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Market Report

# Unsecured Lending in Central and Southeast Europe

Mario Holzner (coordinator), Amat Adarov, Richard Grieveson, Olga Pindyuk and Hermine Vidovic

The Vienna Institute for International Economic Studies
Wiener Institut für Internationale Wirtschaftsvergleiche

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MARIO HOLZNER (COORDINATOR)
AMAT ADAROV
RICHARD GRIEVESON
OLGA PINDYUK
HERMINE VIDOVIC

Mario Holzner is Deputy Director at The Vienna Institute for International Economic Studies (wiiw). Amat Adarov, Richard Grieveson, Olga Pindyuk and Hermine Vidovic are Economists at wiiw.

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# Abstract

Addiko Bank's South Eastern Europe (SEE) region (Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia) is in the midst of a fairly pronounced cyclical upswing, helped by catch-up effects owing to a generally very poor post-crisis growth performance. We believe however that the peak has already passed for most countries, with a weakening of external conditions (especially in the euro area) presenting big headwinds to growth. Growth rates should remain positive in the medium term, in the range of around 2.5%-4%. Croatia will be the weakest performer, with Slovenia and Bosnia doing best. Convergence with Western Europe should continue, although the pace is likely to slow during the 2020s.

The region is quite diverse in terms of the banking sector performance. Banking sectors in Croatia and Slovenia are growing rather slowly, lagging behind their peers in Central Europe and even many countries in the euro area, while in Bosnia and Herzegovina, Serbia, and in particular Montenegro banking sectors are much more dynamic. Non-secured retail loans account for the bulk of loans to households in all the countries, and their share in total loans significantly exceeds the average level for the Eurozone.

Slovenia is the leader in terms of digital transformation in the region, in particular when it comes to business digitalisation. Croatia so far significantly lags behind Slovenia, still it performs better than most countries of CEE. The other three countries in the region have not advanced much in digital transformation yet.

The region's financial markets in general and the retail household loan market segment are expected to grow in the long run consistent with the macroeconomic fundamentals of the countries. Under the most likely scenario, by the year 2047 the size of unsecured household loans will increase up to 21.4 bn EUR in Serbia, 19.6 bn EUR in Croatia, 14.0 bn EUR in Slovenia, 8.7 bn EUR in Bosnia and Herzegovina and 2.1 bn in Montenegro. This signifies a marked increase in the size of the market in nominal terms. On average the market is expected to triple over a period of three decades. Over the medium term we expect the markets to grow to levels of 6.9 bn EUR in Serbia, 10.8 bn EUR in Croatia, 5.2 bn EUR in Slovenia, 4.4 bn EUR in Bosnia and Herzegovina and 1 bn EUR in Montenegro, by 2023. This is on average about 20% higher compared to current 2018 levels.

Keywords: Southeast Europe, macroeconomic conditions, financial markets, unsecured household loans, short- and long-term market forecasts

JEL classification: E01, E20, E30, E40, E44, E47, E50, E60, G10, G17, G20

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## ABBREVIATIONS

| | |
|---|---|
| AL | Albania |
| AM | Armenia |
| AT | Austria |
| AZ | Azerbaijan |
| BA | Bosnia and Herzegovina |
| BE | Belgium |
| BG | Bulgaria |
| BY | Belarus |
| CH | Switzerland |
| CZ | Czech Republic |
| CY | Cyprus |
| DE | Germany |
| DK | Denmark |
| EE | Estonia |
| EL | Greece |
| ES | Spain |
| FR | France |
| GE | Georgia |
| HR | Croatia |
| HU | Hungary |
| IE | Ireland |
| IT | Italy |
| KZ | Kazakhstan |
| LT | Lithuania |
| LU | Luxembourg |
| LV | Latvia |
| MD | Moldova |
| ME | Montenegro |
| MK | Macedonia |
| NO | Norway |
| PL | Poland |
| PT | Portugal |
| RO | Romania |
| RS | Serbia |
| RU | Russia |
| SI | Slovenia |
| SK | Slovakia |
| TR | Turkey |
| UA | Ukraine |
| UK | United Kingdom of Great Britain and Northern Ireland |
| XK | Kosovo |

| | |
|---|---|
| BAM | convertible mark of Bosnia and Herzegovina |
| EUR | euro |
| HRK | Croatian kuna |
| RSD | Serbian dinar |
| USD | US dollar |

| | |
|---|---|
| ARA | Assessing Reserve Adequacy |
| BOP | balance of payments |
| BRI | Belt and Road Initiative |
| CAR | capital adequacy ratio |
| CE | Central Europe |
| CE-3 | CZ, PL, HU |
| CEE | Central and Eastern Europe |
| CEF | Connecting Europe Facility |
| CESEE | Central, East and Southeast Europe |
| CIS | Commonwealth of Independent States |
| COICOP | classification of individual consumption by purpose |
| CPI | consumer price index |
| DESI | Digital Economy and Society Index |
| EA | euro area 19 countries |
| EBA | European Banking Authority |
| EBRD | European Bank for Reconstruction and Development |
| ECB | European Central Bank |
| EM | Emerging Market |
| ER | exchange rate |
| ESA'10 | European system of accounts, ESA 2010 |
| EU | European Union |
| EU-15 | 15 original members of the European Union |
| EU-28 | 28 members of the European Union as of January 2019 |
| EU-CEE | EU members of Central and Eastern Europe |
| EU-SILC | European Union Statistics on Income and Living Conditions |
| FDI | Foreign Direct Investment |
| FISIM | Financial Intermediation Services, Indirectly Measured |
| FX | foreign exchange |
| GDP | Gross Domestic Product |
| GPI | Global Peace Index |
| GNP | gross national product |
| GVA | gross value added |
| HH | households |
| HICP | Harmonised Index of Consumer Prices |
| ICT | information and communications technology |
| IFI | international financial institution |
| IFRS | International Financial Reporting Standards |
| IMF | International Monetary Fund |
| IPA | Instrument for Pre-Accession Assistance |
| LFS | Labour Force Survey |
| LTD | loans-to-deposits ratio |

| | |
|---|---|
| MIFID | Markets in Financial Instruments Directive |
| MSMEs | micro, small and medium-sized enterprises |
| NB | National Bank |
| NCU | national currency unit |
| NPL | non-performing loan |
| pp | percentage points |
| PPP | purchasing power parity |
| PPS | purchasing power standard |
| PSD | Payment Services Directive |
| RER | real exchange rate |
| RIR | real interest rate |
| ROA | return on assets |
| ROE | return on equity |
| ROW | Rest of World |
| RWA | risk-weighter assets |
| SEE | Southeast Europe |
| SME | small and medium-sized enterprise |
| STEM | science, technology, engineering and mathematics |
| VAT | value added tax |
| WBGI | World Bank Governance Indicators |
| WEF | World Economic Forum |
| wiiw | The Vienna Institute for International Economic Studies |

| | |
|---|---|
| . | not available (in tables) |
| bn | billion |
| eop | end of period |
| mn | million |
| p.a. | per annum |
| yoy | year-over-year |

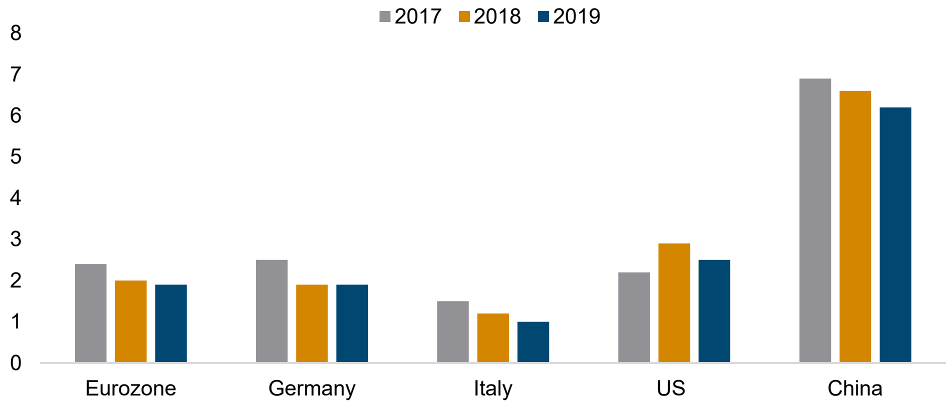
# 1. Macroeconomic profile in comparison

The region is in the midst of a fairly pronounced cyclical upswing, helped by catch-up effects owing to a generally very poor post-crisis growth performance. We believe however that the peak has already passed for most countries, with a weakening of external conditions (especially in the euro area) presenting big headwinds to growth. Growth rates should remain positive in the medium term, in the range of around 2.5-4%. Croatia will be the weakest performer, with Slovenia and Bosnia doing best. Convergence with Western Europe should continue, although the pace is likely to slow during the 2020s.

## 1.1. GLOBAL CONTEXT

The global economy is hitting an increasingly rough patch, owing to several factors, but in particular US-China trade tensions, signs of a slowdown in the Chinese economy, political conflict and weaker growth in the eurozone, and rising geopolitical risks. These all have important and negative economic implications for the five countries studied here.

**Figure 1.1 / Global growth, selected countries, real in %**



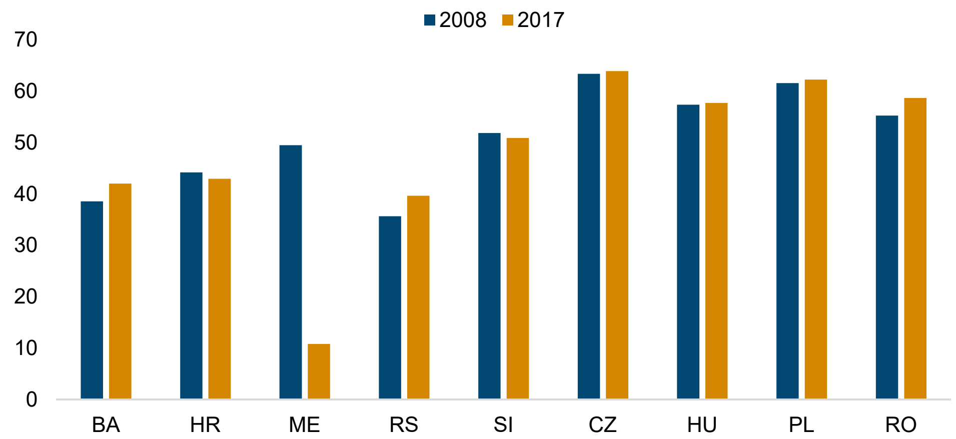

Source: IMF.

The IMF expects global real GDP growth of 3.7% in 2019, the same as in 2018 and 2017. This is a reasonable outturn by post-crisis standards. However, the key regions from the perspective of Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia – namely the eurozone, the US and China – are all set to slow in 2019 (Figure 1.1). Conditions in the eurozone post particular challenges for our region. Growth slowed markedly in 2018, especially in some of the key markets for the countries studied here (specifically Germany, but also Italy). With some partial exceptions[1], the eurozone is the

[1] The main exception is Montenegro, which now exports far less as a share of the total to the EU than it used to. This can be explained by several factors. First, Montenegro's exports are very small, so changes can look much more significant than they really are. Second, exports to the EU-15 collapsed after the crisis and have failed to recover since. These exports have been partially offset by increased sales to other CESEE markets (in particular Bosnia, Hungary, Turkey, Poland and Lithuania). Third, Montenegro's aluminium industry was heavily hit by the economic crisis and this used to be a major source of exports to the EU.

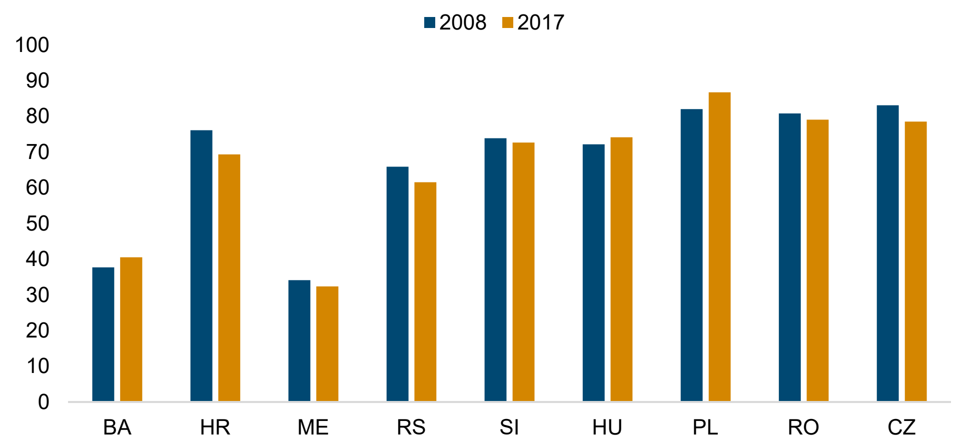
overwhelmingly dominant market for exports and source of remittances, investment and tourists for the Balkan region (Figures 1.2 and 1.3).

**Figure 1.2 / Exports to the EU 15, % of total**




Source: National statistical agencies, Eurostat.

**Figure 1.3 / EU 15 share in total inward FDI stock, %**




Source: wiiw FDI Database.

## 1.2. RECENT TRENDS AND FORECASTS

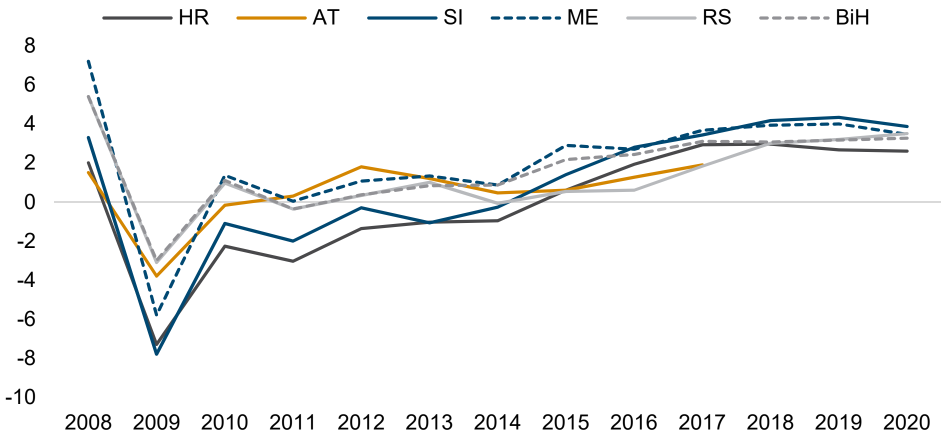
Despite the increasingly challenging external environment, growth in the Western Balkans is generally good, and in many cases at or close to its highest level since the crisis (Figure 1.4). Growth for the six Western Balkan countries not yet members of the EU has converged this year with that of the CESEE EU members, after a long period of underperformance (Figure 1.5). wiiw forecasts that this good momentum in the five countries studied will broadly continue, although the peak for most countries has probably already passed (see Table 1.1).

**Table 1.1 / wiiw real GDP growth forecasts, % change per year**

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| **BA** | 3.0 | 3.4 | 3.4 | 3.5 | 3.5 | 3.4 |
| **HR** | 2.5 | 2.6 | 2.7 | 2.5 | 2.5 | 2.6 |
| **ME** | 4.2 | 3.1 | 3.1 | 3.5 | 3.5 | 3.0 |
| **RS** | 4.3 | 3.4 | 2.8 | 3.0 | 3.0 | 2.9 |
| **SI** | 4.5 | 3.6 | 3.5 | 2.9 | 2.5 | 2.5 |
| **EA-19** | 1.9 | 1.6 | 1.5 | 1.4 | 1.3 | 1.4 |

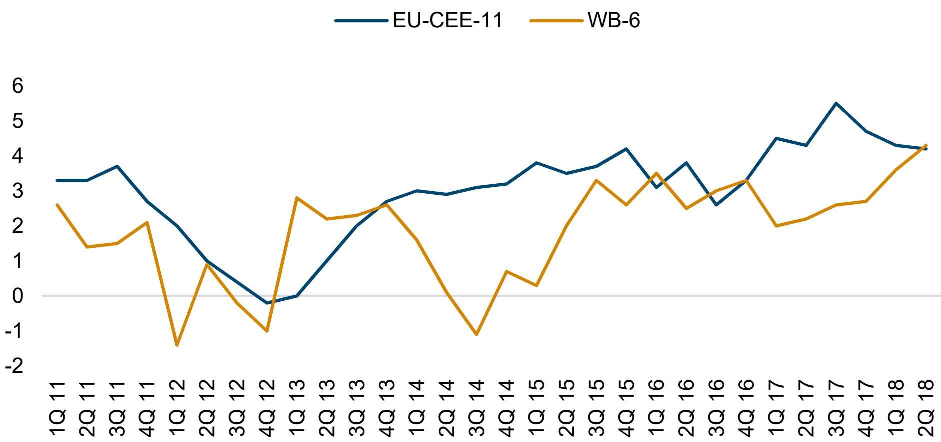
Source: wiiw Autumn 2018 forecast, EA-19 – wiiw forecast.

**Figure 1.4 / Real GDP growth, %**




Source: Eurostat, data from 2018 onwards wiiw forecasts.

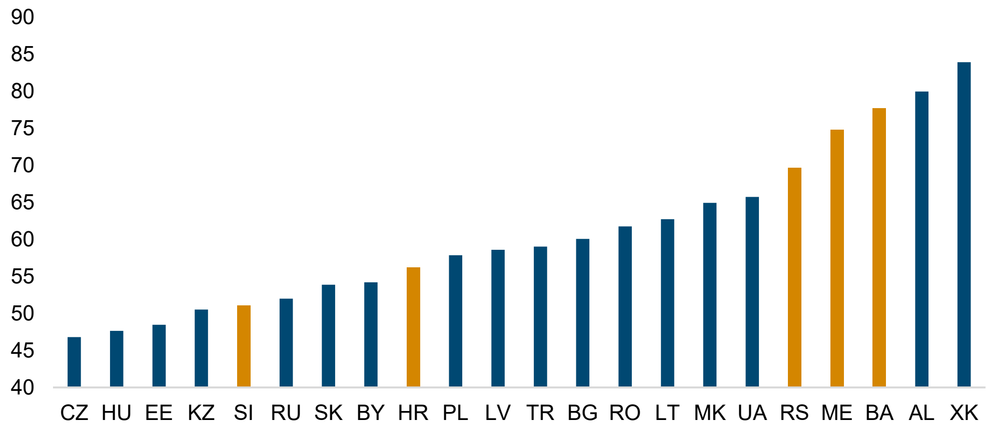
**Figure 1.5 / Real GDP growth by sub-region, %**




Source: wiiw.

The drivers of growth will be quite diverse in the coming years. We expect private consumption to play an important role, given its high share in GDP across the region (its role is particular important in Serbia, Montenegro and Bosnia and Herzegovina, see Figure 1.6). Labour markets in the region are generally not as tight as in some other parts of CESEE, but skills shortages are visible, in part because workers are emigrating to Western Europe and wealthier parts of CESEE. This appears to be having some impact on wages, which are rising quite strongly (there is also a catch-up effect here, with wages having been quite low for some time relative to other parts of CESEE). These trends look set to continue. Moreover, inflation should remain quite low (see Table 1.2), providing support for real wage growth.

**Figure 1.6 / Private consumption, % of GDP**




Source: wiiw.

**Table 1.2 / wiiw CPI inflation forecasts, % per year**

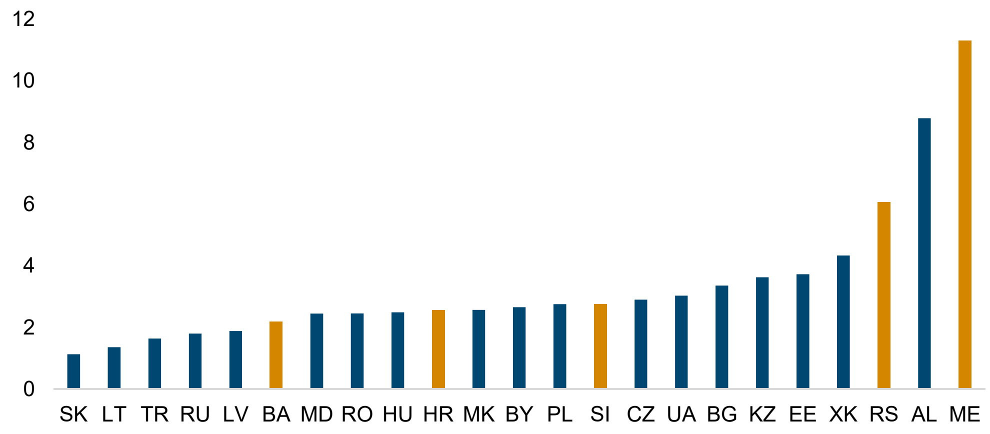
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| **BA** | 1.2 | 1.9 | 1.9 | 2.3 | 2.7 | 3.0 |
| **HR** | 1.6 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| **ME** | 3.5 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 |
| **RS** | 2.0 | 2.7 | 3.0 | 3.2 | 3.2 | 3.0 |
| **SI** | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |

Source: wiiw Autumn 2018 forecast.

We expect investment to also have a fairly strong, positive impact on growth. Capacity utilisation rates have been rising for several years, which should continue to boost gross fixed capital formation. In addition, the EU funds cycle is underway, which will benefit Slovenia and Croatia in particular (although especially in the latter weak absorption capacity remains an issue). This will contribute to catch-up investment in infrastructure, which in most of the region is significantly less developed than in most EU-CEE countries. Meanwhile interest rates remain at or close to historic lows, mirroring trends in the eurozone, which should provide further support for investment spending. Foreign direct investment inflows should remain fairly strong (Figure 1.7), helped at least in some places by supportive policy (Serbia is a notable case here). Additional supportive factors for investment growth in the coming years include price competitiveness gains, reasonable business confidence levels, and strong cash positions.

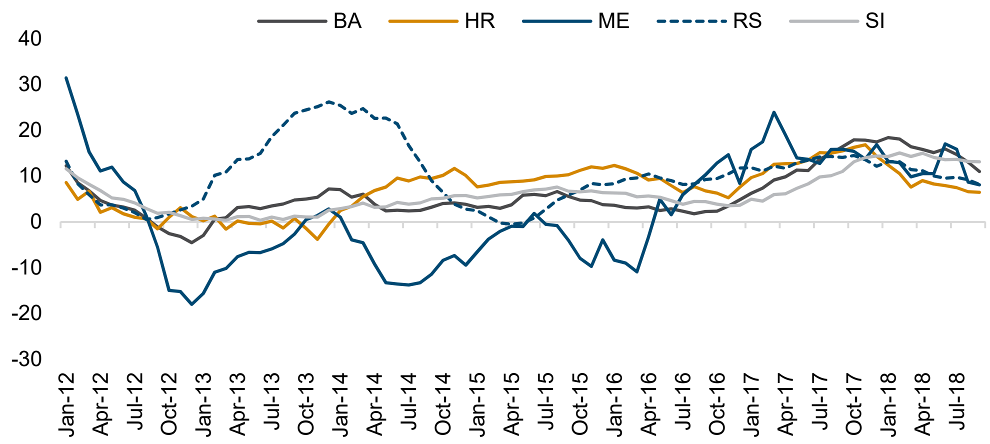
An important driver of growth in the region is also tourism. This is especially the case in Croatia and Montenegro, which are traditional tourism destinations, but also increasingly in Slovenia, Bosnia and Herzegovina and Serbia. We attribute this to increased awareness of the region owing to continued high levels of emigration from many of these countries to Western Europe and beyond, but also heightened perceptions of security risk in many competitor markets (for example in North Africa). The tourism sector has also benefited from some strong investment incentives, including subsidised credit from local development banks and taxation policies which have helped private landlords and the hotels, restaurants and catering industry. We expect positive trends in the tourism sector to continue.

**Figure 1.7 / FDI inflows, % of GDP, 2015-2017 average**




Source: wiiw FDI Database.

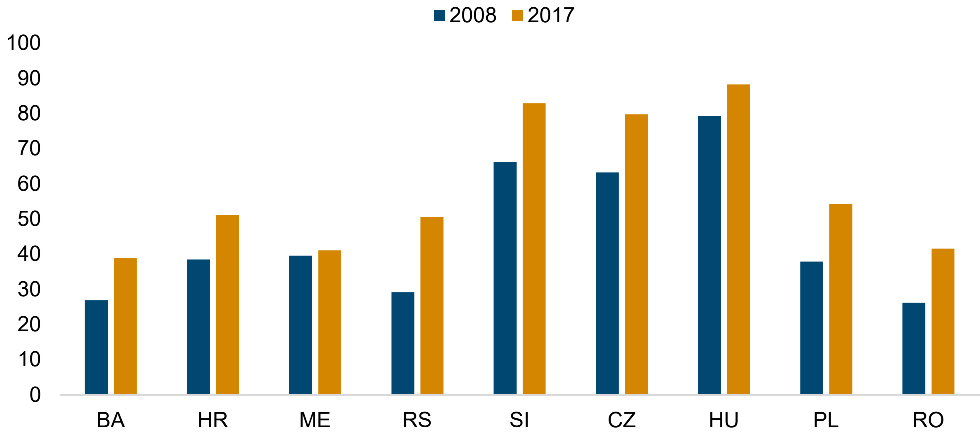
**Figure 1.8 / Euro-denominated nominal exports, % change year on year, 12-month moving average**




Source: wiiw Monthly Database.

