.0	-7.9	-8.7	-3.4	-0.2	-3.7

Source: wiiv.

Table 9

Net FDI inflows

	2010	2011	2012	2013	2014	2015	2016
	<i>% of GDP</i>						
Albania	8.8	6.8	6.9	9.8	8.7	8.7	8.8
Bosnia and Herzegovina	2.4	2.7	2.3	1.5	2.9	1.7	1.7
Kosovo	8.3	8.2	4.5	5.3	2.7	5.3	3.6
FYR Macedonia	2.3	4.6	1.5	3.1	2.4	2.4	3.6
Montenegro	18.4	12.3	15.2	10.0	10.8	17.4	5.4
Serbia	4.3	10.6	3.2	4.5	4.5	6.3	6.1
Ukraine	4.6	4.3	4.6	2.4	0.3	3.3	3.5

Source: wiiw.

Table 10

Reserve assets excluding gold

	2010	2011	2012	2013	2014	2015	2016
	<i>End of period, % of GDP</i>						
Albania	20.6	20.0	19.9	20.5	21.5	27.7	26.9
Bosnia and Herzegovina	25.2	23.9	24.2	25.8	28.0	29.5	31.9
Kosovo	14.4	11.9	14.4	13.0	11.6	12.6	13.9
FYR Macedonia	20.9	23.9	25.3	22.1	25.9	22.6	24.0
Montenegro	13.3	9.3	10.9	12.6	15.8	18.6	21.3
Serbia	32.1	34.4	32.5	31.3	28.1	29.3	28.0
Ukraine	23.6	19.4	12.1	9.5	5.4	13.8	16.6

Source: wiiw.

Table 11

Gross external debt

	2010	2011	2012	2013	2014	2015	2016
	<i>End of period, % of GDP</i>						
Albania	45.6	53.5	57.5	66.2	69.5	74.7	73.3
Bosnia and Herzegovina	51.6	48.9	52.2	52.2	51.9	53.4	54.8
Kosovo	31.2	29.7	30.0	30.2	31.2	33.3	34.2
FYR Macedonia	57.8	64.2	68.2	64.0	70.0	70.1	73.5
Montenegro ¹	29.2	32.6	40.7	42.6	45.2	54.0	53.1
Serbia	79.0	72.2	80.9	74.8	77.1	78.3	77.8
Ukraine	83.1	80.5	71.9	71.7	102.6	132.4	128.9

Source: wiiw.

¹ Gross external public debt.

Table 12

General government balance

	2010	2011	2012	2013	2014	2015	2016
	% of GDP						
Albania	-3.1	-3.5	-3.4	-5.0	-5.2	-4.1	-1.8
Bosnia and Herzegovina	-2.4	-1.2	-2.0	-2.2	-2.0	0.7	-1.0
Kosovo	-1.8	-1.1	-1.2	-2.5	-2.9	1.6	0.2
FYR Macedonia	-2.4	-2.6	-3.9	-4.0	-4.2	-3.4	-2.0
Montenegro	-4.8	-3.7	-6.5	-6.0	-3.0	-8.0	-3.6
Serbia	-4.6	-4.8	-6.8	-5.5	-6.6	-3.7	-1.3
Ukraine	-5.8	-1.7	-3.5	-4.2	-4.5	-1.6	-2.3

Source: wiiw.

Table 13

Gross general government debt

	2010	2011	2012	2013	2014	2015	2016
	% of GDP						
Albania	57.7	59.4	62.1	65.6	70.1	73.1	72.4
Bosnia and Herzegovina	39.3	40.8	44.3	43.5	44.0	45.0	45.2
Kosovo	5.9	5.3	8.1	8.9	10.5	12.9	14.2
FYR Macedonia	34.6	32.0	38.3	40.2	45.7	46.6	47.7
Montenegro	40.7	45.4	53.4	55.7	56.2	62.8	63.7
Serbia	41.8	45.4	56.2	59.6	70.4	74.6	74.0
Ukraine	38.6	35.1	35.3	38.4	69.4	79.1	81.0

Source: wiiw.

Table 14

Broad money

	2010	2011	2012	2013	2014	2015	2016
	End of period, annual nominal change in %						
Albania	12.5	9.2	5.0	2.3	4.0	1.8	3.9
Bosnia and Herzegovina	7.2	5.8	3.4	7.9	7.3	8.0	8.3
Kosovo	12.9	8.8	7.1	17.3	-4.2	6.5	8.4
FYR Macedonia	8.4	7.5	0.5	0.2	7.2	7.6	6.1
Montenegro	12.2	9.7	4.4	5.3	10.5	6.8	6.1
Serbia	3.4	2.1	8.4	4.8	9.1	10.9	9.5
Ukraine	12.9	10.3	9.4	4.6	7.6	6.6	11.6

Source: wiiw, European Commission.

Table 15

Key interest rate

	2010	2011	2012	2013	2014	2015	2016
	<i>End of period, %</i>						
Albania (one-week repo rate)	5.00	4.75	4.00	3.00	2.25	1.75	1.25
Bosnia and Herzegovina ¹	..	..	..	..	..	..	..
Kosovo ²	..	..	..	..	..	..	..
FYR Macedonia (CB bills) ³	4.11	4.00	3.73	3.25	3.25	3.25	3.75
Montenegro ²	..	..	..	..	..	..	..
Serbia (two-week repo rate)	11.50	9.75	11.25	9.50	8.00	4.50	4.00
Ukraine (discount rate)	7.75	7.75	7.50	6.50	14.00	22.00	14.00

Source: wiiv.

¹ Currency board.² Unilateral euroization.³ Monthly weighted average interest rate on central bank (CB) bills auctions (28 days).

Table 16

Exchange rate

	2010	2011	2012	2013	2014	2015	2016
	<i>Period average, national currency per EUR</i>						
Albania	137.79	140.33	139.04	140.26	139.97	139.74	137.36
Bosnia and Herzegovina	1.96	1.96	1.96	1.96	1.96	1.96	1.96
Kosovo	..	..	..	..	..	..	..
FYR Macedonia	61.52	61.53	61.53	61.58	61.62	61.61	61.60
Montenegro	..	..	..	..	..	..	..
Serbia	103.04	101.95	113.13	113.14	117.31	120.76	123.10
Ukraine	10.53	11.09	10.27	10.61	15.72	24.23	28.29

Source: wiiv.