Exports continue to grow quite strongly, albeit slightly less so than at the beginning of 2018, reflecting a slowdown in key markets, especially the eurozone (Figure 1.8). This matters more than in the past, as the region's economies have generally become much more open over the past decade (Figure 1.9). Partly, this reflects the weakness of domestic expenditure components, especially investment but also consumption. However, in addition it reflects increases in export capacity, helped significantly by FDI inflows (for example in Serbia). Much of the region has achieved impressive competitiveness gains since the crisis. Continued progress on EU accession and associated reforms should increase foreign investment in productive capacity, thereby boosting exports and increasing the region's integration into global value chains.

**Figure 1.9 / Exports of goods and services, % of GDP**




Source: wiiw Annual Database.

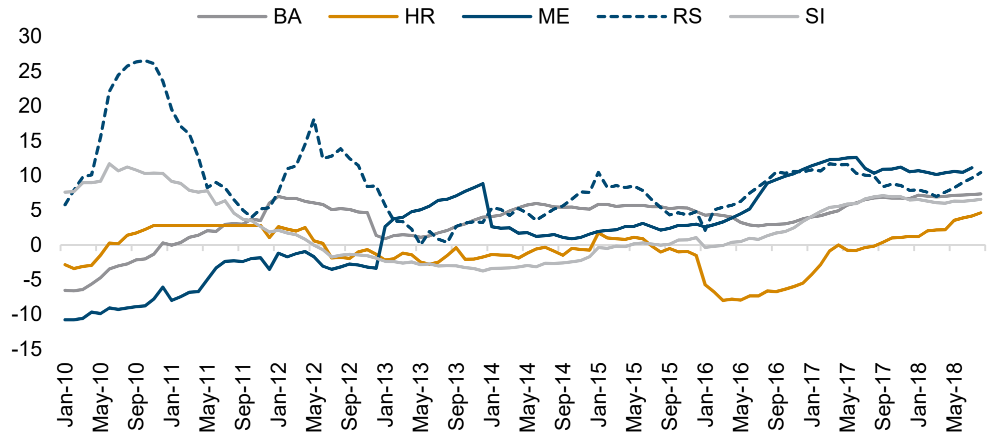
The credit cycle is also picking up, providing further stimulus to growth, albeit to a different extent in different countries. Moreover, demand appears to be much higher from households than firms, indicating that the impact is likely to be more visible on the private consumption side rather than investment (see Table 1.3 and Figures 1.10 and 1.11). We expect ECB policy to remain very loose throughout the upcoming years (we have long been sceptical of a sharp tightening cycle beginning in 2019, and the market has now moved more in line with this view). Inflation in some key parts of the bloc, in particular Italy, remains very weak, especially once energy prices are stripped out, and it appears that there is more than enough slack in the labour market to absorb significant employment growth (which is anyway questionable) without generating upward pressure on prices. Meanwhile, in Italy and other parts of the eurozone, survey data suggest that firms are struggling to pass on higher energy input costs to consumers, limiting pass-through effects. More broadly, growth in the bloc has slowed considerably in recent quarters, reflecting the US-China trade war, weaker growth in China and the impact on confidence of political risks, not least due to the new Italian government and Brexit.

**Table 1.3 / Credit indicators, June 2018**

| | BA | HR | ME | RS | SI | CZ | HU | PL | RO |
|---|---|---|---|---|---|---|---|---|---|
| Loans to non-fin. corporations, % yoy | 6.8 | -0.1 | 6.3 | 0.8 | -2.3 | 4.2 | 14.7 | 7.0 | 3.5 |
| Loans to households, % yoy | 7.2 | 3.9 | 10.4 | 9.0 | 6.3 | 7.5 | 2.1 | 4.8 | 10.0 |
| Real interest rate, CPI deflated, % | -1.9 | 0.8 | 2.3 | 0.7 | -2.3 | -1.4 | -2.2 | 0.1 | -2.1 |
| Non-performing loans (NPLs), in %, eop | 9.3 | 11.2 | 7.0 | 7.8 | 6.9 | 3.4 | 4.1 | 6.8 | 5.7 |

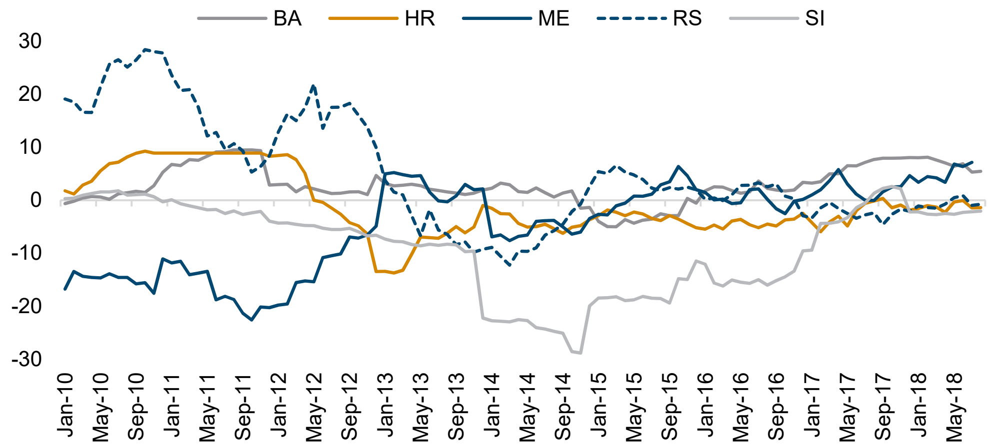
Note: For Slovenia NPLs defined as non-performing exposure including forborne exposure.
Source: wiiw credit monitor.

**Figure 1.10 / Growth of credit to households, % year on year**




Source: wiiw Monthly Database.

**Figure 1.11 / Growth of credit to non-financial corporations, % year on year**




Source: wiiw Monthly Database.

## 1.3. CONVERGENCE PROSPECTS

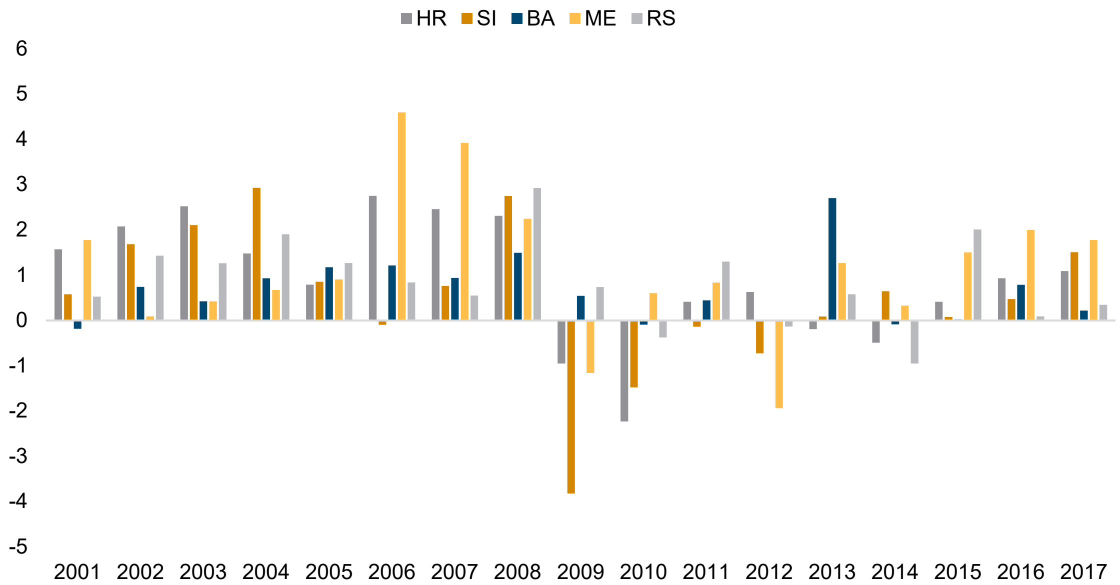
The five countries' convergence with the euro area was relatively good in the pre-crisis years, but fell back substantially in most countries in 2009-2014 (Figure 1.12). Since 2015, the convergence process has restarted, albeit at a generally slower rate than in the pre-crisis years, and in Croatia and Slovenia convergence with the EU-28 is still at a significantly lower level than was the case in 2008 (Figure 1.13). We expect convergence to continue in the medium and long term, but for the pace to slow further, especially for Slovenia (in line with the beta convergence hypothesis).

The most feasible model for further economic development in the countries covered here is that of the Visegrád states, which have attracted large amounts of FDI into the tradeable goods sector, and as such built up large export capacities. There is scope for the Western Balkans to follow this strategy, with exports/GDP shares generally still low across the region. This will depend on continued convergence of legal standards and the quality of the business environment with EU levels, as well as improvements in infrastructure. There is also scope for much greater intra-regional trade (current levels are low relative to comparable regions), but this will depend on improvements in capacity, infrastructure and resolving political conflicts in the region. Meanwhile, the pace of per capita convergence in particular will depend heavily on automation trends in the region, with high emigration set to continue during the medium and long term (with the probable exception of Slovenia). In the Visegrád states, high emigration rates have contributed to rising investment in automation and increased productivity.

Another important determinant of the region's future growth prospects will be digitalisation trends. Here there is certain room for optimism. In mid-2018 the European Commission launched a Digital Agenda for the Western Balkans[2], to improve broadband connectivity, increase cybersecurity, strengthen the digital economy and boost research and innovation. One recent study included Slovenia and Croatia among 'CEE digital challengers'[3]. The CEE region as a whole has a high number of STEM and ICT graduates relative to Western Europe, good digital infrastructure, and less technology lock-in than Western Europe, which in theory could quicken the pace of development of the new digital economy.

A final important driver of growth and convergence would be higher labour force participation rates. Currently, with the exception of Slovenia, participation rates in the countries covered are low relative to most of the rest of CESEE and Western Europe. The inactivity rate for the region as a whole is declining, albeit quite slowly. More rapid falls in inactivity have been recorded recently in some countries, however, especially Montenegro and Serbia. The still-high inactivity levels represent an untapped source of potential growth.

**Figure 1.12 / Real GDP at PPP in relation to the eurozone, percentage-point change per year**

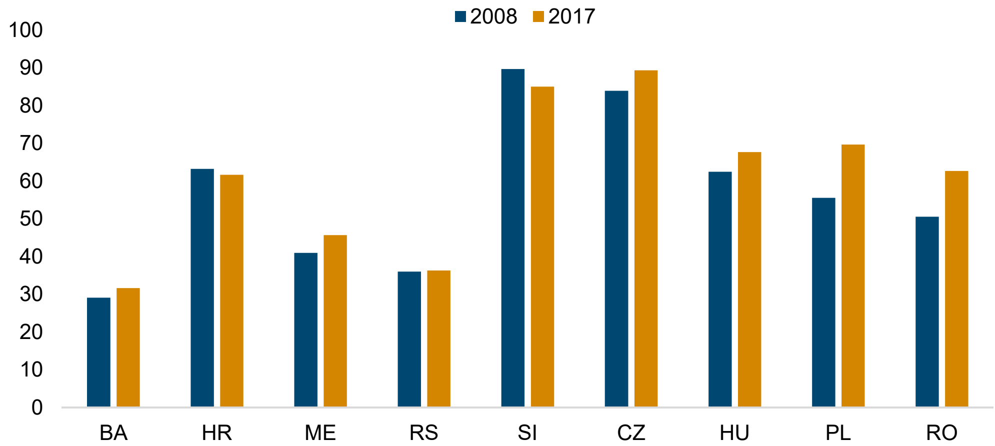



Source: wiiw convergence monitor.

2 http://europa.eu/rapid/press-release_IP-18-4242_en.htm

3 http://digitalchallengers.mckinsey.com/

**Figure 1.13 / Real GDP per capita at PPP, EU-28 = 100**




Source: wiiw convergence monitor.

## 1.4. CONTEXT AND CHALLENGES

Although the five countries are in the midst of a reasonably good cyclical upswing, this may already be ending. Moreover, we would argue that, in the context of the very weak post-crisis growth performance (Figure 1.14) and the overall favourable conditions of 2015-2017 (robust eurozone upswing, low interest rates, new EU funds cycle, etc.), growth in the five countries should have been higher. With positive external conditions now appearing to fade quite quickly, the region will find it much more difficult to generate growth in the coming years.

**Figure 1.14 / Average real GDP growth rates for CESEE, 2011-2017**


Source: wiiw Annual Database.

There are some possible reasons for optimism. One is that the economies covered here, with the exception of Slovenia, do not export that much as a share of GDP (by wider CESEE standards). This indicates the potential for catch-up growth driven by exports. In 2017, the merchandise exports of the other four countries were all equivalent to less than 40% of their respective GDP levels (simple average for CESEE: 44%). Moreover, most countries in the region also tend to export more resources or low-value manufactures when compared with regional peers. Finally, there is simply significant potential for countries in the region to trade more with each other. Intra-regional trade as a share of total trade is lower than for some peer countries, for example the Visegrád states. However, the reasons for this, including persistently weak demand since the crisis, infrastructure deficiencies, and bilateral political disputes, will not be easy to overcome.

A second important reason for optimism, which could help to address these challenges, is the likelihood of further EU integration of the region in the coming years. Although full accession for Serbia, Bosnia and Herzegovina and Montenegro could still be someway off, the EU reform anchor is strong, and should deliver benefits for the business environment and structural reforms even in the run-up to accession.

## 1.5. OVERVIEW OF MAJOR LONG-RUN ECONOMIC DEVELOPMENTS

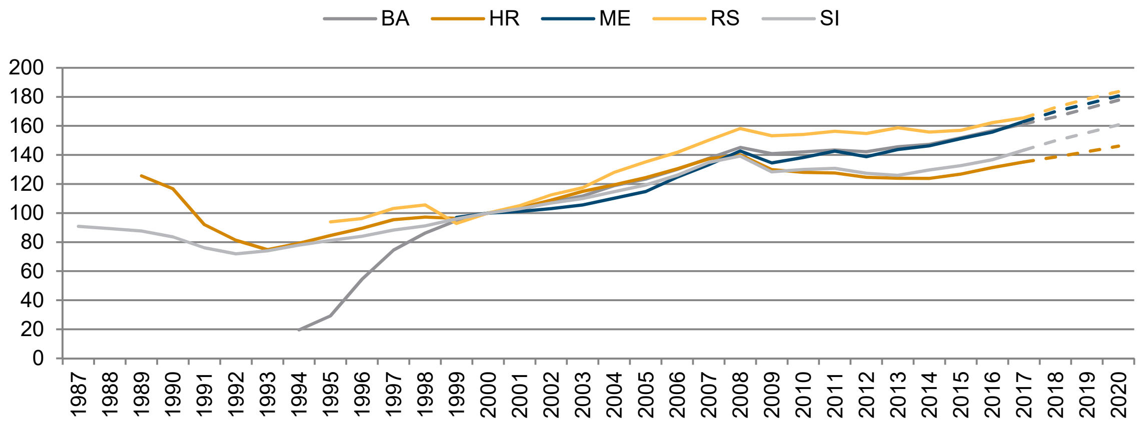
The long-run economic development since the disintegration of Yugoslavia in the late 1980s and early 1990s is characterised by regular setbacks and recurring catch-up efforts (Figure 1.15). Particularly the outbreak of the global financial crisis in 2008 left the countries in the region in recession and stagnation in the following years. Slovenia and Croatia had not reached the 2008 level of real GDP by 2016 and 2017, respectively. By 2020 these countries can expect to reach a real GDP level of 150% (Croatia) to 180% (Serbia) of their year 2000 level.

Moreover, some of these countries (Bosnia and Herzegovina, Croatia, Serbia) have lost about 7% of their population since 2000. Apart from low fertility rates, it was particularly emigration due to armed conflicts in the 1990s and the weak economic situation later on that caused population figures to constantly decline in these countries (with stronger downward corrections in census years). While the process of mass emigration certainly has critical political implications, it is rather supportive of the productivity increases seen in the region. By 2017 per capita GDP in purchasing power parities has increased by 60% to 160% in Slovenia and Serbia, respectively.

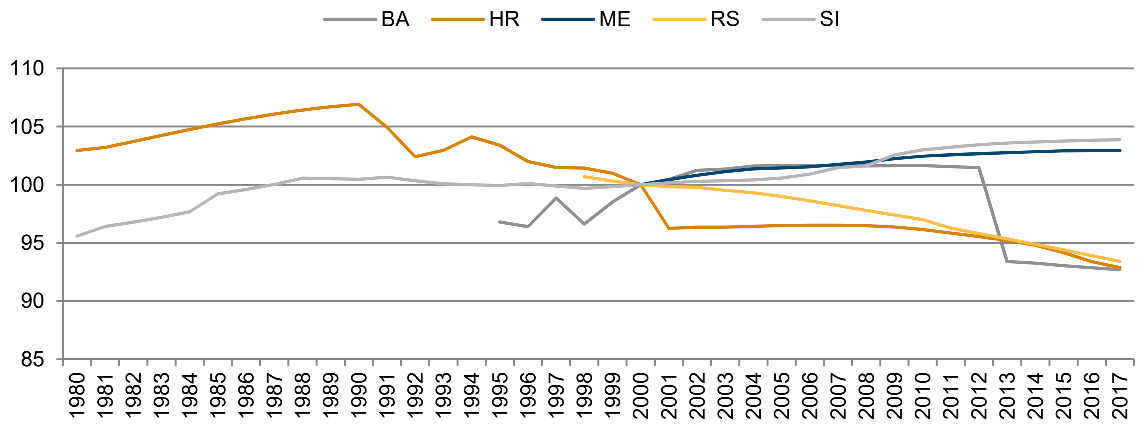
If one looks at even longer-run convergence processes since the 1950s one observes in 1958 (Figure 1.16, upper left panel) the centre-periphery gradation from the Northwest to the Southeast of Europe in terms of GDP per capita in per cent of Germany, the technological leader in Central Europe, that was known from the times of the second industrial revolution. In 1978, on the eve of the second oil price shock, countries in the region experienced a certain catch-up growth. Especially Slovenia and Croatia were able to converge to income levels close to those found in Austria and Italy. However, the subsequent massive increase in global interest rates caused a grave economic crisis in Yugoslavia in the 1980s which eventually was followed by a series of wars among the Yugoslav republics in the 1990s. These were two lost decades which left the successor states of Yugoslavia in a bad economic shape as can be seen from the snapshot in 1998 (Figure 1.16, upper right panel).

**Figure 1.15 / Real GDP, population and GDP per capita at PPS**

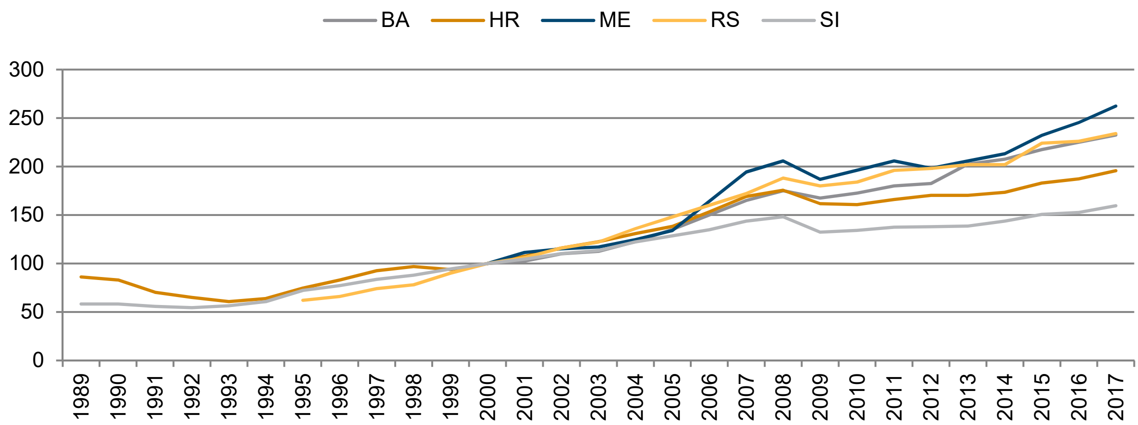
Gross domestic product, real index, 2000=100, 1987-2017, forecasts 2018-2020




Population index, 2000=100, 1980-2017

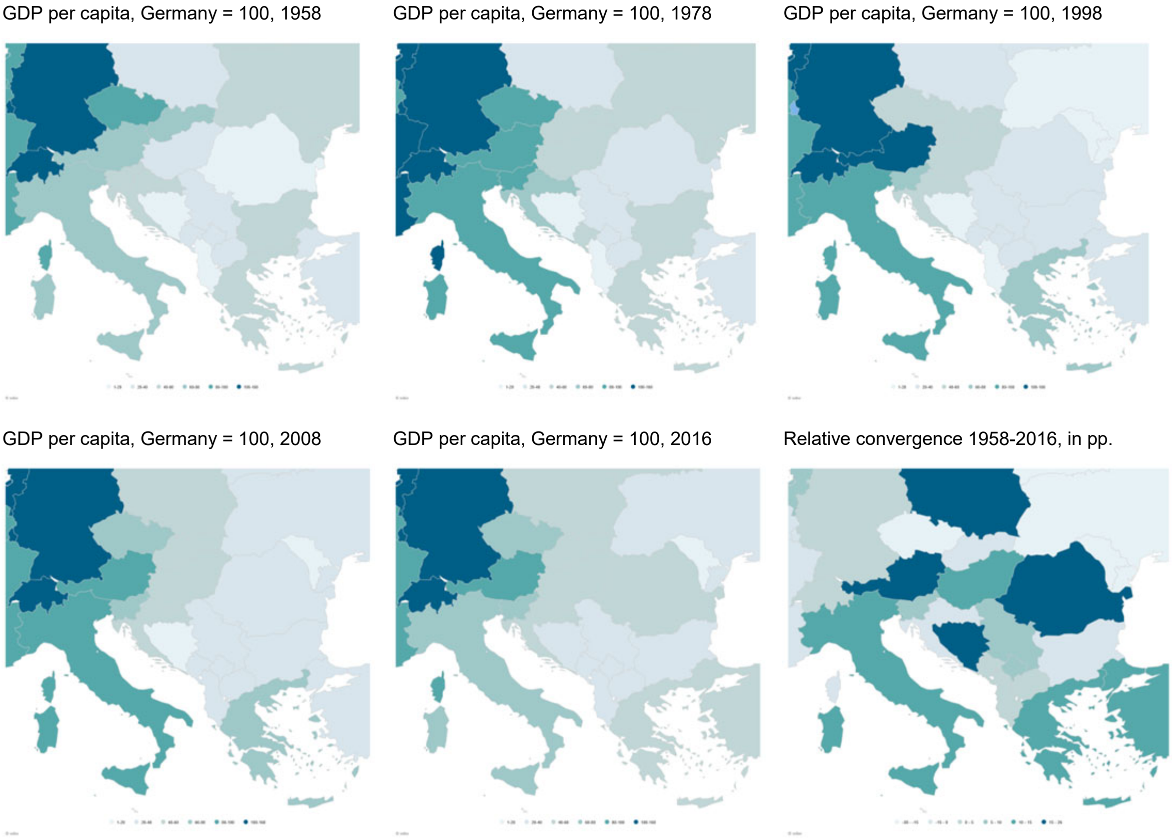



Gross domestic product per capita at PPS, index, 2000=100, 1989-2017




Source: wiiw Annual Database.

**Figure 1.16 / Long-run GDP per capita convergence vis-à-vis Germany**



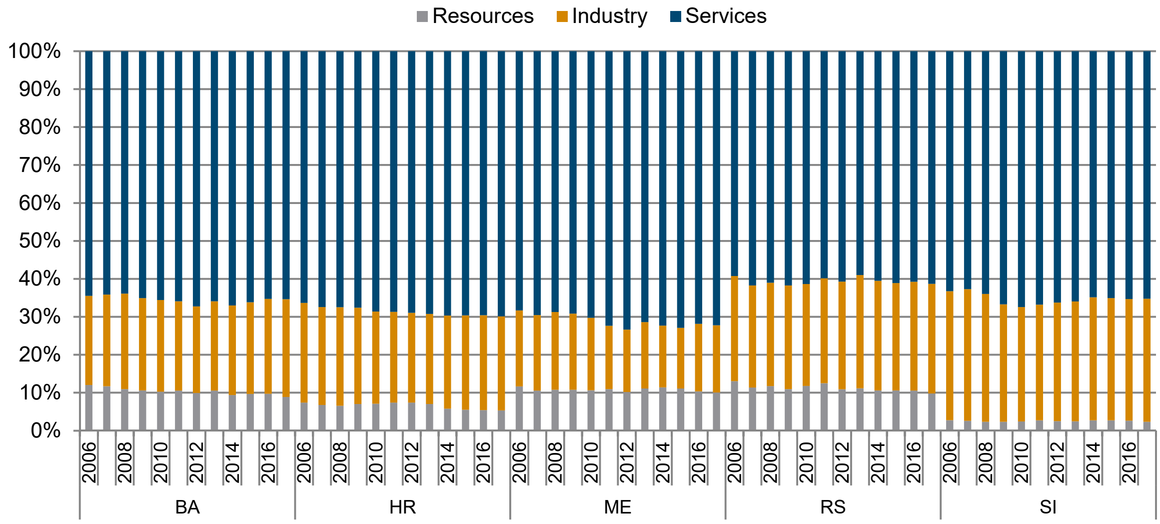

Note: 1958: BY & UA average of SU & PL, CZ average of CS, CS & DE, SK average of CS & HU, MD average of SU & RO, RU = SU; 1978: BY & UA average of SU & PL, SK average of CS & HU, MD average of SU & RO, XK = RS;
All years: XK = RS.
Source: MPD 2018, own calculations.

The situation in 2008, before the outbreak of the global financial crisis, showed – if anything – a very slow catch-up in incomes in the broader region. This process continued in the period thereafter (Figure 1.16, lower central panel shows the situation in 2016), however, not so much because of high growth in the SEE region but due to the weaker performance in the Northwest. Finally, it is interesting to look at the winners and losers over the period 1958-2016 in percentage point change relative to the German income level. There seems to be no specific pattern. Croatia lost slightly. Montenegro, Slovenia and Serbia gained only a few percentage points. Interestingly, Bosnia and Herzegovina is among the winners with double-digit catch-up rates. Certainly, the very low initial level and the most recent inflow of FDI and foreign transfers as well as massive outward migration are important factors behind this country's relative gains in GDP per capita vis-à-vis Germany.

## 1.6. STRUCTURAL CHARACTERISTICS

The economies of the region share certain common features in their industrial structure (Figure 1.17). Extraction of resources through agriculture and mining is still quite important in Bosnia, Montenegro and Serbia with shares of about 10% in gross value added (GVA). In Montenegro and Croatia, where tourism plays an important role, the services sector makes up around 70% of GVA. Industrial activity is relatively strong in Bosnia and Croatia (about 25%) and particularly in Serbia and Slovenia (around 30% of GVA).

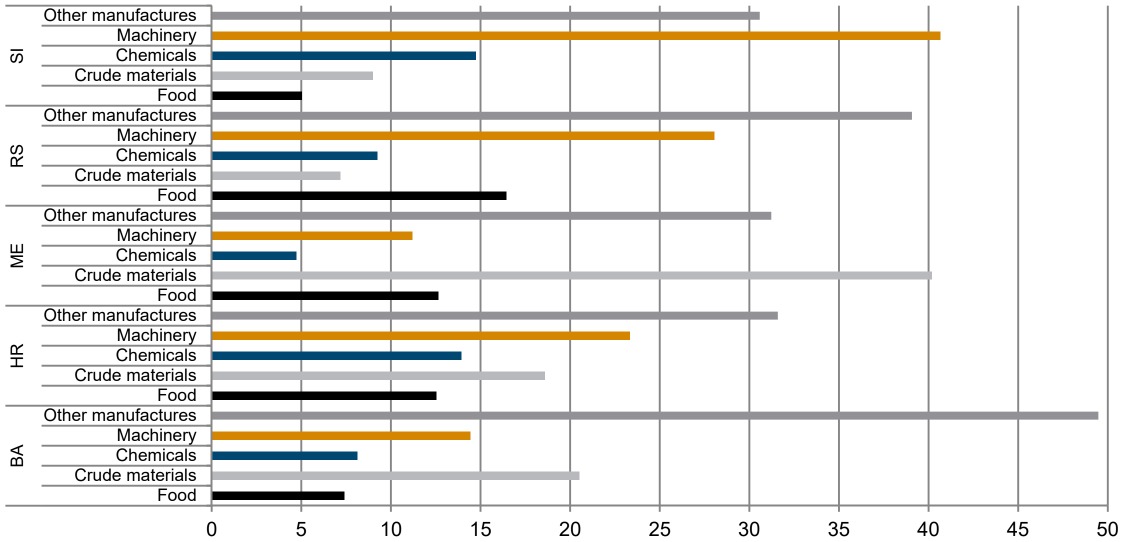
**Figure 1.17 / Broad sectoral breakdown of gross value added, in % of total, 2006-2017**




Note: Resources refer to the NACE sectors of agriculture, forestry, fishing, mining and quarrying; Industry to the sectors of manufacturing, electricity, gas, steam, air conditioning supply, water supply, sewerage, waste management, remediation and construction.
Source: wiiw Annual Database.

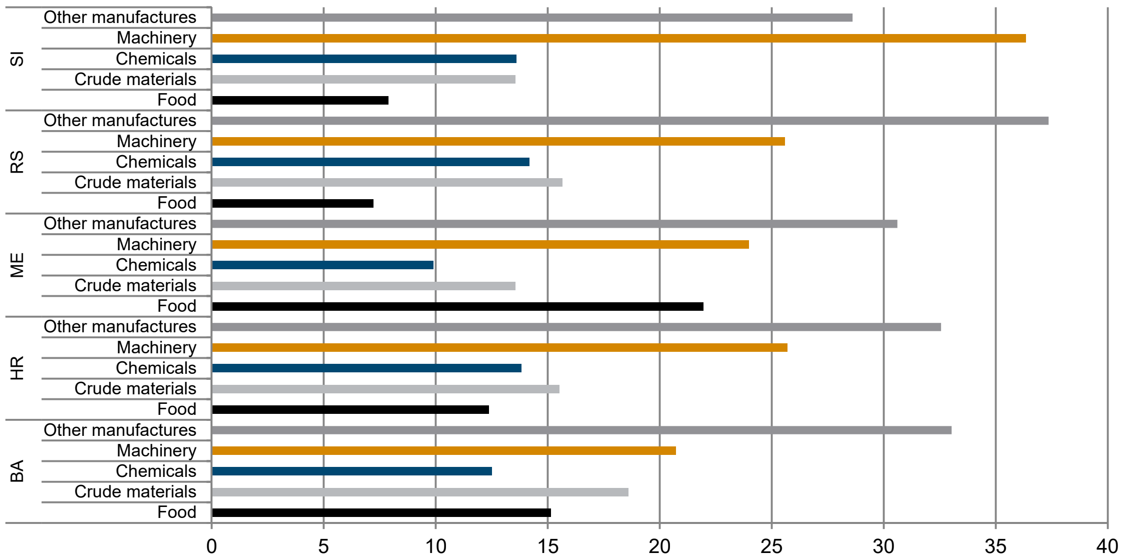
In terms of goods export structure simple (other) manufactures dominate. (Figure 1.18) Most of them are classified chiefly by material. However, in Slovenia machinery (and transport equipment) exports (41% of total) dominate and in Montenegro it is crude materials exports (41%). With 28% and 23% of total goods exports machinery and transport equipment exports are also important in Serbia and Croatia, respectively. Both, in Slovenia (15%) and Croatia (14%) exports of chemicals are fairly important. With 16% of total goods exports food products (including beverages, tobacco and live animals) are an important export category in Serbia. Given the partial integration into global value chains, the import structure (Figure 1.19) is not that different from the export structure. However, here machinery (including vehicles) have relatively high shares in all the countries of the region and imports of food products play an important role as well.

**Figure 1.18 / Structure of goods exports by product groups, in % of total, 2017**



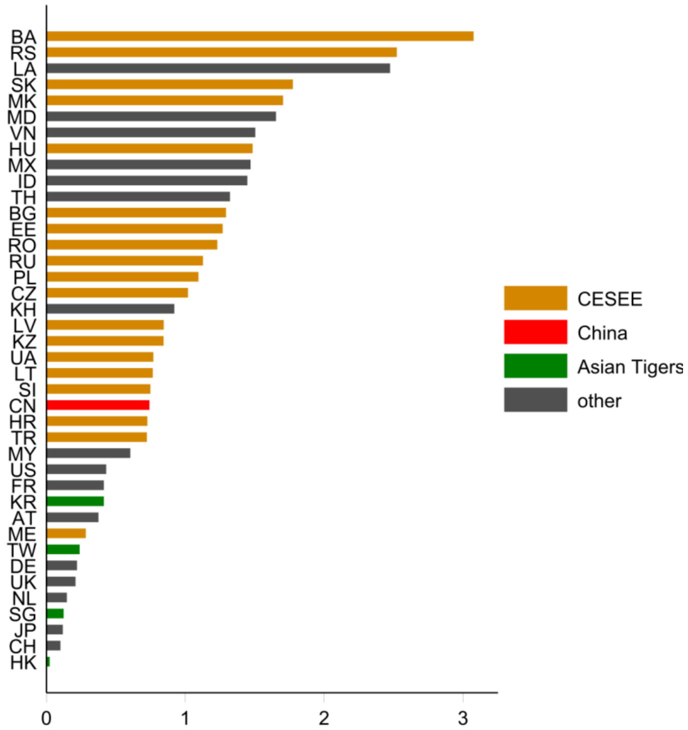

Note: Food consists of the SITC categories food and live animals as well as beverages and tobacco. Crude materials consists of the SITC categories crude materials, inedible, except fuels; mineral fuels, lubricants and related materials as well as animal and vegetable oils, fats and waxes. Chemicals consists of the SITC category chemicals and related products, n.e.s.. Machinery consists of the SITC category Machinery and transport equipment. Other manufactures consists of the SITC categories manufactured goods classified chiefly by material; miscellaneous manufactured articles as well as commodities not classified elsewhere in the SITC.
Source: wiiw Annual Database.

**Figure 1.19 / Structure of goods imports by product groups, in % of total, 2017**



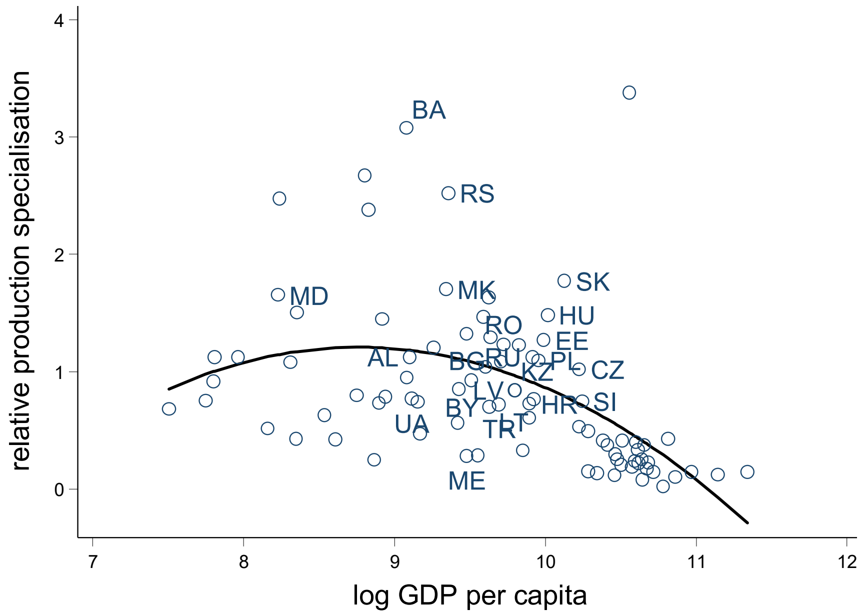

Note: Food consists of the SITC categories food and live animals as well as beverages and tobacco. Crude materials consists of the SITC categories crude materials, inedible, except fuels; mineral fuels, lubricants and related materials as well as animal and vegetable oils, fats and waxes. Chemicals consists of the SITC category chemicals and related products, n.e.s.. Machinery consists of the SITC category machinery and transport equipment. Other manufactures consists of the SITC categories manufactured goods classified chiefly by material; miscellaneous manufactured articles as well as commodities not classified elsewhere in the SITC.
Source: wiiw Annual Database.

**Figure 1.20 / Relative production specialisation index**




Note: The relative production specialisation index relates to functional specialisation of greenfield manufacturing FDI (average 2003-2015) in production tasks as compared to pre- and post-production services such as R&D or marketing. 0.5 is the value a country would obtain if its functional specialisation equalled that of the world.
Source: fDi markets database, wiiw calculations.

**Figure 1.21 / High time to adjust the functional specialisation**



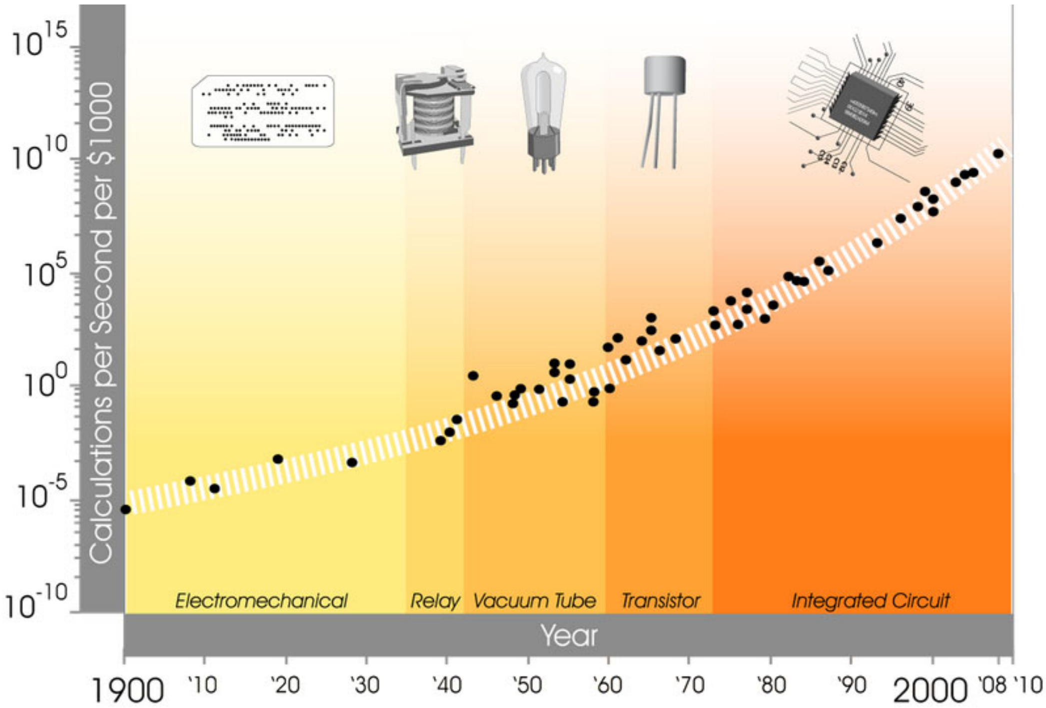

Note: GDP per capita in PPP as of 2010; calculations.
Source: PWT version 8.0, fDi markets database, wiiw.

The strong industrial specialisation combines with a functional specialisation of manufacturing FDI in production tasks in the region (Figure 1.20). Particularly Bosnia and Serbia stand out as locked in in the function of a factory economy with the related features of a low share in the value added of the overall output in the global (mostly German-dominated) value added chains. Also given their income levels (Figure 1.21), these two countries should seek a more diversified functional structure of their manufacturing sectors in order to avoid a potential semi-periphery trap.[4]

Moreover, the ongoing 3rd and 4th industrial revolution (i.e. digitalisation and robotisation) might be particular challenges for the economies of the region. There are indications that these processes will be less gradual as compared to the relatively slow 1st and 2nd industrial revolutions that went on since the mid-18th and 19th century up to the 20th century. Since the introduction of the integrated circuit in the 1970s growth of computing times is exponential (Figure 1.22).

Also, robotisation is an ongoing process and while it certainly is very challenging, it is probably better to be part of it than being excluded. However, from the countries in our region only Slovenia is among the top countries in the use of industrial robots. Croatia is far below the global average and the other countries of the SEE region are not even recorded in the respective statistics (Figure 1.23).

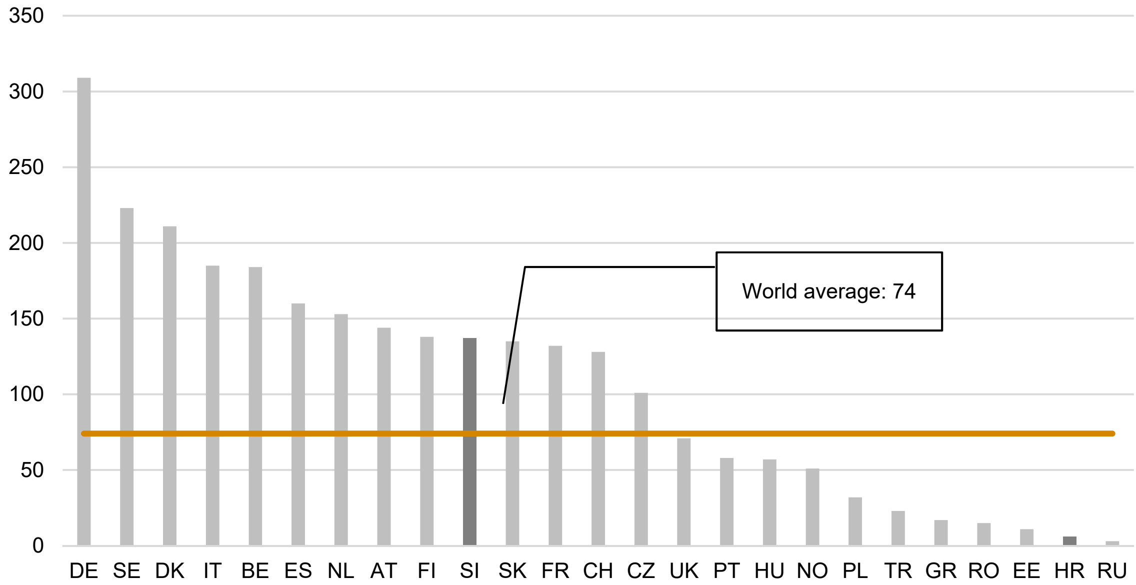
**Figure 1.22 / Exponential growth of computing, calculations per second per 1,000 USD, logarithmic plot, 1990-2010**




Source: Kurzweil (2005).

4 wiiw Spring 2018 Forecast Report, 'Riding the Global Growth Wave'.

**Figure 1.23 / Number of installed industrial robots per 10,000 employees in the European manufacturing industry, 2016**

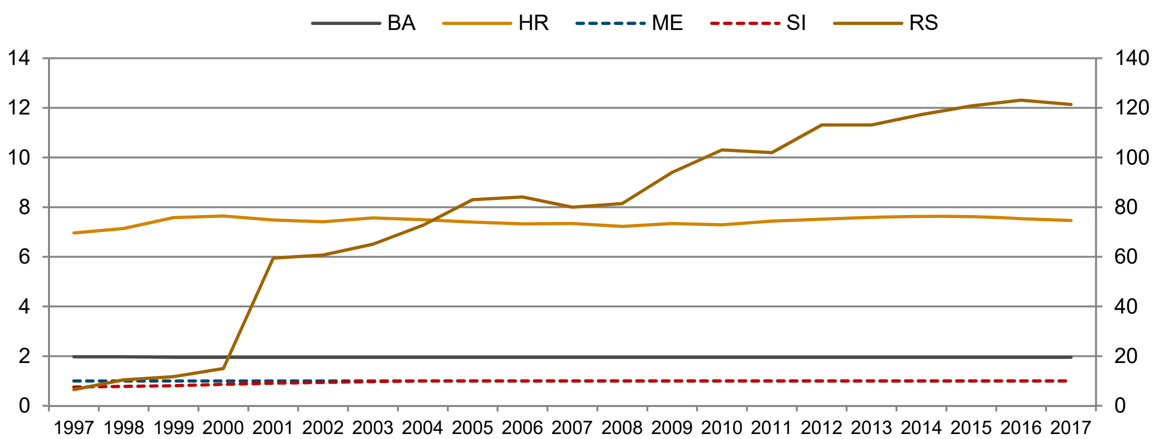



Source: IFR, World Robotics, 2017.

## 1.7. MACROECONOMIC POLICY FRAMEWORK

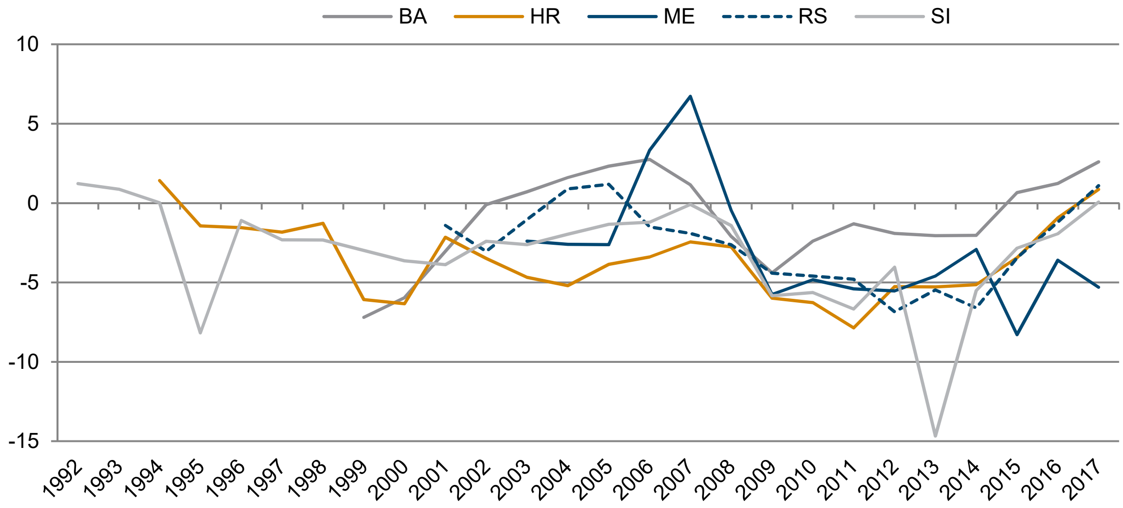
The basic macroeconomic framework of the countries in the region is one of a fixed (Bosnia and Herzegovina) or de facto fixed (Croatia) exchange rate regime vis-à-vis the euro or the outright adoption of the euro (Montenegro and Slovenia). Serbia is the notable exception – although in recent years the country's exchange rate was (more or less) fixed against the euro too (Figure 1.24). The European Central Bank's support for these countries is mostly in the form of technical cooperation.

**Figure 1.24 / National currency unit per euro, period average, 1997-2017**




Note: Serbia right scale.
Source: wiiw Annual Database.

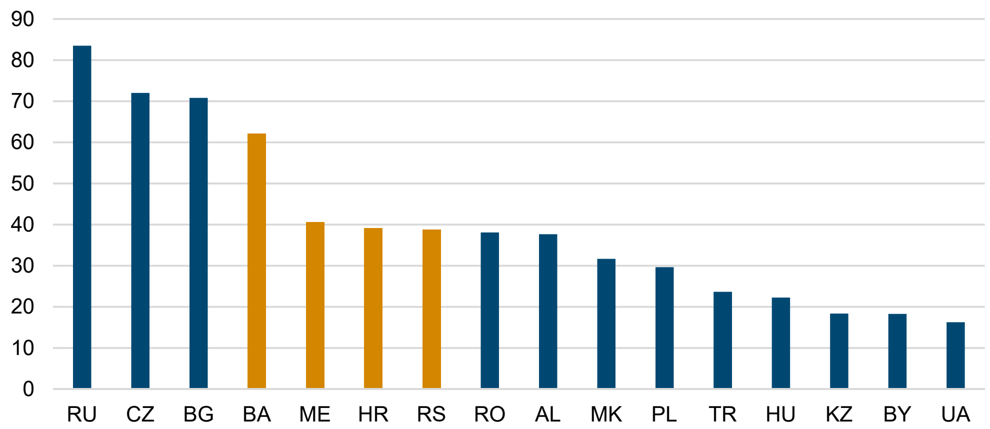
**Figure 1.25 / General government budget, deficit (-) / surplus (+), in % of GDP, 1992-2017**




Source: wiiw Annual Database.

The fixed exchange rate regime is assisted by a relatively prudent fiscal policy with long-term deficits cyclically oscillating around 3% of GDP (Figure 1.25). In certain (more recent) years negative outliers like in Slovenia in 2013 were related to crisis-caused bailouts. With the exception of Montenegro, all the region's general government budgets saw a surplus in 2017, mostly due to the favourable growth trends.

**Figure 1.26 / Gross reserves to gross external debt ratio, selected CESEE countries, 2017**




Source: wiiw Annual Database, own calculations.

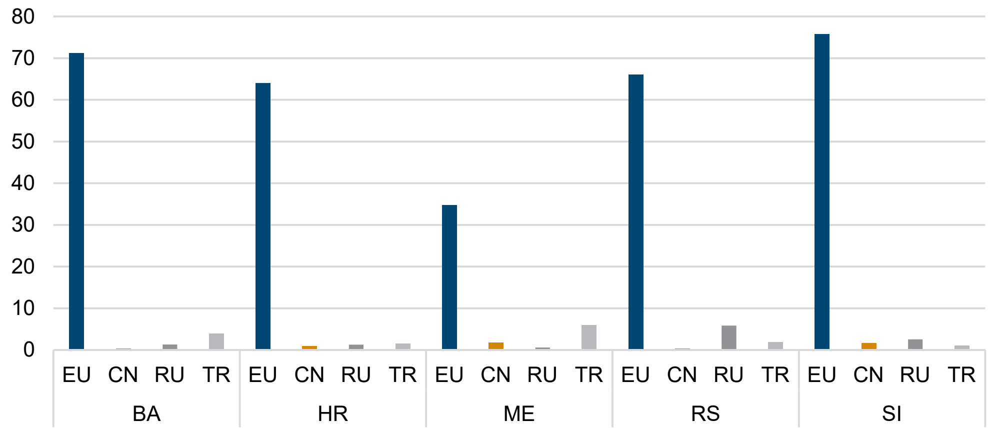
Moreover, compared to other countries in Central, East and Southeast Europe, the ratio of reserves to external debt is relatively high (Figure 1.26). The countries' revenues from goods exports, tourism receipts and remittances are overwhelmingly denominated in euro (see next section). Also, with regard to the financial sector's deposits and loans structure, euroisation is substantial. Macroeconomic shocks are typically absorbed via the migration channel. The macroeconomic policy framework of the region with its euro anchor thus appears to be by and large sustainable.

## 1.8. EUROPEAN INTEGRATION

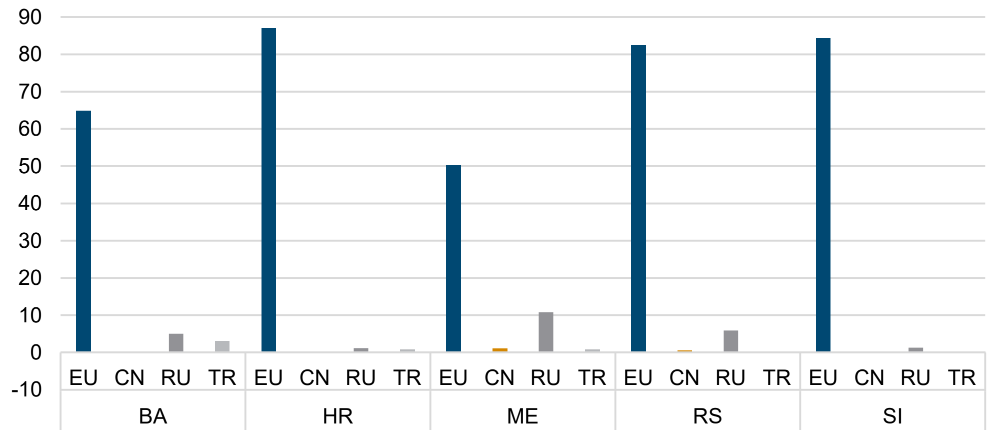
The European integration of the region is proceeding slowly. So far only Slovenia (in 2004) and Croatia (in 2013) have acceded the European Union. Slovenia joined the euro in 2007. Croatia will soon apply for the ERM II mechanism and might join the euro by 2025 or even before. Montenegro and Serbia are negotiating candidate countries (since 2010 and 2012, respectively) and Bosnia and Herzegovina has only applied for EU membership in 2016 and faces serious internal constitutional problems ever since, hindering any substantial progress. The former two countries might join the EU by around 2030 and the euro area after 2040.

**Figure 1.27 / Export and FDI stock shares by partners, in % of total, 2017**

Goods exports



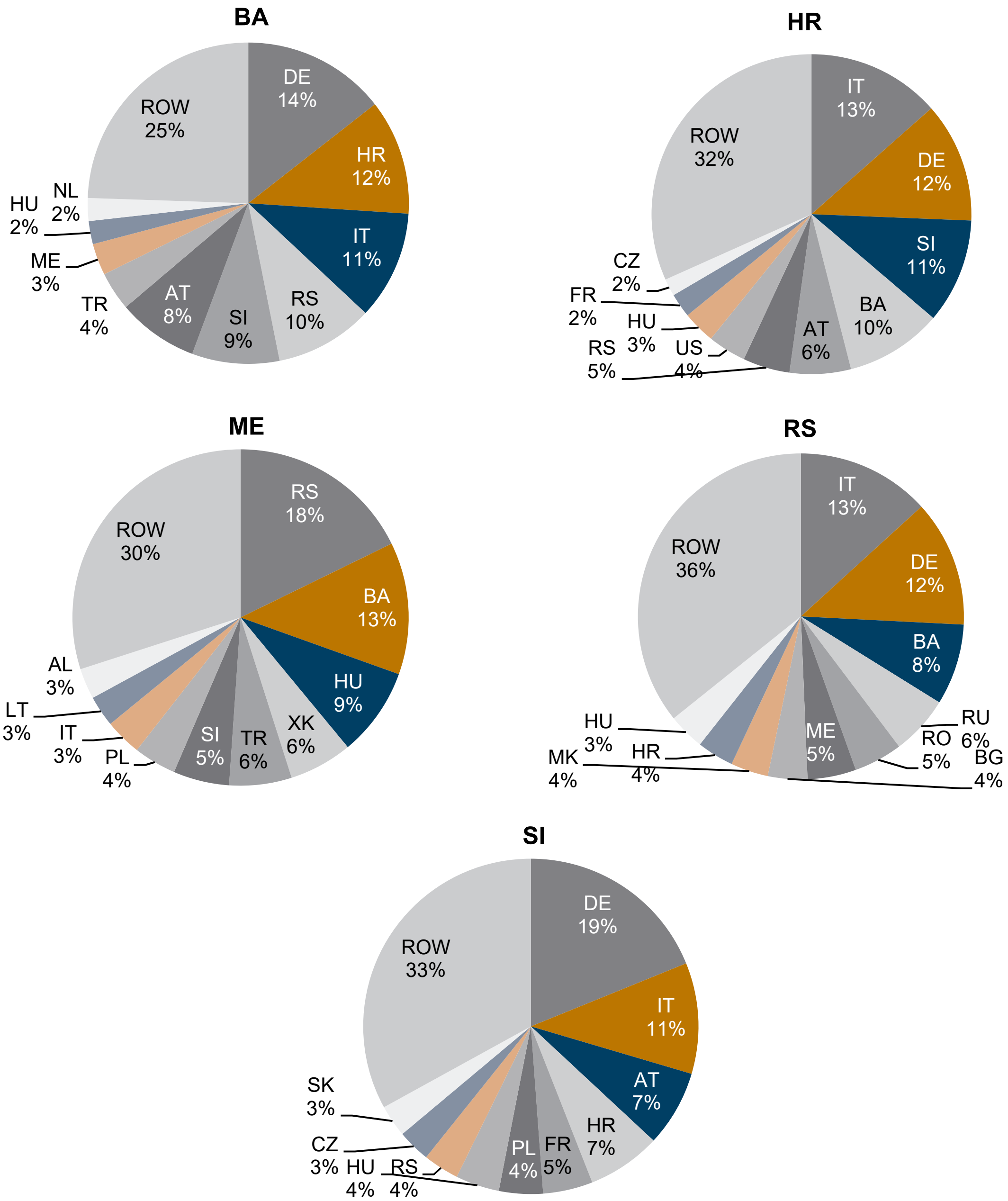

FDI stock




Note: Serbian FDI stocks as of 2015.
Source: wiiw Annual Database, wiiw FDI Database.

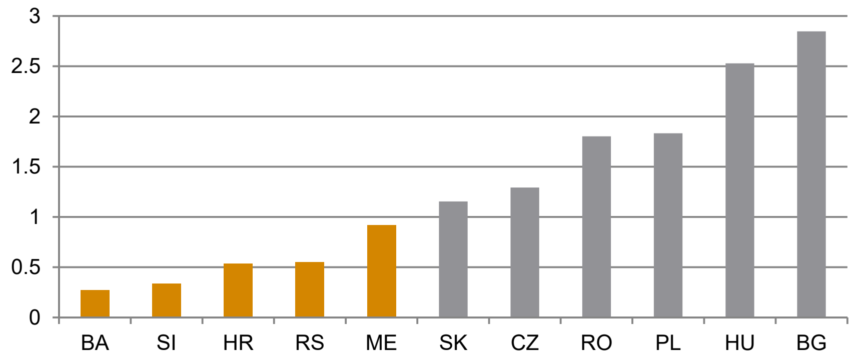
However, in economic terms all the countries in the region are strongly tied to the EU. The EU is by far their most important trading partner and the vast majority of FDI in the region originates from the EU. More than 60% of the region's exports are absorbed by the EU-28 market and more than 70% of the countries' FDI stock originates from the European Union (Figure 1.27). Looking more closely at the export structure by partner country (Figure 1.28), shows that Germany, Italy and the region itself are the main destinations for locally produced goods. Although significantly less than most CEE EU member states, the countries of the region received important EU transfers totalling about 0.5% of GDP in 2017 (Figure 1.29). Even under reduced overall EU budgets in the future, inflows of a similar size will likely continue (with an increase in absorption capacity Croatia should be able to increase EU transfers significantly), given the priorities indicated by the EU Commission. Migrants from the region work to a large extent in the EU and send significant remittances in euro back home.

**Figure 1.28 / Goods exports by partner country, in % of total, 2017**



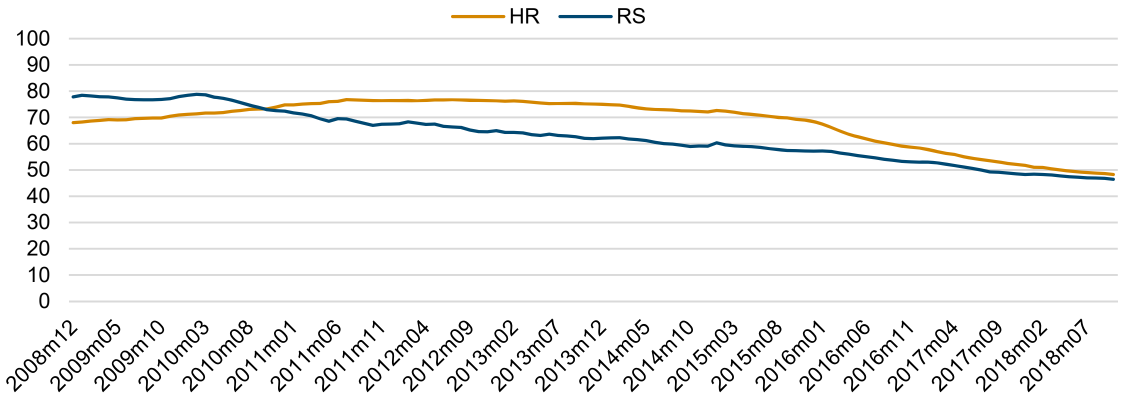

Source: wiiw Annual Database.

**Figure 1.29 / Net EU transfers, in % of GDP, 2017**




Note: Operating Budgetary Balance for EU members; IPA II indicative allocations for Western Balkan countries.
Source: European Commission.

**Figure 1.30 / Loans to households, foreign currency (i.e. EUR and CHF), in % of total**



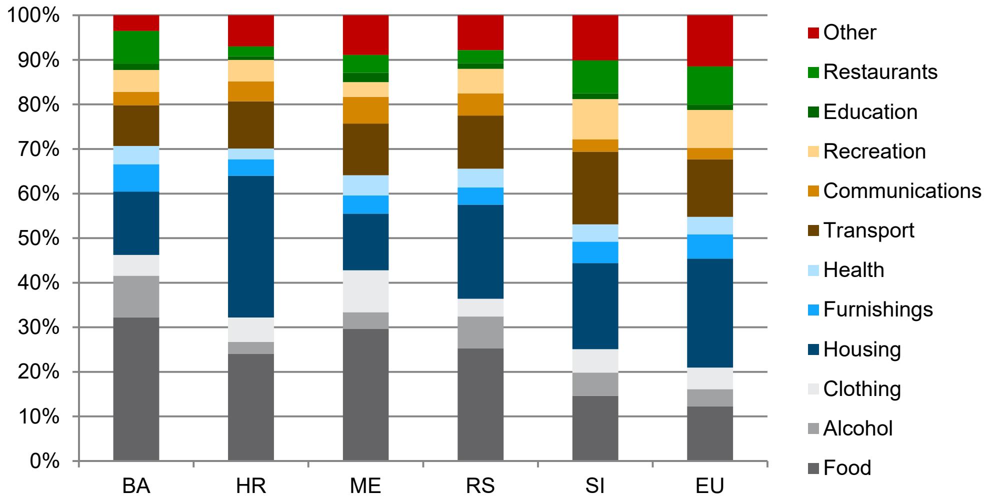

Source: wiiw Monthly Database.

Moreover, given the fixed exchange rate regimes prevalent in the region also money wise the economies are bound to the euro. Slovenia and Montenegro even use the euro outright and Bosnia and Herzegovina runs a currency board vis-à-vis the euro. There is a history of euroisation which goes back to Yugoslav times where people used the German Mark as hard currency in everyday life. As can be seen from Figure 1.30 the remaining two countries that at least nominally have a floating exchange rate regime – Croatia and Serbia – have high (though declining) shares of household loans in foreign currency of about 50% (of which in Croatia 99% and in Serbia 86% are denominated or indexed in euro and the rest in Swiss francs, respectively). This makes potential devaluations very costly and hence less likely. Nevertheless, there have been different exchange rate policy approaches in the past. While Serbia did allow the exchange rate to depreciate in times of crisis, Croatia has by and large defended a fixed exchange rate vis a vis the euro (Figure 1.24). Croatia has done this also at the cost of a massive real depreciation in the wake of the global financial crisis with a six year period of recession (2009-2014). It is highly unlikely that they will give up their exchange rate policy in view of a soon entry into the ERM II. Overall, despite various global and regional powers (e.g. Russia, China, Turkey) trying to influence the countries in the region, the EU (and the euro) remains the only game in town.

## 1.9. HOUSEHOLD INCOME AND CONSUMPTION PATTERNS

Basic consumption needs (food, beverages, clothing) are particularly high in the less developed economies of Bosnia and Herzegovina, Montenegro and Serbia (Figure 1.31). Croatian households are spending a comparatively high consumption share on housing (almost a third), while in Slovenia about a quarter is spent on transport and recreational activities – much more than in the other economies. Consumption patterns for the average EU household are quite similar to those in Slovenia, with somewhat less resources spent for food and transport and more for housing.

**Figure 1.31 / Final consumption expenditure of households by consumption purpose, in % of total, 2017**




Note: COICOP categories 1-12; EU 2016, Bosnia and Herzegovina 2015 and Croatia 2014.
Source: Eurostat and national statistical offices.

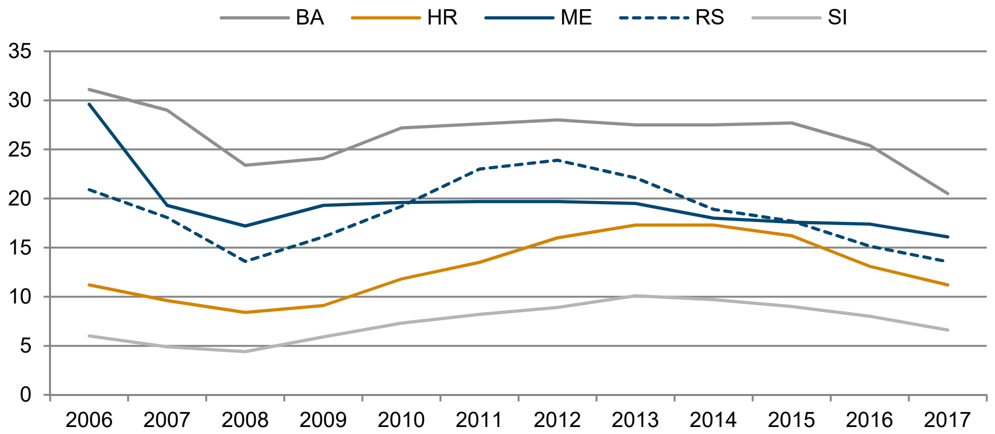
According to the EU-SILC database the median net equivalised monthly household income in 2016 stood at about EUR 2,500 in Croatia, EUR 5,900 in Slovenia and only EUR 950 in Serbia. By comparison, the EU's average value is at some EUR 7,300. Thus, consumption possibilities out of regular household income are relatively limited throughout the region – with the exception of Slovenia. Also, in Slovenia the growth of household income is much less dependent on the cyclical development of the economy. By contrast, in Croatia the correlation coefficient of household median income growth and GDP growth is very high (80%). The structure of the economies is important to understand the differences. In Slovenia, the government tried to protect households in the wake of the global financial crisis by e.g. hiking the minimum wage. Between 2008 and 2016, according to Eurostat the Slovenian minimum wage was raised from EUR 539 to EUR 791 (an increase of 47%). In Croatia it was a mere increase from EUR 380 to EUR 408 (an increase of about 7%). Moreover, the coverage of employees by collective agreements is much higher in Slovenia as compared to Croatia – 65% versus 53% in 2013 (Visser, 2016). A less corporatist framework typically causes wage income to be much more volatile.

## 1.10. LABOUR MARKETS AND DEMOGRAPHY

Unemployment in the region is endemic (with Slovenia being again an exception). Unemployment rates are in the double-digit range (Figure 1.32) and move with the business cycle. However, another factor that is reducing the unemployment rates is mass migration to (mostly) Western Europe. This has also grave implications for the demography of the societies in the region.

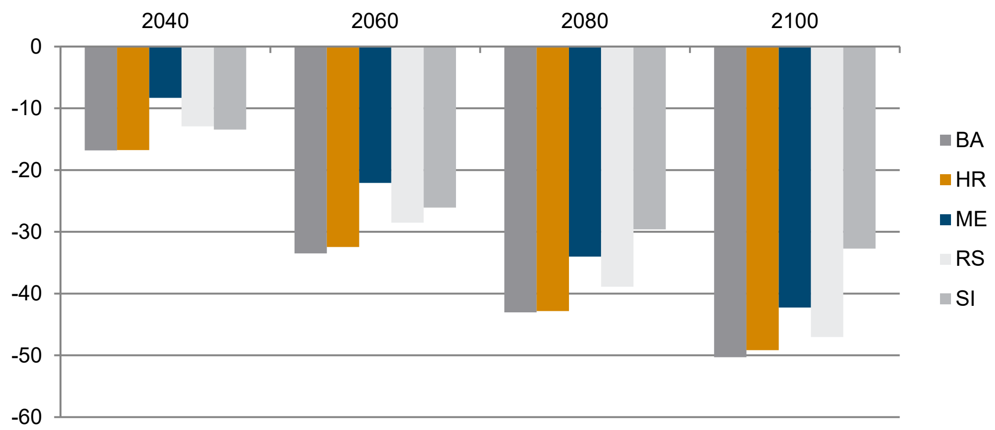
UN projections for the development of the working-age population (Figure 1.33) in SEE foresees massive losses of a third (Slovenia) to half (Bosnia and Herzegovina) by the end of the century. While this (is already and) will certainly be a shock inter alia for the political systems, it also bears the chance of higher investment in labour-saving technologies and related stronger GDP per capita growth in the future.

**Figure 1.32 / Unemployment rate, LFS, in %, period average, 2006-2017**




Source: wiiw Annual Database.

**Figure 1.33 / Demographic trends in working-age population, % change relative to 2020**



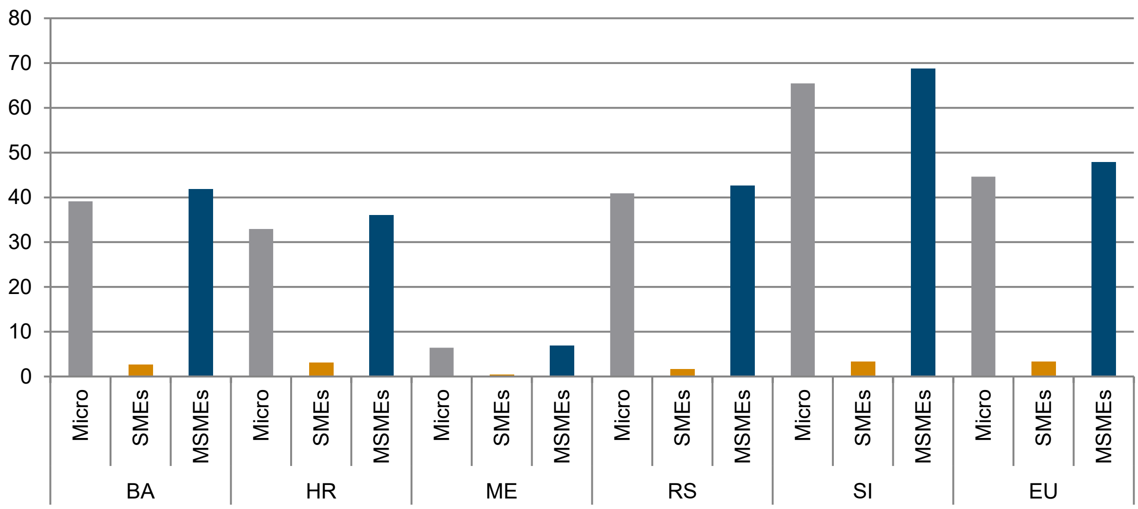

Note: Medium fertility scenario; working age is 15-64 years.
Source: United Nations, Department of Economic and Social Affairs, Population Division, 2017.

## 1.11. MICRO, SMALL AND MEDIUM-SIZED ENTERPRISES

Given the difference in economic activity levels, it does not come as a surprise that the Slovenian economy is characterised by significantly higher entrepreneurship than the other countries in the region (Figure 1.34). Slovenia has a much greater number of micro enterprises per head as well as small and medium-sized enterprises (SMEs). Together there are almost 70 micro, small and medium-sized enterprises (MSMEs) per 1,000 inhabitants in Slovenia. This compares to levels of about 30-40 in the other countries, with Montenegro clearly being an outlier with only 7 MSMEs per 1,000 people. By comparison, the EU value is close to 50.

In terms of employment dynamics, MSMEs in the region have outperformed the EU development in recent years. However, Croatia and Slovenia are the notable exceptions, where employment in MSMEs went down in the wake of the global financial crisis and where since then employment development has been sluggish. The situation in terms of value added is quite similar, with Croatia being the only negative outlier in comparison to the EU average development.

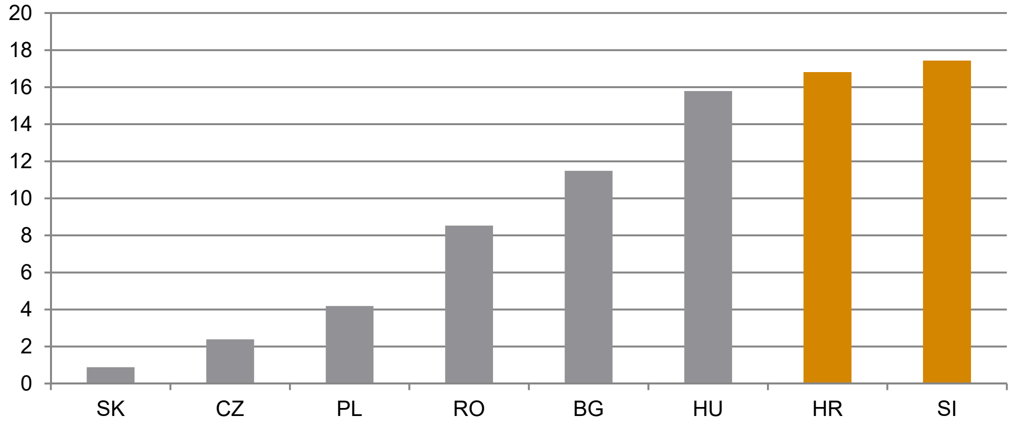
**Figure 1.34 / Enterprise density (per 1,000 people) by firm size, 2017**




Note: Bosnia and Herzegovina 2008, Montenegro 2015, Serbia 2016; the following size-class definitions are applied: micro firms (0-9 persons employed), small firms (10-49 persons employed) and medium-sized firms (50-249 persons employed).
Source: European Commission SME Performance Review and SBA factsheets; SME finance forum.

Interestingly, it is especially the MSME sector in Slovenia and Croatia that experienced over recent years export growth that was much stronger than in comparator countries (Figure 1.35). Given the above described employment developments during the post-crisis deleveraging process it is fair to assume that the competitiveness of Slovenian and Croatian MSMEs has been increasing strongly. Moreover, average investment shares in the overall business sector of Croatia and Slovenia over the same period was relatively low (around 20% of value added). At the same time businesses in the comparator countries had investment rates of around 30%. This implies that a further increase in the export orientation of the MSMEs in Croatia and Slovenia will make expansion investment in productive capacities necessary.

**Figure 1.35 / Growth of MSMEs' total exports in EUR, in %, 2014-2016**




Note: Slovenia 2013-2016.
Source: Eurostat.

# 2. Banking market

The region is quite diverse in terms of the banking sector performance. Banking sectors in Croatia and Slovenia are growing rather slowly, lagging behind their peers in Central Europe and even many countries in the euro area, while in Bosnia and Herzegovina, Serbia, and in particular Montenegro banking sectors are much more dynamic. Non-secured retail loans account for the bulk of loans to households in all the countries, and their share in total loans significantly exceeds the average level for the Eurozone. In all the countries except for Croatia accumulation of non-secured retail loans has been much faster than wage growth. Combining this trend with very high shares of non-secured retail loans in household loans in these countries means potential risks of overheating and creation of bubbles at the markets of these loans. Slovenia is the leader in terms of digital transformation in the region, in particular when it comes to business digitalisation. Croatia so far significantly lags behind Slovenia, still it performs better than most countries of CEE. The other three countries in the region have not advanced much in digital transformation yet.

Serbia and Croatia have the highest number of banks in the region – 28 and 25, respectively. However, the banking sector of the latter is significantly more concentrated: the share of the top 5 banks in assets in Croatia was 73.5% vs 54.9% in Serbia (Table 2.1). Bosnia and Herzegovina stands out as the country with the lowest concentration of its banking sector and relatively low average assets per bank, which implies potential for further consolidation of the banking market.

**Table 2.1 / Key performance indicators of the region's banking markets in 2017**

| | Number of banks | ROE, in % | ROA, in % | CAR, in % | NPLs, % of total loans | Average assets per bank, EUR million | Share in assets of the top 5 banks |
|---|---|---|---|---|---|---|---|
| Bosnia and Herzegovina | 23 | 10.2 | 1.5 | 14.0 | 10.0 | 682.3 | 53.6 |
| Croatia | 25 | 6.1 | 1.1 | 23.8 | 11.4 | 2104.0 | 73.5 |
| Montenegro | 15 | . | . | 12.3 | 7.3 | 278.8 | 60.8 |
| Serbia | 28 | 10.5 | 2.1 | 19.7 | 9.9 | 1015.7 | 54.9 |
| Slovenia | 15 | 9.6 | 1.2 | 18.2 | 8.4 | 2529.8 | 60.6 |
| **Region** | **106** | **9.1** | **1.5** | **17.6** | **9.4** | **1310.0** | **60.7** |
| *EU-CEE* | *1063* | *10.6* | *1.2* | *20.5* | *4.9* | *1180.3* | *81.0* |
| *CE-3* | *760* | *12.5* | *1.4* | *17.6* | *4.5* | *1110.3* | *73.9* |
| *EA-19* | *4769* | *6.1* | *0.6* | *19.4* | *4.2* | *6370.0* | *83.1* |
| *EU-28* | *6250* | *7.6* | *0.7* | *19.8* | *4.1* | *6862.2* | *81.8* |

Note: NPL for Slovenia - non-performing exposure (including forborne exposures) to gross carrying amounts.
CE3: Czech Republic, Hungary, Poland
For EU-CEE, CE3, EA19, EU28 data on number of banks, average assets per bank for CE3, EA, EU data source: European Banking Federation, "Banking in Europe: EBF Facts & Figures 2018" report; for other indicators: Global Financial Development Database, World Bank, data for 2016.
Source: National banks statistics, European Banking Federation, Global Financial Development Database World Bank, wiiw calculations.

Banking sectors of all the countries of the region recorded profits in 2017 as a drop in funding costs compensated lower interest income and offered good returns to the investors. Serbia and Bosnia and

Herzegovina had the highest levels of return on equity (ROE), noticeably exceeding the average level for the euro area. Croatia's ROE in 2017 was at 6.1%, which is an average level for the EA-19. Return on assets (ROA) was strong as well across all the countries, significantly surpassing average indicators for EA-19 and EU-28.

Bank capitalisation is strong in all the countries, with Croatia having one of the highest levels of the capital adequacy ratio (CAR) in the EU. Though Montenegro and Bosnia and Herzegovina have the lowest CAR levels in the region, they outperform many of their peers in the EU.

Non-performing loans (NPLs) in the region are still higher than on average in the EU, but they have declined significantly during the last years as banks have cleansed their portfolios, thus the health of the banking system has improved simultaneously with an increase in profitability.

Croatia has the biggest banking sector in terms of total assets among the five countries of the region, followed by Slovenia. At the same time, the banking sectors in Croatia and Slovenia are growing rather slowly, lagging behind their peers in Central Europe and even many countries in the euro area: in 2017, annual growth in assets was at about 2% in both countries, and before 2017, the two banking markets had been contracting for several years due to government deleveraging and non-performing loans sales (see Appendix tables).

The fastest expansion of the banking sector is taking place in Montenegro, where the average annual growth rate of bank assets during 2015-2017 was at 10%. Bosnia and Herzegovina and Serbia recorded more moderate growth in bank assets – on average 5% and 4% respectively during 2015-2017. Given the still relatively high levels of NPLs in Croatia, Bosnia and Herzegovina, and Serbia, banks are likely to further write off bad debt, which will have a dampening effect on asset growth.

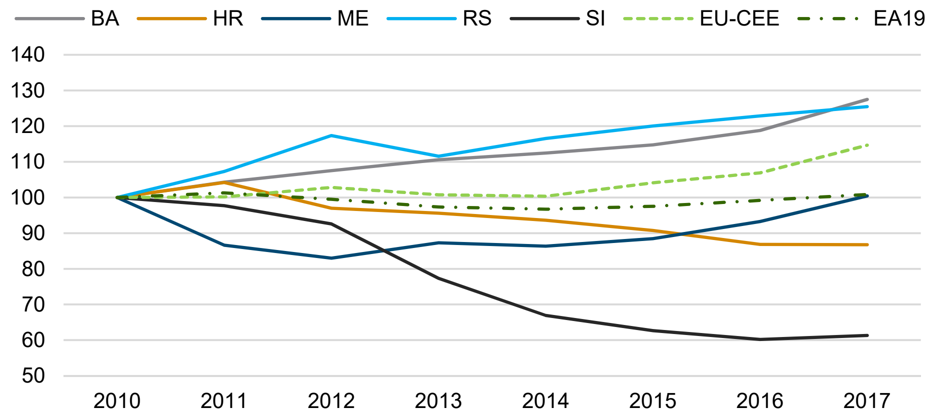
In terms of banks' assets as a share of GDP the region still significantly lags behind most of the EU member states (see Appendix tables). Croatia has the highest banking penetration among the 5 countries – around 100% of GDP in 2018 – and this is still a half of an average banking penetration level in the EU. This implies a big potential for catching-up of the banking markets.

To sum, the top factors of strength / stability of the banking sector in the region are:

› Low banking penetration that implies significant loan volume catch-up potential in SEE,
› Decreasing NPLs that signals about improving health of the banking sector,
› Strong capitalisation in all the countries of the region,
› High profitability of the banking sector in three biggest countries of the region.

Loans to the non-financial sector have been growing at a slower pace than other components of banks' portfolios, which is particularly noticeable in the case of Montenegro (see Figure 2.1). Relative dynamics remain similar, with Bosnia and Herzegovina, Serbia, and Montenegro accumulating loans much faster than Croatia and Slovenia, especially in the last three years.

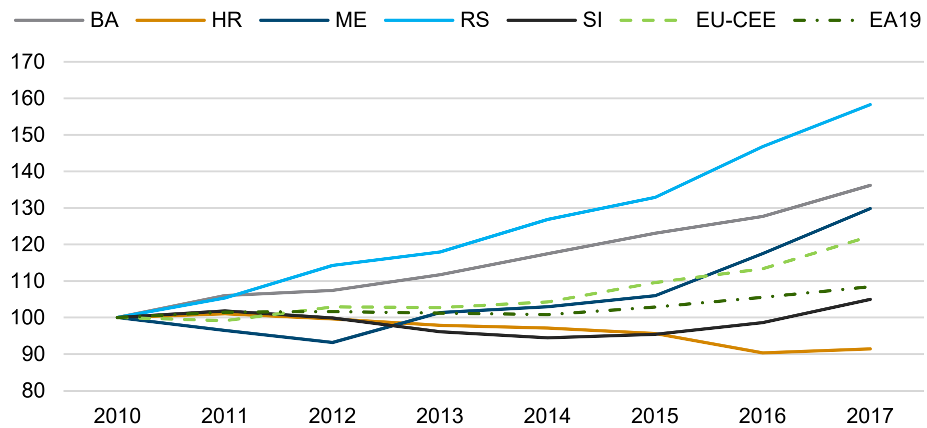
**Figure 2.1 / Index of stock of loans to non-financial private sector, in NCU terms, 2010=100**




Source: National banks statistics, wiiw calculations.

Loans to households have been performing much better than loans to non-financial corporations as can be seen in Figure 2.2. In Croatia, Montenegro, and Slovenia the fall in the stock of these loans post-crisis was much smaller and in Serbia growth in loans to households has been much more dynamic compared to loans to non-financial corporation.

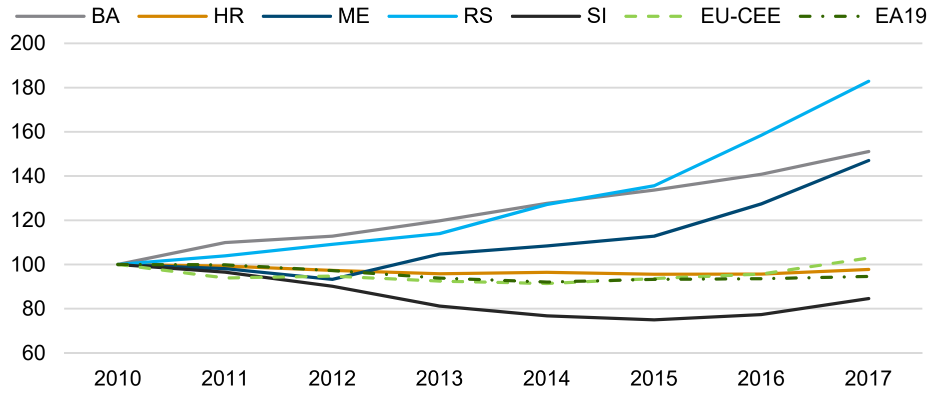
**Figure 2.2 / Index of stock of loans to households, in NCU terms, 2010=100**




Source: National banks statistics, wiiw calculations.

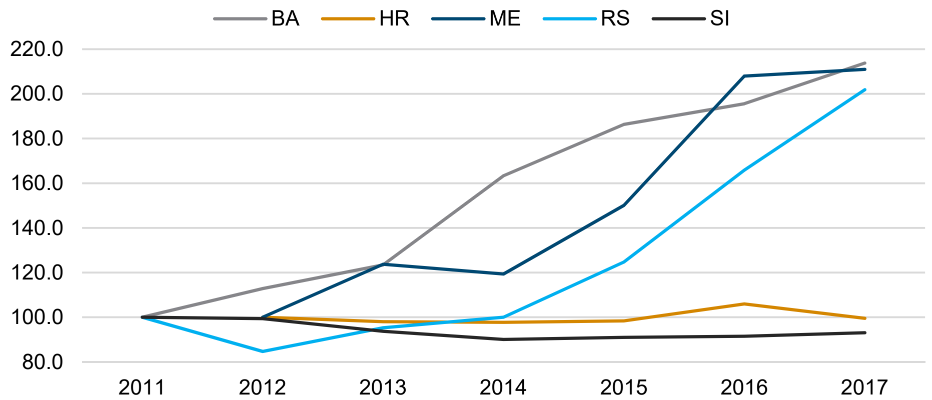
Non-secured retail loans have experienced dynamics similar to overall loans to households (see Figure 2.3). The fall in the loans stock was most profound in Slovenia where the loans stock in 2017 was still much lower than in 2010. In Croatia and Montenegro markets of non-secured retail loans practically stagnated during 2010-2017. In contrast, Bosnia and Herzegovina and Serbia did not experience any market contraction and were dynamically expanding the stock of non-secured retail loans.

**Figure 2.3 / Index of stock of non-secured retail loans, in NCU terms, 2010=100**



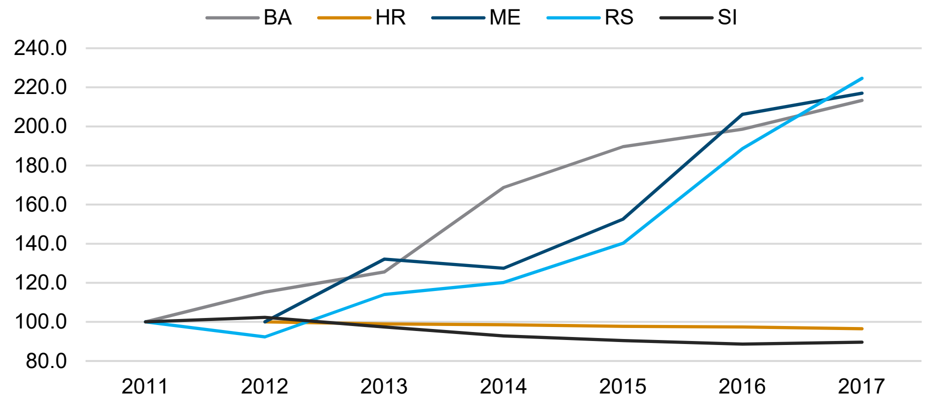

Source: National banks statistics, wiiw calculations.

**Figure 2.4 / Index of loans to households, new disbursements, in NCU terms, 2011=100**




Source: National banks statistics, wiiw calculations.

**Figure 2.5 / Index of non-secured retail loans, new disbursements, in NCU terms, 2011=100**

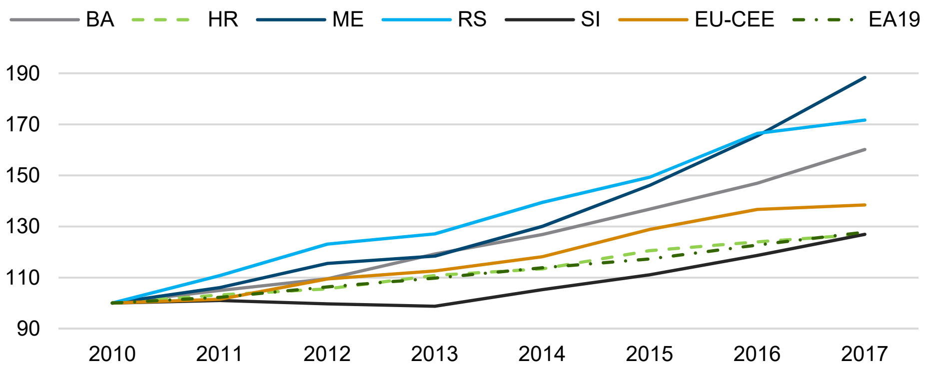



Source: National banks statistics, wiiw calculations.

However, loan stocks data do not show the full picture as they are distorted in particular by NPL write-offs. Figures 2.4 and 2.5 show the dynamics of new disbursement flows for total loans to households and non-secured retail loans, respectively. The main observation to make is that newly issued loans grow much more dynamically than loan stocks. The difference in the speed of growth is particularly striking in the case of Montenegro, where new loans grow at par with Serbia and Bosnia and Herzegovina. Newly issued non-secured loans grow at almost the same speed as total loans to households, which is to be expected as they comprise the bulk of household loans.

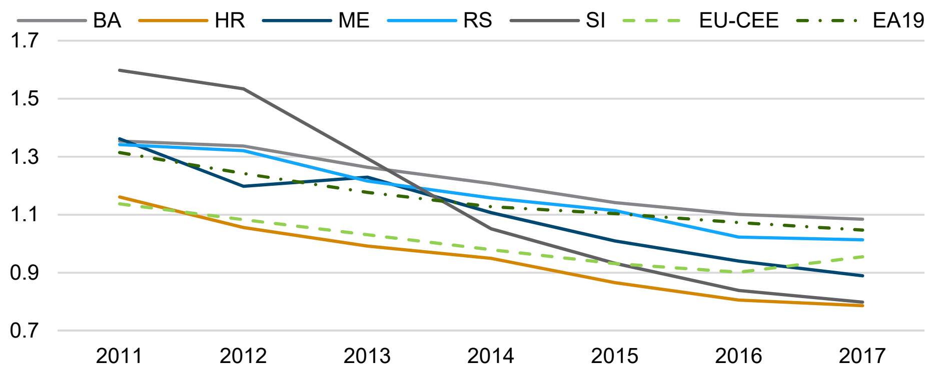
Deposits have been growing rather dynamically in all the countries of the region (see Figure 2.6). Montenegro outperformed its peers in terms of the growth speed. Reflecting deposit dynamics, the loans-to-deposits ratio (LTD) decreased noticeably in all the countries (see Figure 2.7). Sluggish loans expansion in Croatia and Slovenia has contributed to the LTD decline as well. These two countries had the lowest LTD value in the region – at 0.8.

**Figure 2.6 / Index of stock of deposits of non-financial private sector, in NCU terms, 2010=100**




Source: National banks statistics, wiiw calculations.

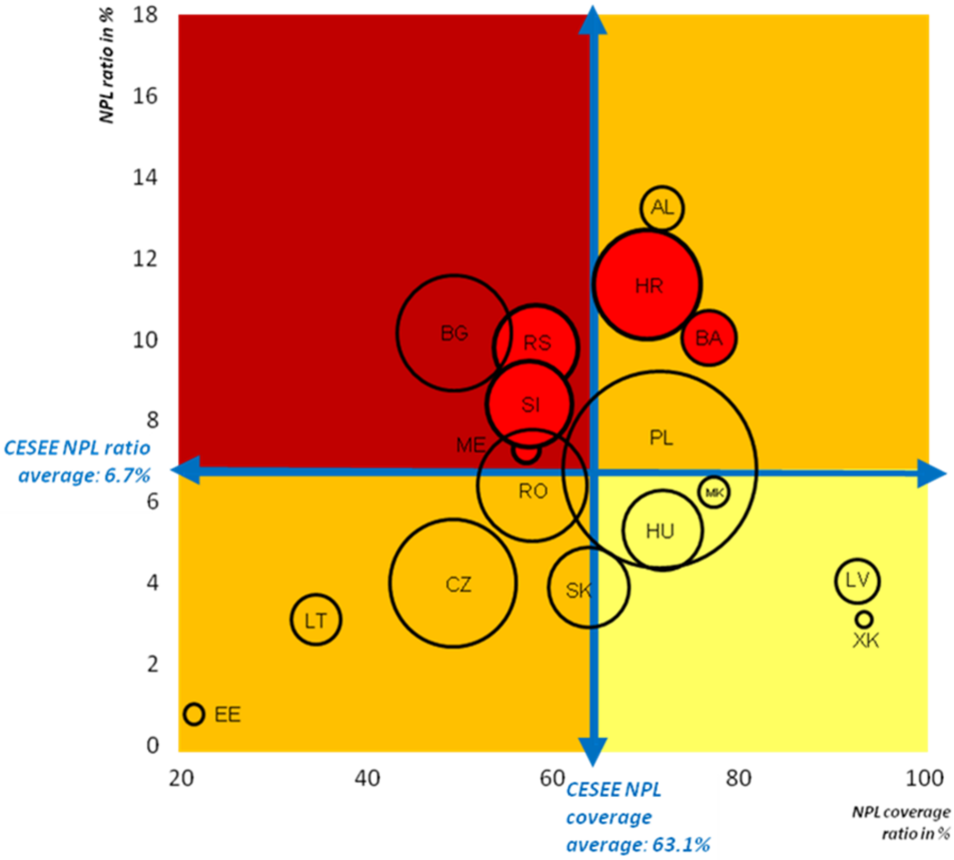
**Figure 2.7 / Loans-to-deposits ratio (LTD) for non-financial private sector**




Source: National banks statistics, wiiw calculations.

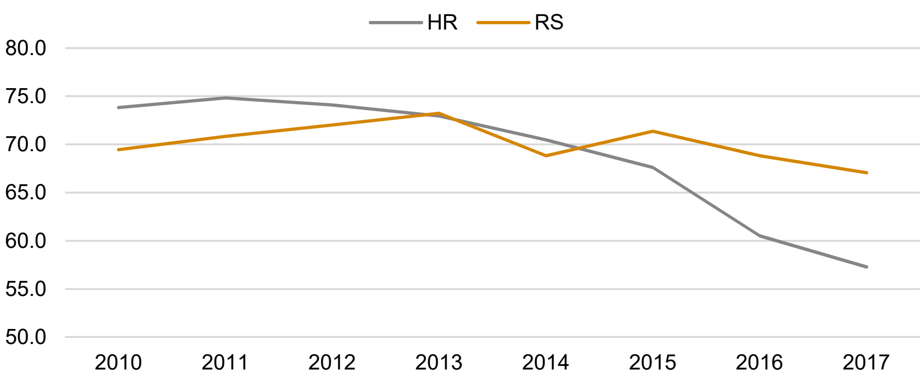
A comparison of NPL ratios and coverage ratios identifies Serbia, Slovenia, and Montenegro as the countries with the highest risks of NPLs (Figure 2.8). Croatia, though having the highest NPL ratio, has accumulated significant loss provisions which mitigates the risks. Bosnia and Herzegovina has one of the highest values of the NPL coverage ratio in CESEE.

**Figure 2.8 / NPL ratio and coverage ratio, %**




Note: The NPL coverage ratio is measured as the proportion of loan-loss provisions to NPLs. The volume of NPLs in EUR terms is proportionate to the area of a circle.
Source: National banks statistics, IMF, wiiw calculations.

**Figure 2.9 / Stock of foreign currency loans in % of total loans to non-financial private sector**



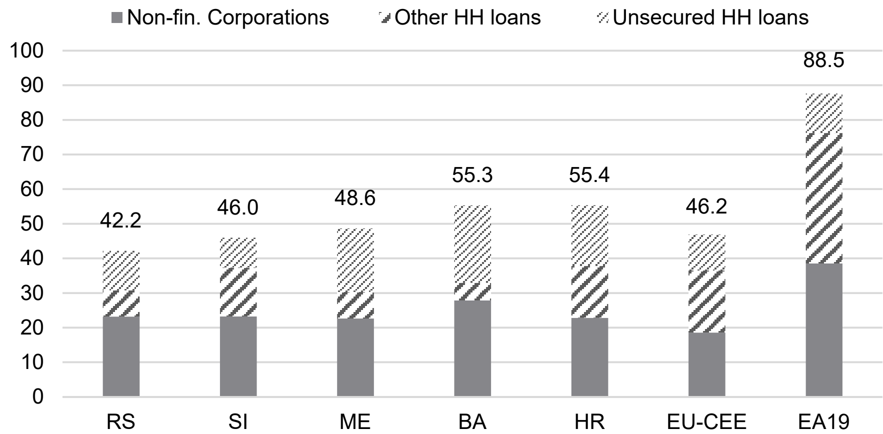

Source: National banks statistics, IMF, wiiw calculations.

Loans in foreign currency account for a significant share of total loans in Croatia and Serbia (see Figure 2.9). Notwithstanding a declining trend, the shares remained relatively high in 2017 – at 67% in Serbia and 57% in Croatia. This situation implies the potential risk of an increase in NPLs if national currencies undergo significant depreciation.

Banking sector depth measured as the ratio of the stock of loans of the non-financial private sector to GDP is at a level of 42-55% (see Figure 2.10), which is comparable with the levels in Central and Eastern European countries, but still much lower than on average in the euro area. Loans to households accounted for 45-59% of the total loans stock in 2017, with the highest share recorded in Serbia. Croatian banks have the lowest share of loans to non-financial corporations in their portfolios.

The structures of household loans varies significantly across the region: while in Slovenia, in 2017, non-secured retail loans accounted for 39% of total loans to households, almost reaching the average EU-CEE level, in Montenegro and Bosnia and Herzegovina their shares were at 71% and 81%, respectively. In all the countries of the region the shares of non-secured retail loans in total loans are significantly higher than on average in the eurozone (23%).

**Figure 2.10 / Loans stock in 2017, % GDP**

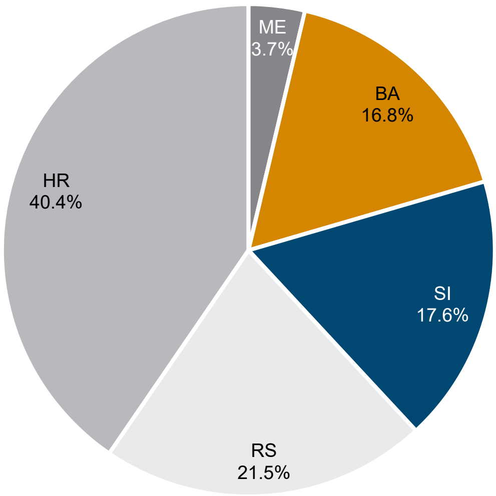



Source: National banks statistics, wiiw calculations.

Croatia accounts for the highest share of the non-secured retail loans market in the region (see Figure 2.11), with the stock of loans reaching EUR 8.6 billion in 2017. Serbia is the second biggest market for non-secured retail loans.

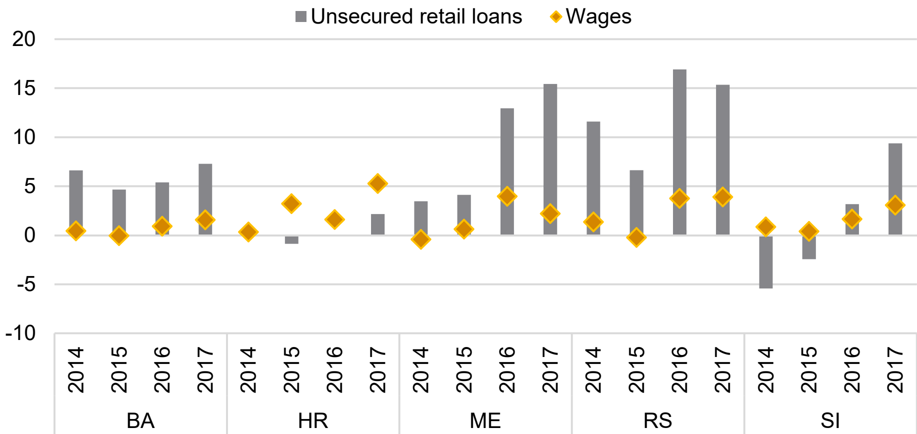
Figure 2.12 compares the dynamics of wages and non-secured retail loans in the region. In all the countries except for Croatia the accumulation of non-secured retail loans has been much faster than wage growth. In the case of Serbia and Montenegro the differences in growth rates were particularly large. Combining this trend with the very high shares of non-secured retail loans in household loans in these countries points to potential risks of overheating and the creation of bubbles in the markets of these loans.

**Figure 2.11 / Shares of countries in the region's market of non-secured retail loans in 2017, %**




Source: National banks statistics, wiiw calculations.

**Figure 2.12 / Average monthly net wages and stock of non-secured retail loans, annual change in %**




Source: National banks statistics, wiiw calculations.

Newly developing ICT-based finance solutions make use of the advances in big data analytics to provide access to finance to many clients that went unserved in the past. Such data include information on the location of consumers, frequency and type of phone calls, frequency of utility bill payments, social media presence, and various other items. Based on this information, financial technology companies build models that calculate the propensity of consumers to repay their financial obligations and that provide them with the appropriate financial facilities.

As Table 2.2 shows, digital transformation is more advanced in Croatia and Slovenia, while the other three countries in the region have been lagging behind. All the countries of the region have relatively high shares of internet users, but active mobile subscriptions are still underperforming in Bosnia and

Herzegovina and Montenegro. Banking transactions through a mobile phone are not very common yet, Montenegro and Bosnia and Herzegovina are the least developed in this respect. Both debit and credit cards are used much more seldom in Bosnia and Herzegovina, Serbia and Montenegro as compared with Croatia and Slovenia. On the positive side, the regulatory environment appears to be favourable to the digital transformation of the economies.

**Table 2.2 / Digital transformation indicators**

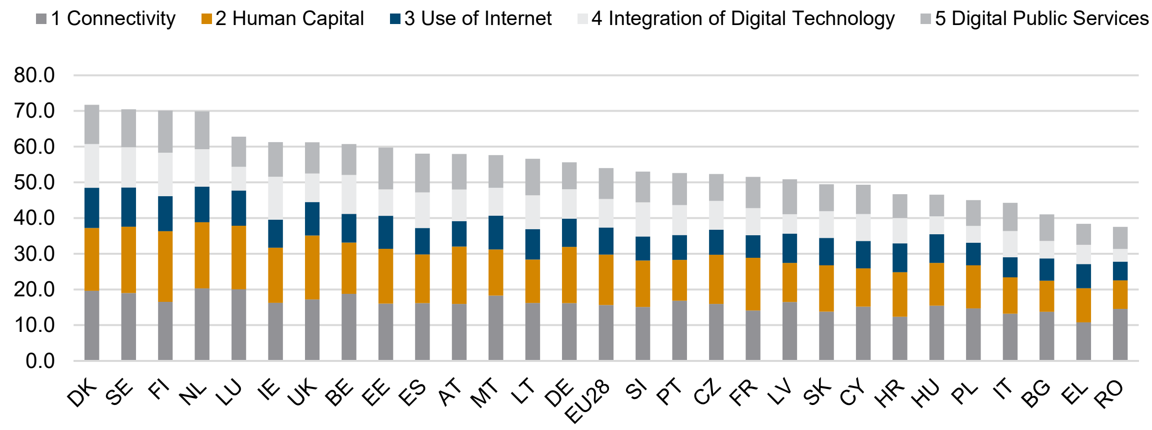
| Country name | | BA | HR | ME | RS | SI | AT | CZ |
|---|---|---|---|---|---|---|---|---|
| ICT INFRASTRUCTURE & SERVICES | Internet users (per 100 people) | 65.1 | 69.8 | 64.6 | 65.3 | 73.1 | 83.9 | 81.3 |
| | Active mobile broadband subscriptions per 100 inhabitants | 33.5 | 75.4 | 43.7 | 71.8 | 52.0 | 68.6 | 68.8 |
| PAYMENT SOLUTIONS | Debit card (% age 15+) | 34.4 | 71.1 | 33.8 | 57.8 | 91.3 | 81.6 | 64.0 |
| | Debit card used in the past year (% age 15+) | 18.7 | 50.4 | 22.8 | 38.0 | 65.8 | 68.5 | 52.2 |
| | Credit card (% age 15+) | 9.5 | 38.0 | 15.3 | 15.2 | 35.2 | 40.2 | 25.7 |
| | Credit card used in the past year (% age 15+) | 6.2 | 32.8 | 12.3 | 12.0 | 29.9 | 34.6 | 20.0 |
| | Used an account to make a transaction through a mobile phone (% age 15+) | 1.0 | 5.6 | 0.8 | 4.8 | 7.5 | 21.1 | 13.8 |
| LEGAL & REGULATORY FRAMEWORKS | Does the country have a legal framework for electronic transactions/ e-signature? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Does the country have a legal framework for data protection/ privacy online? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Does the country have a legal framework for consumer protection when purchasing online? | Yes | Yes | No | No | Yes | Yes | Yes |
| | Does the country have a legal framework for cybercrime prevention? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Source: World Bank, ITU Database, Global Findex, UNCTAD Cyberlaw Tracker.

Data on the Digital Economy and Society Index (DESI) compiled by the European Commission[5] (available only for Croatia and Slovenia among the 5 SEE countries covered here) show that digitalisation has been developing fast in the two countries. In particular, a strong trend has been recorded in Slovenia that outperforms many of the EU members in terms of technological advancement. Figure 2.13 shows that Slovenia's digital competitiveness is at the average EU level and is higher than in most of its CESEE peers as well as in France and Portugal.

5 The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness. More information on its methodology can be found at https://ec.europa.eu/digital-single-market/en/desi.

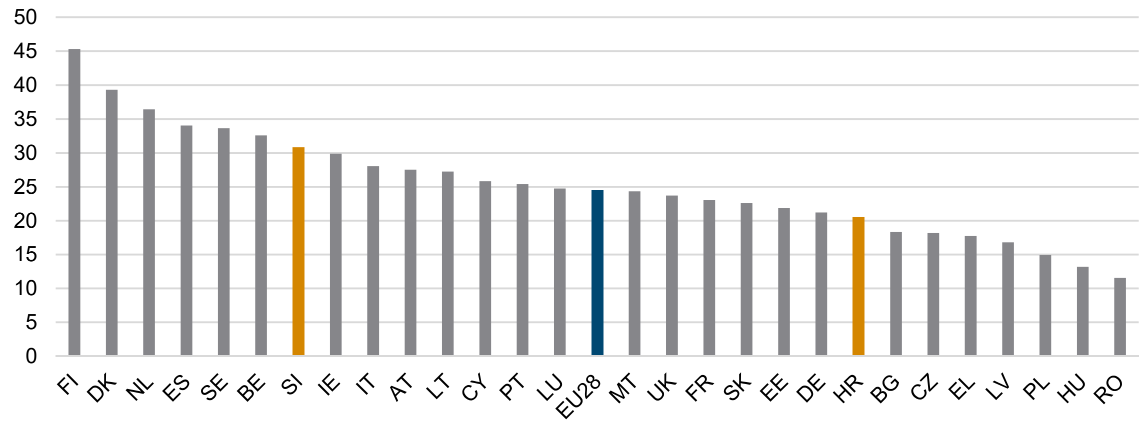
**Figure 2.13 / Digital Economy and Society Index, 2018 ranking**




Source: European Commission.

When it comes to business digitalisation, Slovenia appears to be one of the best performers in the EU; it held 7th place in 2018 (see Figure 2.14). Croatia so far significantly lags behind Slovenia, still it performs better than most CEE countries.

**Figure 2.14 / Business digitalisation in 2018, DESI component 4a, weighted score**




Source: European Commission.

## 2.1. OVERVIEW OF MAJOR AND COMPETITOR BANKS PERFORMANCE

In this section we zoom in on innovation patterns of two major international banks in the region (see the Box below). Further in Tables 2.3 – 2.27 we present performance indicators of Addiko Bank in comparison with its competitors by country. Selection of banks for each country was done based on the following principle: 5 biggest banks in terms of total assets and banks identified as main competitors of Addiko. Performance indicators include total assets (shares in the total banking sector, annual growth), volumes of loans to non-banking sectors overall and of unsecured retail loans, capital adequacy ratios, NPL ratios, net income, ROA and ROE before tax.

## EXAMPLES OF INNOVATIONS IN COMPETITOR BANKS

### UniCredit Bank

*Bosnia and Herzegovina*

The focus on raising clients' awareness of the advantages of doing business through mobile and internet banking services brought about a twofold increase in active users of electronic services in 2017 as compared with the previous year. In line with global trends, clients prefer mobile banking services and the number of active mobile banking users tripled in 2017.

In order to additionally simplify and accelerate the process of paying bills via mobile banking, the bank introduced the 'Take a Photo and Pay' technology. Instead of manually filling out a payment order, the user has the option to use the mobile phone camera to take a photo of, or scan, the recipient's account number, the amount of payment and the reference number, which are automatically loaded into a payment order in the application.

A new product was introduced – loans for financing energy efficiency in households.

*Slovenia*

In December 2017, the 'Scan and Pay' option in mobile banking was introduced, and 15% of users began to use the new functionalities within the first month. Since October 2017 the bank provides online account opening; on a computer, mobile phone or tablet. The solution delivers a fully digital experience. The start of the account opening process is supported by automatic verification. Video identification is carried out by a certified business partner in Italy in Slovenian or English. The process ends with a digital signature, and it is completed within a few minutes.

With the aim of providing consumers with a quick and easy way to obtain a cash loan, UniCredit Bank simplified the process of obtaining a loan of up to EUR 5,000 and a repayment period of up to 60 months, thus reducing the time required to obtain a loan to a few hours.

Since December 2017, Mobile Bank PRO! has been available for business users. Currently, its functionalities are identical to the Mobile Bank GO! application.

### Intesa Sanpaolo Bank

*Slovenia*

In 2017, Intesa Sanpaolo Bank expanded its range of products and services for its clients, among them the following:

› Provision of mobile payments using the Activa Visa Inspire card within the scope of the Wave2Pay mobile-wallet application

› Expanded range of pre-approved consumer credits

› Banka IN 'mobile wallet' for business clients: The technology complements the existing payment mechanisms, replaces cash management and low-value payments, and provides simple and transparent handling of domestic payment transactions, both for the service provider as well as user, in real time. The solution is intended for clients and non-clients of the Bank.

› Developing ratings for small enterprises and natural persons.

## Table 2.3 / Bosnia and Herzegovina: Assets

| Ranking 2017 | Institution name | Total assets 2015 | Total assets 2016 | Total assets 2017 | Share, % 2015 | Share, % 2016 | Share, % 2017 | Growth, % 2015 | Growth, % 2016 | Growth, % 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | UniCredit Bank d.d. Mostar, Federation of BiH | 4,392 | 4,731 | 5,250 | 18.5 | 18.9 | 19.2 | 10.4 | 7.7 | 11.0 |
| 2 | Raiffeisen Bank BH d.d., Federation of BiH | 3,729 | 3,951 | 4,155 | 15.7 | 15.8 | 15.2 | 0.6 | 5.9 | 5.2 |
| 3 | Nova banka a.d., Republika Srpska | 1,628 | 1,708 | 1,880 | 6.8 | 6.8 | 6.9 | 2.1 | 4.9 | 10.1 |
| 4 | Intesa Sanpaolo banka d.d., Federation of BiH | 1,552 | 1,790 | 1,876 | 6.5 | 7.1 | 6.9 | 7.5 | 15.4 | 4.8 |
| 5 | UniCredit bank a.d., Republika Srpska | 1,257 | 1,402 | 1,483 | 5.3 | 5.6 | 5.4 | 14.7 | 11.5 | 5.8 |
| 6 | SPARKASSE BANK d.d., Federation of BiH | 1,168 | 1,190 | 1,348 | 4.9 | 4.7 | 4.9 | 12.5 | 1.9 | 13.3 |
| 7 | Sberbank BH d.d., Federation of BiH | 1,102 | 1,163 | 1,339 | 4.6 | 4.6 | 4.9 | 9.4 | 5.5 | 15.1 |
| 8 | NLB banka a.d., Republika Srpska | 1,205 | 1,251 | 1,319 | 5.1 | 5.0 | 4.8 | 1.1 | 3.8 | 5.4 |
| 9 | NLB banka d.d., Federation of BiH | 938 | 980 | 1,044 | 3.9 | 3.9 | 3.8 | 3.0 | 4.5 | 6.6 |
| 12 | Addiko Bank d.d., Federation of BiH | 840 | 848 | 894 | 3.5 | 3.4 | 3.3 | -15.3 | 0.9 | 5.4 |
| 13 | Sberbank a.d., Republika Srpska | 824 | 818 | 832 | 3.5 | 3.3 | 3.0 | -3.8 | -0.7 | 1.7 |
| 14 | Addiko Bank a.d., Republika Srpska | 797 | 717 | 711 | 3.3 | 2.9 | 2.6 | -15.6 | -10.0 | -0.9 |
| | **Total (all institutions)** | **23,798** | **25,058** | **27,298** | **100.0** | **100.0** | **100.0** | **4.0** | **5.3** | **8.9** |
| | **Top 5 banks (according to 2017 ranking)** | **12,558** | **13,581** | **14,643** | **52.8** | **54.2** | **53.6** | **6.3** | **8.1** | **7.8** |

Note: Total assets for all institution are calculated as a sum over two entities (Federation of BiH and Republika Srpska) banking data.
Sources: Banking agency of the Federation of BiH, Banking agency of Republika Srpska, annual reports of banks.

## Table 2.4 / Bosnia and Herzegovina: Loans to non-banking sector and unsecured retail loans

| Ranking 2017 | Institution name | Loans to non-banking sector 2015 | Loans to non-banking sector 2016 | Loans to non-banking sector 2017 | Unsecured retail loans 2015 | Unsecured retail loans 2016 | Unsecured retail loans 2017 |
|---|---|---|---|---|---|---|---|
| 1 | UniCredit Bank d.d. Mostar, Federation of BiH | 2,903 | 3,078 | 3,368 | 1,255 | 1,323 | 1,411 |
| 2 | Raiffeisen Bank BH d.d., Federation of BiH | 2,251 | 2,310 | 2,408 | 1,273 | 1,291 | 1,321 |
| 3 | Nova banka a.d., Republika Srpska | 1,119 | 1,076 | 1,244 | . | . | . |
| 4 | Intesa Sanpaolo banka d.d., Federation of BiH | 1,218 | 1,277 | 1,344 | 356 | 382 | 417 |
| 5 | UniCredit bank a.d., Republika Srpska | 905 | 855 | 896 | 326 | 343 | 352 |
| 6 | SPARKASSE BANK d.d., Federation of BiH | 879 | 928 | 964 | . | . | . |
| 7 | Sberbank BH d.d., Federation of BiH | 913 | 965 | 976 | 265 | 271 | 258 |
| 8 | NLB banka a.d., Republika Srpska | 589 | 640 | 683 | . | . | . |
| 9 | NLB banka d.d., Federation of BiH | 663 | 688 | 724 | . | . | . |
| 12 | Addiko Bank d.d., Federation of BiH | 573 | 557 | 609 | 396 | 379 | 389 |
| 13 | Sberbank a.d., Republika Srpska | 640 | 621 | 591 | . | . | . |
| 14 | Addiko Bank a.d., Republika Srpska | 610 | 600 | 632 | 236 | 260 | 288 |
| | **Total (all institutions)** | **15,599** | **16,406** | **17,639** | **6,201** | **6,535** | **7,011** |
| | **Top 5 banks (according to 2017 ranking)** | **8,395** | **8,596** | **9,260** | **.** | **.** | **.** |

Sources: Banking agency of the Federation of BiH, Banking agency of Republika Srpska, annual reports of banks.

## Table 2.5 / Bosnia and Herzegovina: Capital adequacy and asset quality

| Ranking 2017 | Institution name | 2015 CAR, in % | 2016 CAR, in % | 2017 CAR, in % | 2015 NPL, in % of total loans | 2016 NPL, in % of total loans | 2017 NPL, in % of total loans |
|---|---|---|---|---|---|---|---|
| 1 | UniCredit Bank d.d. Mostar, Federation of BiH | 15.2 | 15.7 | 16.4 | 10.7 | 9.7 | 7.8 |
| 2 | Raiffeisen Bank BH d.d., Federation of BiH | 15.2 | 15.6 | 15.0 | 12.6 | 13.1 | 10.8 |
| 3 | Nova banka a.d., Republika Srpska | 12.3 | 13.9 | 13.9 | 7.3 | 7.4 | 5.7 |
| 4 | Intesa Sanpaolo banka d.d., Federation of BiH | 13.8 | 14.1 | 14.2 | 5.0 | 4.6 | 5.7 |
| 5 | UniCredit bank a.d., Republika Srpska | 18.3 | 18.4 | 19.1 | 8.1 | 8.5 | 7.2 |
| 6 | SPARKASSE BANK d.d., Federation of BiH | 13.0 | 12.9 | 11.7 | 9.7 | 9.6 | 8.5 |
| 7 | Sberbank BH d.d., Federation of BiH | 13.8 | 13.3 | 14.3 | . | . | . |
| 8 | NLB banka a.d., Republika Srpska | 17.6 | 16.2 | 15.3 | . | . | . |
| 9 | NLB banka d.d., Federation of BiH | 13.5 | 14.2 | 15.2 | 12.0 | 13.3 | 9.7 |
| 12 | Addiko Bank d.d., Federation of BiH | 14.7 | 16.0 | 13.2 | 48.6 | 41.0 | 28.3 |
| 13 | Sberbank a.d., Republika Srpska | 13.7 | 13.5 | 16.5 | 9.3 | 9.6 | 10.0 |
| 14 | Addiko Bank a.d., Republika Srpska | . | 16.1 | 14.6 | 36.9 | 26.8 | 19.1 |
| | **Total (all institutions)** | **14.4** | **14.4** | **14.0** | **13.7** | **11.8** | **10.0** |
| | **Top 5 banks (according to 2017 ranking)** | **.** | **.** | **.** | **.** | **.** | **.** |

Sources: Banking agency of the Federation of BiH, Banking agency of Republika Srpska, annual reports of banks.

## Table 2.6 / Bosnia and Herzegovina: Profitability

| Ranking 2017 | Institution name | 2015 Net interest income | 2016 Net interest income | 2017 Net interest income | 2015 Results before tax | 2016 Results before tax | 2017 Results before tax |
|---|---|---|---|---|---|---|---|
| 1 | UniCredit Bank d.d. Mostar, Federation of BiH | 105 | 160 | 162 | 2 | 102 | 92 |
| 2 | Raiffeisen Bank BH d.d., Federation of BiH | 119 | 122 | 122 | 75 | 61 | 81 |
| 3 | Nova banka a.d., Republika Srpska | 45 | 52 | 53 | 14 | 15 | 12 |
| 4 | Intesa Sanpaolo banka d.d., Federation of BiH | 59 | 61 | 61 | 29 | 30 | 28 |
| 5 | UniCredit bank a.d., Republika Srpska | 47 | 49 | 51 | 23 | 25 | 28 |
| 6 | SPARKASSE BANK d.d., Federation of BiH | 42 | 44 | 45 | 16 | 21 | 21 |
| 7 | Sberbank BH d.d., Federation of BiH | 39 | 42 | 42 | 7 | 10 | 6 |
| 8 | NLB banka a.d., Republika Srpska | 33 | 36 | 36 | 19 | 45 | 29 |
| 9 | NLB banka d.d., Federation of BiH | 31 | 33 | 35 | 9 | 12 | 17 |
| 12 | Addiko Bank d.d., Federation of BiH | 23 | 18 | 23 | -90 | -38 | 5 |
| 13 | Sberbank a.d., Republika Srpska | 29 | 30 | 31 | 5 | 5 | 6 |
| 14 | Addiko Bank a.d., Republika Srpska | 19 | 18 | 22 | -53 | -9 | 4 |
| | **Total (all institutions)** | **.** | **804** | **830** | **160** | **295** | **387** |
| | **Top 5 banks (according to 2017 ranking)** | **374** | **444** | **449** | **143** | **232** | **242** |

Sources: Banking agency of the Federation of BiH, Banking agency of Republika Srpska, annual reports of banks.

## Table 2.7 / Bosnia and Herzegovina: Profitability ratios

| Ranking 2017 | Institution name | ROA (before tax) 2015 | ROA (before tax) 2016 | ROA (before tax) 2017 | ROE (before tax) 2015 | ROE (before tax) 2016 | ROE (before tax) 2017 |
|---|---|---|---|---|---|---|---|
| 1 | UniCredit Bank d.d. Mostar, Federation of BiH | 2.0 | 2.0 | 2.0 | 11.8 | 11.4 | 12.1 |
| 2 | Raiffeisen Bank BH d.d., Federation of BiH | 2.0 | 1.6 | 2.0 | 13.5 | 11.3 | 15.4 |
| 3 | Nova banka a.d., Republika Srpska | 0.9 | 0.9 | 0.7 | 10.2 | 9.9 | 7.4 |
| 4 | Intesa Sanpaolo banka d.d., Federation of BiH | 1.9 | 1.7 | 1.5 | 12.5 | 11.6 | 10.4 |
| 5 | UniCredit bank a.d., Republika Srpska | 1.9 | 1.8 | 1.9 | 12.4 | 12.4 | 13.1 |
| 6 | SPARKASSE BANK d.d., Federation of BiH | 1.4 | 1.7 | 1.6 | 14.5 | 18.6 | |
| 7 | Sberbank BH d.d., Federation of BiH | 0.6 | 0.8 | 0.5 | 4.3 | 5.7 | 3.7 |
| 8 | NLB banka a.d., Republika Srpska | 1.6 | 3.8 | 2.3 | 14.7 | 30.4 | 17.2 |
| 9 | NLB banka d.d., Federation of BiH | 0.8 | 1.1 | 1.5 | 7.2 | 9.5 | 12.1 |
| 12 | Addiko Bank d.d., Federation of BiH | -10.7 | -4.4 | 0.6 | -47.7 | -18.3 | 2.5 |
| 13 | Sberbank a.d., Republika Srpska | 0.6 | 0.6 | 0.7 | 4.7 | 3.9 | 4.8 |
| 14 | Addiko Bank a.d., Republika Srpska | -5.6 | -1.1 | 0.6 | -36.3 | -6.1 | 3.0 |
| | **Total (all institutions)** | **0.4** | **0.1** | **1.5** | **8.6** | **4.2** | **10.2** |
| | **Top 5 banks (according to 2017 ranking)** | **1.1** | **1.7** | **1.7** | **12.2** | **11.3** | **12.3** |

Sources: Banking agency of the Federation of BiH, Banking agency of Republika Srpska, annual reports of banks.

## Table 2.8 / Croatia: Assets

| Ranking 2017 | Institution name | Total assets 2015 | Total assets 2016 | Total assets 2017 | Share, % 2015 | Share, % 2016 | Share, % 2017 | Growth, % 2015 | Growth, % 2016 | Growth, % 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Banks and savings banks** | | | | | | | | | |
| 1 | Zagrebačka banka d.d. [1)] | 105,997 | 105,131 | 102,188 | 26.4 | 26.5 | 25.6 | 3.4 | -0.8 | -2.8 |
| 2 | Privredna banka Zagreb d.d. | 69,733 | 72,439 | 75,881 | 17.4 | 18.3 | 19.0 | 0.9 | 3.9 | 4.8 |
| 3 | Erste&Steiermärkische Bank d.d. | 58,995 | 56,119 | 57,206 | 14.7 | 14.2 | 14.3 | -2.0 | -4.9 | 1.9 |
| 4 | Raiffeisenbank Austria d.d. | 31,198 | 31,424 | 31,386 | 7.8 | 7.9 | 7.9 | -0.7 | 0.7 | -0.1 |
| 5 | Splitska banka d.d.[2)] | 27,067 | 27,045 | 26,892 | 6.8 | 6.8 | 6.7 | -5.9 | -0.1 | -0.6 |
| 6 | Addiko Bank d.d. | 25,557 | 21,099 | 21,199 | 6.4 | 5.3 | 5.3 | -9.5 | -17.4 | 0.5 |
| 7 | Hrvatska poštanska banka d.d. | 17,713 | 19,358 | 19,798 | 4.4 | 4.9 | 5.0 | 2.0 | 9.3 | 2.3 |
| 8 | OTP banka Hrvatska d.d. | 15,883 | 15,790 | 19,647 | 4.0 | 4.0 | 4.9 | 0.1 | -0.6 | 24.4 |
| | **Total (all banks and savings banks included)** | **393,394** | **388,722** | **391,338** | **98.1** | **98.0** | **98.0** | **-0.5** | **-1.2** | **0.7** |
| | **Housing savings banks** | | | | | | | | | |
| | Prva stambena štedionica d.d. | 2,607 | 2,559 | 2,644 | 0.7 | 0.6 | 0.7 | 4.8 | -1.9 | 3.3 |
| | **TOTAL (ALL INSTITUTIONS INCLUDED)** | **401,166** | **396,533** | **399,253** | **100.0** | **100.0** | **100.0** | **-0.5** | **-1.2** | **0.7** |
| | **Top 5 banks (according to 2017 ranking)** | **292,990** | **292,157** | **293,553** | **73.0** | **73.7** | **73.5** | **0.4** | **-0.3** | **0.5** |

1. Recently merged its housing saving business (Prva stambena štedionica),
2. Société Générale-Splitska banka d.d., Split changed its name to Splitska banka d.d., Split on 15 May 2017.
Should be fully consolidated into OTP by the end of 2018
Sources: Croatian National Bank, annual reports of banks.

### Table 2.9 / Croatia: Loans to non-banking sector and unsecured retail loans

| Ranking 2017 | Institution name | 2015 Loans to non-banking sector | 2016 Loans to non-banking sector | 2017 Loans to non-banking sector | 2015 Unsecured retail loans | 2016 Unsecured retail loans | 2017 Unsecured retail loans |
|---|---|---|---|---|---|---|---|
| | **Banks and savings banks** | | | | | | |
| 1 | Zagrebačka banka d.d. [1)] | 69,632 | 65,612 | 61,893 | 9,072 | 9,329 | 9,487 |
| 2 | Privredna banka Zagreb d.d. | 44,186 | 45,667 | 44,562 | . | . | . |
| 3 | Erste&Steiermärkische Bank d.d. | 38,833 | 36,254 | 36,512 | . | . | . |
| 4 | Raiffeisenbank Austria d.d. | 17,387 | 16,390 | 16,276 | . | . | . |
| 5 | Splitska banka d.d.[2)] | 18,582 | 17,725 | 16,828 | . | . | . |
| 6 | Addiko Bank d.d. | 17,233 | 12,341 | 10,401 | 1,810 | 2,020 | 2,419 |
| 7 | Hrvatska poštanska banka d.d. | 10,061 | 11,250 | 10,852 | . | . | . |
| 8 | OTP banka Hrvatska d.d. | 10,862 | 10,336 | 10,736 | . | . | . |
| **Total (all banks and savings banks included)** | | **.** | **.** | **.** | **.** | **.** | **.** |
| | **Housing savings banks** | | | | | | |
| | Prva stambena štedionica d.d. | . | . | . | . | . | . |
| **TOTAL (ALL INSTITUTIONS INCLUDED)** | | **211,735** | **202,652** | **202,450** | **62,828** | **62,871** | **64,236** |
| | **Top 5 banks (according to 2017 ranking)** | **188,620** | **181,648** | **176,071** | **.** | **.** | **.** |

1. Recently merged its housing saving business (Prva stambena štedionica),
2. Société Générale-Splitska banka d.d., Split changed its name to Splitska banka d.d., Split on 15 May 2017. Should be fully consolidated into OTP by the end of 2018.
Sources: Croatian National Bank, annual reports of banks.

### Table 2.10 / Croatia: Capital adequacy and asset quality

| Ranking 2017 | Institution name | 2015 Total capital ratio, % | 2016 Total capital ratio, % | 2017 Total capital ratio, % | 2015 NPL ratio, in % | 2016 NPL ratio, in % | 2017 NPL ratio, in % |
|---|---|---|---|---|---|---|---|
| | **Banks and savings banks** | | | | | | |
| 1 | Zagrebačka banka d.d. [1)] | 24.7 | 26.2 | 28.1 | 17.4 | 16.0 | 11.9 |
| 2 | Privredna banka Zagreb d.d. | 22.2 | 24.8 | 25.4 | 11.9 | 9.4 | 9.0 |
| 3 | Erste&Steiermärkische Bank d.d. | 19.8 | 21.6 | 22.4 | 15.0 | 10.8 | 10.0 |
| 4 | Raiffeisenbank Austria d.d. | 21.1 | 22.2 | 22.5 | 17.0 | 15.1 | 10.8 |
| 5 | Splitska banka d.d.[2)] | 18.7 | 19.9 | 21.2 | 11.1 | 10.5 | 12.8 |
| 6 | Addiko Bank d.d. | 22.7 | 29.9 | 27.8 | 12.9 | 11.8 | 13.0 |
| 7 | Hrvatska poštanska banka d.d. | 15.9 | 15.7 | 18.1 | 26.7 | 16.5 | 17.1 |
| 8 | OTP banka Hrvatska d.d. | 15.6 | 16.7 | 16.9 | 19.6 | 17.4 | 14.5 |
| **Total (all banks and savings banks included)** | | **20.9** | **22.9** | **23.7** | **.** | **.** | **.** |
| | **Housing savings banks** | | | | | | |
| | Prva stambena štedionica d.d. | 25.6 | 26.4 | 30.5 | . | . | . |
| **TOTAL (ALL INSTITUTIONS INCLUDED)** | | **20.9** | **23.0** | **23.8** | **16.7** | **13.8** | **11.4** |
| | **Top 5 banks (according to 2017 ranking)** | **22.2** | **24.0** | **25.0** | **.** | **.** | **.** |

1. Recently merged its housing saving business (Prva stambena štedionica),
2. Société Générale-Splitska banka d.d., Split changed its name to Splitska banka d.d., Split on 15 May 2017. Should be fully consolidated into OTP by the end of 2018.
Sources: Croatian National Bank, annual reports of banks.

## Table 2.11 / Croatia: Profitability

| Ranking 2017 | Institution name | 2015 Net interest income | 2016 Net interest income | 2017 Net interest income | 2015 Results before tax | 2016 Results before tax | 2017 Results before tax |
|---|---|---|---|---|---|---|---|
| | **Banks and savings banks** | | | | | | |
| 1 | Zagrebačka banka d.d. 1) | 2,636 | 2,729 | 2,722 | -662 | 2,127 | 1,006 |
| 2 | Privredna banka Zagreb d.d. | 2,193 | 2,335 | 2,374 | 208 | 1,982 | 1,673 |
| 3 | Erste&Steiermärkische Bank d.d. | 1,632 | 1,582 | 1,656 | -1,241 | 830 | 812 |
| 4 | Raiffeisenbank Austria d.d. | 929 | 897 | 856 | -311 | 585 | 475 |
| 5 | Splitska banka d.d.2) | 796 | 768 | 760 | 155 | 468 | -98 |
| 6 | Addiko Bank d.d. | 432 | 444 | 481 | -2,456 | 79 | 153 |
| 7 | Hrvatska poštanska banka d.d. | 510 | 514 | 531 | 127 | 162 | 12 |
| 8 | OTP banka Hrvatska d.d. | 497 | 515 | 527 | -155 | 152 | 65 |
| **Total (all banks and savings banks included)** | | **10,548** | **10,825** | **10,900** | **-5,032** | **6,171** | **3,900** |
| | **Housing savings banks** | | | | | | |
| | Prva stambena štedionica d.d. | . | . | . | 29 | 31 | 27 |
| **TOTAL (ALL INSTITUTIONS INCLUDED)** | | **10,756** | **11,040** | **11,121** | **-4,973** | **6,227** | **3,959** |
| | **Top 5 banks (according to 2017 ranking)** | **8,186** | **8,311** | **8,368** | **-1,851** | **5,991** | **3,868** |

1. Recently merged its housing saving business (Prva stambena štedionica),
2. Société Générale-Splitska banka d.d., Split changed its name to Splitska banka d.d., Split on 15 May 2017.
Should be fully consolidated into OTP by the end of 2018.
Sources: Croatian National Bank, annual reports of banks.

## Table 2.12 / Croatia: Profitability ratios

| Ranking 2017 | Institution name | 2015 ROA | 2016 ROA | 2017 ROA | 2015 ROE | 2016 ROE | 2017 ROE |
|---|---|---|---|---|---|---|---|
| | **Banks and savings banks** | | | | | | |
| 1 | Zagrebačka banka d.d. 1) | -0.6 | 2.0 | 1.0 | -4.6 | 14.9 | 6.9 |
| 2 | Privredna banka Zagreb d.d. | 0.3 | 2.7 | 2.2 | 1.9 | 16.4 | 12.8 |
| 3 | Erste&Steiermärkische Bank d.d. | -2.1 | 1.5 | 1.4 | -17.8 | 11.3 | 10.4 |
| 4 | Raiffeisenbank Austria d.d. | -1.0 | 1.9 | 1.5 | -6.8 | 13.2 | 10.9 |
| 5 | Splitska banka d.d.2) | 0.6 | 1.7 | -0.4 | 4.8 | 14.5 | -2.9 |
| 6 | Addiko Bank d.d. | -9.6 | 0.4 | 0.7 | -67.8 | 2.1 | 4.7 |
| 7 | Hrvatska poštanska banka d.d. | 0.7 | 0.8 | 0.1 | 8.3 | 10.6 | 0.8 |
| 8 | OTP banka Hrvatska d.d. | -1.0 | 1.0 | 0.3 | -9.9 | 9.1 | 3.8 |
| **Total (all banks and savings banks included)** | | **-1.2** | **1.6** | **1.1** | **-9.9** | **11.7** | **7.3** |
| | **Housing savings banks** | | | | | | |
| | Prva stambena štedionica d.d. | 1.1 | 1.2 | 1.0 | 11.7 | 12.5 | 10.8 |
| **TOTAL (ALL INSTITUTIONS INCLUDED)** | | **-1.2** | **1.6** | **1.0** | **-9.7** | **11.7** | **7.3** |
| | **Top 5 banks (according to 2017 ranking)** | **-0.6** | **2.1** | **1.3** | **-5.1** | **14.4** | **8.6** |

1. Recently merged its housing saving business (Prva stambena štedionica), 2. Société Générale-Splitska banka d.d., Split changed its name to Splitska banka d.d., Split on 15 May 2017. Should be fully consolidated into OTP by the end of 2018.
Note: ROE is calculated by dividing results before tax to own funds.
Sources: Croatian National Bank, annual reports of banks.

## Table 2.13 / Montenegro: Assets

| Ranking 2017 | Institution name | Total assets 2015 | Total assets 2016 | Total assets 2017 | Share, % 2015 | Share, % 2016 | Share, % 2017 | Growth, % 2015 | Growth, % 2016 | Growth, % 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Crnogorska komercijalna banka AD Podgorica member of OTP Group | 586 | 595 | 615 | 16.9 | 15.7 | 14.7 | 2.4 | 1.6 | 3.4 |
| 2 | Hipotekarna banka AD Podgorica | 411 | 429 | 495 | 11.8 | 11.3 | 11.8 | 40.5 | 4.2 | 15.4 |
| 3 | ERSTE Bank AD Podgorica | 369 | 450 | 491 | 10.6 | 11.9 | 11.7 | -2.0 | 22.0 | 8.9 |
| 4 | Societe Generale banka Montenegro AD | 436 | 450 | 483 | 12.6 | 11.9 | 11.6 | 14.5 | 3.2 | 7.4 |
| 5 | NLB Banka AD Podgorica | 487 | 475 | 460 | 14.0 | 12.5 | 11.0 | -5.8 | -2.4 | -3.2 |
| 7 | Addiko Bank AD Podgorica | 229 | 254 | 264 | 6.6 | 6.7 | 6.3 | -3.6 | 10.7 | 4.0 |
| | **Total (all banks)** | **3,472** | **3,790** | **4,182** | **100.0** | **100.0** | **100.0** | **10.7** | **9.2** | **10.3** |
| | **Top 5 banks (according to 2017 ranking)** | **2,289** | **2,399** | **2,543** | **65.9** | **63.3** | **60.8** | **7.0** | **4.8** | **6.0** |

Sources: Central Bank of Montenegro, annual reports of banks.

## Table 2.14 / Montenegro: Loans to non-banking sector and unsecured retail loans

| Ranking 2017 | Institution name | Loans to non-banking sector 2015 | Loans to non-banking sector 2016 | Loans to non-banking sector 2017 | Unsecured retail loans 2015 | Unsecured retail loans 2016 | Unsecured retail loans 2017 |
|---|---|---|---|---|---|---|---|
| 1 | Crnogorska komercijalna banka AD Podgorica member of OTP Group | 283 | 265 | 301 | . | . | . |
| 2 | Hipotekarna banka AD Podgorica | 188 | 216 | 216 | . | . | . |
| 3 | ERSTE Bank AD Podgorica | 236 | 252 | 299 | . | . | . |
| 4 | Societe Generale banka Montenegro AD | 301 | 303 | 341 | . | . | . |
| 5 | NLB Banka AD Podgorica | 256 | 258 | 268 | . | . | . |
| 7 | Addiko Bank AD Podgorica | 159 | 188 | 216 | . | . | . |
| | **Total (all banks)** | **1,842** | **1,942** | **2,091** | **604** | **682** | **787** |
| | **Top 5 banks (according to 2017 ranking)** | **1,264** | **1,294** | **1,425** | **.** | **.** | **.** |

Sources: Central Bank of Montenegro, annual reports of banks.

## Table 2.15 / Montenegro: Capital adequacy and asset quality

| Ranking 2017 | Institution name | 2015 Total capital ratio, % | 2016 Total capital ratio, % | 2017 Total capital ratio, % | 2015 NPL ratio, in % | 2016 NPL ratio, in % | 2017 NPL ratio, in % |
|---|---|---|---|---|---|---|---|
| 1 | Crnogorska komercijalna banka AD Podgorica member of OTP Group | 15.4 | 15.7 | 16.7 | . | . | . |
| 2 | Hipotekarna banka AD Podgorica | 8.5 | 9.1 | 9.1 | . | . | . |
| 3 | ERSTE Bank AD Podgorica | 14.1 | 13.3 | 13.7 | . | . | . |
| 4 | Societe Generale banka Montenegro AD | 11.4 | 12.4 | 12.5 | . | . | . |
| 5 | NLB Banka AD Podgorica | 14.4 | 16.4 | 15.2 | . | . | . |
| 7 | Addiko Bank AD Podgorica | 12.7 | 15.4 | 13.2 | 34.5 | 21.4 | 24.0 |
| | **Total (all banks)** | **13.3** | **12.9** | **12.3** | **12.6** | **10.29** | **7.29** |
| | **Top 5 banks (according to 2017 ranking)** | **13.0** | **13.6** | **13.6** | **.** | **.** | **.** |

Sources: Central Bank of Montenegro, annual reports of banks.

## Table 2.16 / Montenegro: Profitability

| Ranking 2017 | Institution name | 2015 Net interest income | 2016 Net interest income | 2017 Net interest income | 2015 Results before tax | 2016 Results before tax | 2017 Results before tax |
|---|---|---|---|---|---|---|---|
| 1 | Crnogorska komercijalna banka AD Podgorica member of OTP Group | 22 | 21 | 21 | 7 | 3 | 9 |
| 2 | Hipotekarna banka AD Podgorica | 12 | 12 | 13 | 4 | 4 | 5 |
| 3 | ERSTE Bank AD Podgorica | 20 | 19 | 20 | 7 | 9 | 9 |
| 4 | Societe Generale banka Montenegro AD | 19 | 21 | 20 | 7 | 8 | 8 |
| 5 | NLB Banka AD Podgorica | 17 | 19 | 17 | 2 | 6 | 6 |
| 7 | Addiko Bank AD Podgorica | 7 | 7 | 8 | -21 | -10 | 1 |
| | **Total (all banks)** | **.** | **.** | **.** | **.** | **.** | **.** |
| | **Top 5 banks (according to 2017 ranking)** | **90** | **92** | **90** | **27** | **30** | **37** |

Sources: Central Bank of Montenegro, annual reports of banks.

## Table 2.17 / Montenegro: Profitability ratios

| Ranking 2017 | Institution name | ROA 2015 | ROA 2016 | ROA 2017 | ROE 2015 | ROE 2016 | ROE 2017 |
|---|---|---|---|---|---|---|---|
| 1 | Crnogorska komercijalna banka AD Podgorica member of OTP Group | 1.2 | 0.5 | 1.5 | 7.9 | 3.1 | 8.9 |
| 2 | Hipotekarna banka AD Podgorica | 0.9 | 0.9 | 0.9 | 11.0 | 10.3 | 10.3 |
| 3 | ERSTE Bank AD Podgorica | 1.9 | 1.9 | 1.8 | 13.8 | 14.5 | 13.1 |
| 4 | Societe Generale banka Montenegro AD | 1.6 | 1.9 | 1.7 | 14.0 | 15.0 | 13.8 |
| 5 | NLB Banka AD Podgorica | 0.3 | 1.3 | 1.3 | 2.3 | 7.7 | 8.5 |
| 7 | Addiko Bank AD Podgorica | -9.0 | -3.8 | 0.6 | -64.6 | -42.9 | 6.6 |
| | **Total (all banks)** | | | | | | |
| | **Top 5 banks (according to 2017 ranking)** | **1.2** | **1.2** | **1.4** | **9.0** | **9.2** | **10.7** |

Sources: Central Bank of Montenegro, annual reports of banks.

## Table 2.18 / Serbia: Assets

| Ranking 2017 | Institution name | Total assets 2015 | Total assets 2016 | Total assets 2017 | Share, % 2015 | Share, % 2016 | Share, % 2017 | Growth, % 2015 | Growth, % 2016 | Growth, % 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Banca Intesa a.d. | 487,799 | 551,416 | 564,860 | 16.0 | 17.0 | 16.8 | 3.1 | 13.0 | 2.4 |
| 2 | Unicredit Bank Srbija a.d. | 308,284 | 332,232 | 362,749 | 10.1 | 10.2 | 10.8 | 16.2 | 7.8 | 9.2 |
| 3 | Komercijalna banka a.d. | 391,857 | 400,017 | 369,184 | 12.9 | 12.3 | 11.0 | -3.5 | 2.1 | -7.7 |
| 4 | Société Générale banka Srbija a.d. | 230,537 | 235,783 | 287,988 | 7.6 | 7.3 | 8.5 | 3.7 | 2.3 | 22.1 |
| 5 | Raiffeisen banka a.d. | 234,426 | 254,025 | 264,621 | 7.7 | 7.8 | 7.9 | 4.6 | 8.4 | 4.2 |
| 6 | Agroindustrijsko komercijalna banka AIK banka a.d. | 179,079 | 183,736 | 209,360 | 5.9 | 5.7 | 6.2 | 3.3 | 2.6 | 13.9 |
| 7 | Eurobank a.d. [1)] | 140,583 | 150,633 | 158,441 | 4.6 | 4.6 | 4.7 | -3.8 | 7.1 | 5.2 |
| 8 | Erste Bank a.d. | 117,488 | 142,916 | 161,921 | 3.9 | 4.4 | 4.8 | 20.2 | 21.6 | 13.3 |
| 11 | Sberbank Srbija a.d. [2)] | 106,836 | 108,158 | 116,033 | 3.5 | 3.3 | 3.4 | -1.5 | 1.2 | 7.3 |
| 13 | Addiko Bank a.d. [3)] | 101,513 | 97,355 | 94,116 | 3.3 | 3.0 | 2.8 | -14.5 | -4.1 | -3.3 |
| | **TOTAL** | **3,047,825** | **3,241,505** | **3,369,392** | **100.0** | **100.0** | **100.0** | **2.7** | **6.4** | **3.9** |
| | **Top 5 banks (according to 2017 ranking)** | **1,652,904** | **1,773,473** | **1,849,401** | **54.2** | **54.7** | **54.9** | **3.9** | **7.3** | **4.3** |

1) Change of the business name of the former Eurobank EFG a.d. Beograd.
2) Change of the business name of the former Volksbank a.d. Beograd.
3) On 8 July 2016, Hypo Alpe-Adria Bank a.d. Beograd changed its business name into Addiko Bank a.d. Beograd.
Sources: National Bank of Serbia and balance sheets of banks.

## Table 2.19 / Serbia: Loans to non-banking sector and unsecured retail loans

| Ranking 2017 | Institution name | 2015 Loans to non-banking sector | 2016 Loans to non-banking sector | 2017 Loans to non-banking sector | 2015 Unsecured retail loans | 2016 Unsecured retail loans | 2017 Unsecured retail loans |
|---|---|---|---|---|---|---|---|
| 1 | Banca Intesa a.d. | 257,849 | 271,750 | 301,894 | . | . | . |
| 2 | Unicredit Bank Srbija a.d. | 180,375 | 201,321 | 232,553 | . | . | . |
| 3 | Komercijalna banka a.d. | 162,743 | 150,411 | 153,897 | . | . | . |
| 4 | Société Générale banka Srbija a.d. | 156,144 | 158,859 | 204,950 | . | . | . |
| 5 | Raiffeisen banka a.d. | 117,197 | 124,649 | 137,693 | . | . | . |
| 6 | Agroindustrijsko komercijalna banka AIK banka a.d. | 86,775 | 89,327 | 106,135 | . | . | . |
| 7 | Eurobank a.d. [1)] | 87,024 | 94,819 | 106,135 | . | . | . |
| 8 | Erste Bank a.d. | 75,183 | 91,214 | 104,140 | . | . | . |
| 11 | Sberbank Srbija a.d. [2)] | 67,767 | 69,864 | 73,953 | . | . | . |
| 13 | Addiko Bank a.d. [3)] | 55,126 | 60,428 | 61,640 | 7,899 | 10,811 | 13,610 |
| | **TOTAL** | **1,919,626** | **1,964,728** | **2,006,480** | **402,603** | **470,694** | **542,947** |
| | **Top 5 banks (according to 2017 ranking)** | **874,307** | **906,991** | **1,030,988** | **.** | **.** | **.** |

1) Change of the business name of the former Eurobank EFG a.d. Beograd.
2) Change of the business name of the former Volksbank a.d. Beograd.
3) On 8 July 2016, Hypo Alpe-Adria Bank a.d. Beograd changed its business name into Addiko Bank a.d. Beograd. Net loans for total loans, gross for unsecured retail loans.
Sources: National Bank of Serbia and balance sheets of banks.

## Table 2.20 / Serbia: Capital adequacy and asset quality

| Ranking 2017 | Institution name | 2015 Total capital ratio, % | 2016 Total capital ratio, % | 2017 Total capital ratio, % | 2015 NPL, in % of total loans | 2016 NPL, in % of total loans | 2017 NPL, in % of total loans |
|---|---|---|---|---|---|---|---|
| 1 | Banca Intesa a.d. | 23.5 | 22.5 | 21.1 | . | . | . |
| 2 | Unicredit Bank Srbija a.d. | 19.9 | 19.3 | 19.1 | . | . | . |
| 3 | Komercijalna banka a.d. | 15.7 | 13.9 | 17.1 | . | . | . |
| 4 | Société Générale banka Srbija a.d. | 15.9 | 17.1 | 14.0 | . | . | . |
| 5 | Raiffeisen banka a.d. | 23.5 | 22.1 | 21.7 | . | . | . |
| 6 | Agroindustrijsko komercijalna banka AIK banka a.d. | 29.3 | 28.8 | 29.2 | . | . | . |
| 7 | Eurobank a.d. [1)] | 33.4 | 32.5 | 32.3 | . | . | . |
| 8 | Erste Bank a.d. | 13.6 | 12.7 | 12.9 | . | . | . |
| 11 | Sberbank Srbija a.d. [2)] | 21.7 | 21.6 | 20.8 | . | . | . |
| 13 | Addiko Bank a.d. [3)] | 20.9 | 23.0 | 21.8 | 39.1 | 26.5 | 17.1 |
| | **TOTAL** | **20.0** | **18.6** | **19.7** | **21.5** | **17.0** | **9.9** |
| | **Top 5 banks (according to 2017 ranking)** | **19.9** | **19.2** | **18.9** | **.** | **.** | **.** |

1) Change of the business name of the former Eurobank EFG a.d. Beograd.
2) Change of the business name of the former Volksbank a.d. Beograd.
3) On 8 July 2016, Hypo Alpe-Adria Bank a.d. Beograd changed its business name into Addiko Bank a.d. Beograd.
Sources: National Bank of Serbia and balance sheets of banks.

## Table 2.21 / Serbia: Profitability

| Ranking 2017 | Institution name | Net interest income 2015 | Net interest income 2016 | Net interest income 2017 | Net profit before tax 2015 | Net profit before tax 2016 | Net profit before tax 2017 |
|---|---|---|---|---|---|---|---|
| 1 | Banca Intesa a.d. | . | . | . | 24,560 | 34,484 | 28,221 |
| 2 | Unicredit Bank Srbija a.d. | . | . | . | 6,366 | 6,227 | 6,633 |
| 3 | Komercijalna banka a.d. | . | . | . | 180 | 350 | 8,137 |
| 4 | Société Générale banka Srbija a.d. | . | . | . | 2,063 | 5,748 | 6,031 |
| 5 | Raiffeisen banka a.d. | . | . | . | 4,342 | 5,411 | 6,627 |
| 6 | Agroindustrijsko komercijalna banka AIK banka a.d. | . | . | . | 3,413 | 4,338 | 13,794 |
| 7 | Eurobank a.d. [1)] | . | . | . | 5,854 | 7,915 | 10,145 |
| 8 | Erste Bank a.d. | . | . | . | 1,189 | 2,065 | 2,632 |
| 11 | Sberbank Srbija a.d. [2)] | . | . | . | -498 | 436 | 803 |
| 13 | Addiko Bank a.d. [3)] | 3,389 | 2,980 | 3,209 | -6,344 | -1,279 | 1,218 |
| | **TOTAL** | **127,400** | **123,847** | **120,900** | **9,720** | **21,320** | **68,690** |
| | **Top 5 banks (according to 2017 ranking)** | **.** | **.** | **.** | **37,511** | **52,220** | **55,649** |

1) Change of the business name of the former Eurobank EFG a.d. Beograd.
2) Change of the business name of the former Volksbank a.d. Beograd.
3) On 8 July 2016, Hypo Alpe-Adria Bank a.d. Beograd changed its business name into Addiko Bank a.d. Beograd.
Sources: National Bank of Serbia and balance sheets of banks.

## Table 2.22 / Serbia: Profitability ratios

| Ranking 2017 | Institution name | ROA 2015 | ROA 2016 | ROA 2017 | ROE 2015 | ROE 2016 | ROE 2017 |
|---|---|---|---|---|---|---|---|
| 1 | Banca Intesa a.d. | 5.0 | 6.3 | 5.0 | 21.4 | 27.8 | 23.7 |
| 2 | Unicredit Bank Srbija a.d. | 2.1 | 1.9 | 1.8 | 10.4 | 9.7 | 9.6 |
| 3 | Komercijalna banka a.d. | 0.0 | 0.1 | 2.2 | 0.3 | 0.6 | 12.9 |
| 4 | Société Générale banka Srbija a.d. | 0.9 | 2.4 | 2.1 | 5.6 | 14.2 | 14.9 |
| 5 | Raiffeisen banka a.d. | 1.9 | 2.1 | 2.5 | 7.9 | 9.6 | 11.5 |
| 6 | Agroindustrijsko komercijalna banka AIK banka a.d. | 1.9 | 2.4 | 6.6 | 6.5 | 8.2 | 22.6 |
| 7 | Eurobank a.d. [1)] | 4.2 | 5.3 | 6.4 | 12.5 | 16.2 | 19.8 |
| 8 | Erste Bank a.d. | 1.0 | 1.4 | 1.6 | 7.4 | 11.4 | 12.6 |
| 11 | Sberbank Srbija a.d. [2)] | -0.5 | 0.4 | 0.7 | -2.1 | 1.9 | 3.3 |
| 13 | Addiko Bank a.d. [3)] | -6.2 | -1.3 | 1.3 | -28.6 | -6.2 | 5.6 |
| | **TOTAL** | **0.3** | **0.7** | **2.1** | **1.5** | **3.3** | **10.5** |
| | **Top 5 banks (according to 2017 ranking)** | **2.3** | **2.9** | **3.0** | **11.4** | **15.3** | **15.9** |

1) Change of the business name of the former Eurobank EFG a.d. Beograd.
2) Change of the business name of the former Volksbank a.d. Beograd.
3) On 8 July 2016, Hypo Alpe-Adria Bank a.d. Beograd changed its business name into Addiko Bank a.d. Beograd.
Sources: National Bank of Serbia and balance sheets of banks.

## Table 2.23 / Slovenia: Assets

| Ranking 2017 | Institution name | Total assets 2015 | Total assets 2016 | Total assets 2017 | Share, % 2015 | Share, % 2016 | Share, % 2017 | Growth, % 2015 | Growth, % 2016 | Growth, % 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | NLB - NOVA LJUBLJANSKA BANKA d.d. | 8,707 | 8,778 | 8,713 | 23.3 | 23.7 | 23.0 | -2.0 | 0.8 | -0.7 |
| 2 | NOVA KREDITNA BANKA MARIBOR d.d. | 3,563 | 4,832 | 4,914 | 9.5 | 13.0 | 12.9 | -1.2 | 35.6 | 1.7 |
| 3 | ABANKA d.d. | 3,828 | 3,612 | 3,656 | 10.2 | 9.7 | 9.6 | -11.3 | -5.6 | 1.2 |
| 4 | SKB BANKA d.d. | 2,561 | 2,803 | 2,991 | 6.8 | 7.6 | 7.9 | 0.4 | 9.5 | 6.7 |
| 5 | UNICREDIT BANKA SLOVENIJA d.d. | 2,545 | 2,571 | 2,706 | 6.8 | 6.9 | 7.1 | -1.3 | 1.0 | 5.2 |
| 7 | BANKA INTESA SANPAOLO d.d. | 2,272 | 2,352 | 2,398 | 6.1 | 6.3 | 6.3 | -0.7 | 3.5 | 2.0 |
| 9 | SBERBANK BANKA d.d. | 1,902 | 1,846 | 1,741 | 5.1 | 5.0 | 4.6 | 6.9 | -2.9 | -5.7 |
| 10 | ADDIKO BANK d.d | 1,344 | 1,414 | 1,538 | 3.6 | 3.8 | 4.1 | -0.4 | 5.2 | 8.8 |
| 11 | BANKA SPARKASSE d.d. | 1,089 | 1,166 | 1,214 | 2.9 | 3.1 | 3.2 | 5.0 | 7.1 | 4.1 |
| | **Total (all banks)** | **37,411** | **37,050** | **37,946** | **100.0** | **100.0** | **100.0** | **-3.4** | **-1.0** | **2.4** |
| | **Top 5 banks (according to 2017 ranking)** | **21,204** | **22,596** | **22,980** | **56.7** | **61.0** | **60.6** | **-3.3** | **6.6** | **1.7** |

Sources: National Bank of Slovenia, annual reports of individual banks.

## Table 2.24 / Slovenia: Loans to non-banking sector and unsecured retail loans

| Ranking 2017 | Institution name | Loans to non-banking sector 2015 | Loans to non-banking sector 2016 | Loans to non-banking sector 2017 | Unsecured retail loans 2015 | Unsecured retail loans 2016 | Unsecured retail loans 2017 |
|---|---|---|---|---|---|---|---|
| 1 | NLB - NOVA LJUBLJANSKA BANKA d.d. | 5,915 | 5,434 | 4,987 | . | . | . |
| 2 | NOVA KREDITNA BANKA MARIBOR d.d. | 1,538 | 1,949 | 2,323 | . | . | . |
| 3 | ABANKA d.d. | 1,869 | 1,827 | 1,982 | . | . | . |
| 4 | SKB BANKA d.d. | 1,743 | 2,033 | 2,108 | 246 | 245 | 244 |
| 5 | UNICREDIT BANKA SLOVENIJA d.d. | 1,689 | 1,746 | 1,808 | . | . | . |
| 7 | BANKA INTESA SANPAOLO d.d. | 1,483 | 1,626 | 1,675 | 159 | 137 | 163 |
| 9 | SBERBANK BANKA d.d. | 1,277 | 1,222 | 1,311 | 121 | 153 | 191 |
| 10 | ADDIKO BANK d.d | 1,097 | 1,038 | 1,103 | 97 | 199 | 302 |
| 11 | BANKA SPARKASSE d.d. | 836 | 897 | 920 | . | . | . |
| | **Total (all banks)** | **20,192** | **19,403** | **19,763** | **3,331** | **3,437** | **3,759** |
| | **Top 5 banks (according to 2017 ranking)** | **12,755** | **12,987** | **13,207** | **.** | **.** | **.** |

Sources: National Bank of Slovenia, annual reports of individual banks.

## Table 2.25 / Slovenia: Capital adequacy and asset quality

| Ranking 2017 | Institution name | 2015 Total capital ratio, % | 2016 Total capital ratio, % | 2017 Total capital ratio, % | 2015 NPL ratio, in % | 2016 NPL ratio, in % | 2017 NPL ratio, in % |
|---|---|---|---|---|---|---|---|
| 1 | NLB - NOVA LJUBLJANSKA BANKA d.d. | 22.6 | 23.4 | 21.8 | 16.5 | 11.9 | 8.1 |
| 2 | NOVA KREDITNA BANKA MARIBOR d.d. | 28.1 | 23.3 | 19.8 | 18.0 | 12.7 | 9.8 |
| 3 | ABANKA d.d. | 22.9 | 26.3 | 24.3 | 10.9 | 9.2 | 7.3 |
| 4 | SKB BANKA d.d. | 16.1 | 14.2 | 13.2 | 7.0 | 5.1 | 4.0 |
| 5 | UNICREDIT BANKA SLOVENIJA d.d. | 22.0 | 15.6 | 17.4 | 6.7 | 3.8 | 2.4 |
| 7 | BANKA INTESA SANPAOLO d.d. | 17.6 | 17.0 | 17.4 | 11.0 | 8.0 | 7.0 |
| 9 | SBERBANK BANKA d.d. | 18.2 | 18.3 | 18.9 | 3.4 | 3.9 | 3.7 |
| 10 | ADDIKO BANK d.d | 12.8 | 15.6 | 15.6 | 6.6 | 5.4 | 3.4 |
| 11 | BANKA SPARKASSE d.d. | 16.2 | 15.6 | 15.9 | 5.6 | 4.7 | 4.4 |
| | **Total (all banks)** | **18.7** | **19.2** | **18.2** | **16.3** | **11.6** | **8.4** |
| | **Top 5 banks (according to 2017 ranking)** | **22.7** | **21.8** | **20.1** | **13.4** | **9.9** | **7.1** |

Note: NPL for all banks - non-performing exposure including forborne exposure.
Sources: National Bank of Slovenia, annual reports of individual banks.

## Table 2.26 / Slovenia: Profitability

| Ranking 2017 | Institution name | 2015 Net interest income | 2016 Net interest income | 2017 Net interest income | 2015 Results before tax | 2016 Results before tax | 2017 Results before tax |
|---|---|---|---|---|---|---|---|
| 1 | NLB - NOVA LJUBLJANSKA BANKA d.d. | 208 | 175 | 159 | 52 | 68 | 185 |
| 2 | NOVA KREDITNA BANKA MARIBOR d.d. | 79 | 91 | 79 | 42 | 29 | 36 |
| 3 | ABANKA d.d. | 76 | 78 | 72 | 50 | 82 | 48 |
| 4 | SKB BANKA d.d. | 59 | 56 | 58 | 40 | 72 | 48 |
| 5 | UNICREDIT BANKA SLOVENIJA d.d. | 45 | 42 | 43 | 12 | 15 | 47 |
| 7 | BANKA INTESA SANPAOLO d.d. | 44 | 42 | 41 | 14 | 23 | 5 |
| 9 | SBERBANK BANKA d.d. | 35 | 34 | 33 | -4 | 1 | 4 |
| 10 | ADDIKO BANK d.d | 25 | 25 | 34 | -48 | 14 | 18 |
| 11 | BANKA SPARKASSE d.d. | 20 | 20 | 22 | 8 | 11 | 11 |
| | **Total (all banks)** | **746** | **670** | **652** | **158** | **364** | **443** |
| | **Top 5 banks (according to 2017 ranking)** | **467** | **441** | **411** | **196** | **267** | **363** |

Sources: National Bank of Slovenia, annual reports of individual banks.

### Table 2.27 / Slovenia: Profitability ratios

| Ranking 2017 | Institution name | ROA (before tax) 2015 | ROA (before tax) 2016 | ROA (before tax) 2017 | ROE (before tax) 2015 | ROE (before tax) 2016 | ROE (before tax) 2017 |
|---|---|---|---|---|---|---|---|
| 1 | NLB - NOVA LJUBLJANSKA BANKA d.d. | 0.6 | 0.8 | 2.1 | 4.2 | 5.3 | 14.1 |
| 2 | NOVA KREDITNA BANKA MARIBOR d.d. | 1.2 | 0.6 | 0.7 | 7.1 | 4.4 | 5.3 |
| 3 | ABANKA d.d. | 1.3 | 2.3 | 1.3 | 9.5 | 14.0 | 8.0 |
| 4 | SKB BANKA d.d. | 1.6 | 2.6 | 1.6 | 11.5 | 19.5 | 13.1 |
| 5 | UNICREDIT BANKA SLOVENIJA d.d. | 0.5 | 0.6 | 1.7 | 4.6 | 6.2 | 18.4 |
| 7 | BANKA INTESA SANPAOLO d.d. | 0.6 | 1.0 | 0.2 | 5.0 | 7.9 | 1.7 |
| 9 | SBERBANK BANKA d.d. | -0.2 | 0.1 | 0.2 | -2.5 | 0.7 | 2.1 |
| 10 | ADDIKO BANK d.d | -3.6 | 1.0 | 1.2 | -36.1 | 11.8 | 13.8 |
| 11 | BANKA SPARKASSE d.d. | 0.7 | 0.9 | 0.9 | 9.4 | 11.1 | 10.7 |
| | **Total (all banks)** | **0.4** | **1.0** | **1.2** | **3.6** | **8.0** | **9.6** |
| | | | | | | | |
| | **Top 5 banks (according to 2017 ranking)** | **0.9** | **1.2** | **1.6** | **6.6** | **8.4** | **11.6** |

Sources: National Bank of Slovenia, annual reports of individual banks.

# 3. Regulatory environment

## 3.1. EU REGULATION

Global and especially EU regulatory changes matter a great deal for the five countries covered here, including the non-EU members, given the large role of foreign parent banks in these countries' banking sectors. Regulation of the financial sector at the EU level has changed quite significantly over the past decade, in response to the global financial crisis, eurozone crisis, and their legacy.

At the start of 2018, a significant new amount of banking regulation was introduced in the EU. The new measures are as follows:

› The **Payment Services Directive, PSD2**: This regulates the exchange of information related to customer data between established banks, and new competing lenders and financial technology companies (with the aim of increasing competition in retail banking). Most banks are likely to create new interfaces in order to meet the requirements of PSD2, which will increase costs and could result in some teething problems.

› The new **Markets in Financial Instruments Directive, MiFID2**: More derivatives previously traded 'over the counter' are being forced onto central exchanges. Banks have to report up to 65 data points to regulators for trades that they do. In addition, banks must charge clients separately for research. According to the *Economist*, MiFID2 is 'perhaps the biggest regulatory change to European financial markets since the financial crisis'.[6]

› **New International Financial Reporting Standards, IFRS 9**: This forces banks to make provisions for expected loan losses, instead of waiting to incur the losses first.

› A **new floor for risk-weighted assets (RWA), as part of Basel III**: This has implications for the amount of equity that some banks need to hold. Like other parts of Basel III, however, it will be phased in over several years.

As part of the Basel III requirements, **risk weights on government bond exposure** in non-EU countries will be gradually increased from zero, even when funding is in local currency. This means that foreign parent banks have to increase risk weighting for, say, local subsidiaries who hold dinar-denominated Serbian government debt. In the countries covered here, that could have particularly important implications, given that lenders in the region tend to be large-scale buyers of government paper. This could lead to weaker funding inflows from parents to subsidiaries in the region.

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6 https://www.economist.com/finance-and-economics/2018/01/06/europes-sprawling-new-financial-law-enters-into-force. An estimate by the Boston Consulting Group and IHS Markit suggested that financial firms had spent USD 2.1bn preparing for MiFID2.

The other big policy change on the horizon for the EU with regulatory implications is the completion of the **Banking Union**. When talking about ‘completing’ the banking union, what is generally meant is the aim of introducing an EU-wide deposit insurance, in order to break the so-called ‘doom loop’ between sovereigns and banks in weaker parts of the bloc, which was a major source of instability during the 2010-2012 eurozone crisis. This faces quite large-scale opposition in Germany and some other countries. However, for the banking union more broadly, significant steps have already been taken, including single supervision of eurozone banks by the ECB, and a single regulation board to deal with failing banks.

To allay German fears on deposit insurance, the Commission has proposed a gradual approach, and included other offsetting elements. These include building up banks’ ability to withstand heavy losses, and to tackle more strongly the issue of NPLs in the southern eurozone. However, it is far from clear whether this will succeed. In general, it appears that there also remains a great deal of uncertainty around banking legislation at the EU level. Like many other aspects of reform in the bloc, and especially those related to greater integration, it is hostage to adverse political developments of recent years. The current stand-off between Italy and the European Commission, for example, even though it is about fiscal policy, could also have implications for the speed of further banking reform in the EU.

More generally, post-crisis regulatory changes affecting parent banks of lenders in the countries covered here have been quite broad-based. They have included tighter regulation on the quantity and quality of capital that banks must hold, deleveraging, funding profiles, the type of debt that can be bailed-in, and significant changes to risk management practices.

## 3.2. LOCAL REGULATION

The **quality of regulation** differs greatly between the countries covered in this project. Bankruptcy and insolvency regimes are generally weak in the five countries covered here, with implications for the stability of the financial sector in each country. According to the World Economic Forum (WEF)’s ‘soundness of banks’ indicator, the sector in Croatia is strongest, followed by (in order) Serbia, Montenegro, Slovenia and Bosnia and Herzegovina. A separate indicator compiled by the WEF for financial market development shows Montenegro as the clear leader in the region, followed by (in order) Croatia, Serbia, Bosnia and Herzegovina and Slovenia[7].

In terms of regulatory quality more generally, Slovenia is the clear frontrunner in the region according to the World Bank Governance Indicators. It is followed by (in order) Croatia, Montenegro, Serbia and Bosnia and Herzegovina. Serbia and Montenegro have improved on this measure over the past decade, however, while Slovenia and Croatia have deteriorated, and Bosnia and Herzegovina largely stagnated (see Figure 4.2).

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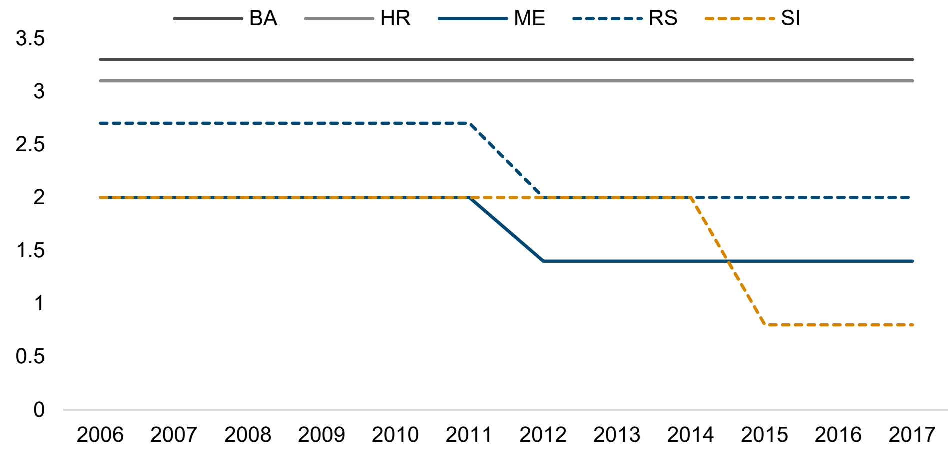
[7] Montenegro’s standout score in the region may seem surprising. The score reflects the WEF’s assessment of Montenegro’s financial sector across the following categories: availability of financial services, affordability of financial services, financing through local equity market, ease of access to loans, venture capital availability, soundness of banks, regulation of securities exchanges and legal rights. Montenegro ranks 44th in the world, just behind Poland (43rd) and just ahead of Austria (47th), suggesting clear strengths in this area.

In almost all countries, **resolving insolvencies** is a challenge. The exception to this is Slovenia, which scores higher than many Western European countries on this measure according to the World Bank's Doing Business rankings (Figure 3.1). It is followed by (in order) Bosnia and Herzegovina, Montenegro, Serbia and Croatia. According to the World Bank, insolvencies take 0.8 years to resolve in Slovenia, 1.4 years in Montenegro, 2 years in Serbia, 3.1 years in Croatia and 3.3 years in Bosnia and Herzegovina (Figure 3.1). The latter two have made zero progress on this measure for at least a decade. Of the weaker performers, Serbia seems to be making most progress in this area. Reforms are underway to ensure timely recognition of losses by banks (something that has been a problem throughout the region), tighten regulation to improve collateral recognition, and strengthen mortgage laws to allow for a more efficient process after defaults. A series of recommendations in the same areas by the IMF to Bosnia and Herzegovina and Montenegro are largely yet to be acted upon (with the exception of moves towards introducing an out-of-court restructuring mechanism in Bosnia and Herzegovina).

**Figure 3.1 / World Bank Doing Business: Years to resolve insolvency**




Source: World Bank.

A lack of clarity over **property rights** often makes it hard to collateralise assets across the region. To some extent this is a legacy of the wars of the 1990s, although other factors also contribute. Major efforts have been put into this in recent years, with the help of external donors. A key initiative has been simply to raise awareness of the importance of registering properties (for example so that family members can inherit after death). This appears to have had some impact[8], but major room for improvement exists.

The lack of clarity over ownership is exacerbated by problems with the **judiciary** in some countries, which makes banks fearful of lending because debts may not be able to be recovered. Partly there are questions about impartiality, but also about simply capacity. The process of recovering assets can be extremely slow, owing to case backlogs and understaffing. One way out of this has been private enforcement agents (bailiffs) who enforce court orders on behalf of the creditor. Montenegro has introduced such a system, and further steps for the region as a whole were made under the Vienna Initiative in 2017.

8 See 'Banking Challenges in the Western Balkans: Prospects and Challenges', Ch. 3 in IMF (2017).

**Credit registries** are a further barrier to the effective functioning of the banking sector in some of the countries covered. Many are either incomplete, or simply do not exist. This makes it very difficult for creditors to make informed decisions about borrowers.

## 3.3. COUNTRY-SPECIFIC DETAILS

### 3.3.1. Serbia

In the second half of 2015, Serbia launched a comprehensive strategy to tackle high NPLs (which were at that point well over 20% of the total, one of the highest levels in the CESEE region). The strategy was broad-based, and included work on banking supervision, tax issues, court procedures, and legal reforms. The aim was to both write-down NPLs, and to prevent a new build-up of bad assets. When looking at NPL ratios in Serbia, the strategy seems to have had quite rapid and significant success (more details are provided in chapters 2 and 4 of this report). In 2015-2016, about 3% of total loans in Serbia were written off.

A remaining weakness in Serbia has been the so-called 'downstream' element, meaning the sale of NPLs once they have been written down. This is partly because of continued challenges in recovering collateral. Asset management companies which specialise in these markets in other parts of Europe have been slow to enter Serbia and the Western Balkan region in general, probably also because of lack of economies of scale.

The other key element for Serbia in the overall strategy is the improvement of NPL resolution in the legal system. Progress has been held back here, in part because of weak or delayed implementation. Serbia introduced a crucial law on real estate appraisals in December 2016, but there have been delays in the approval of some key parts of the legislation. Serbia has no dedicated framework for personal insolvency. In late 2017, the National Bank of Serbia introduced a number of new provisions intended to improve supervisory guidance of loan-loss provisioning. As of mid-2017, Basel III capital and liquidity requirements have been in place in Serbia.

### 3.3.2. Croatia

Croatia introduced a new Bankruptcy Act in 2015 in an attempt to improve pre-bankruptcy proceedings, but it has not been an unqualified success. In 2017, the Ministry of Justice launched a process to deal with various inconsistencies and points which were unclear in the act. In particular, efforts are needed to effectively implement the pre-bankruptcy settlement procedure, and to train staff, including in the judiciary.

### 3.3.3. Montenegro

In Montenegro, the government has introduced International Financial Reporting Standards (IFRS 9), which aims to result in more stringent provisioning by lenders. A law on voluntary financing restructuring was introduced in 2015, and amended in 2017 to broaden the asset coverage and attempt to increase incentives for participation. According to the World Bank, the measure caused an 8.5% decline in the stock of NPLs as of 2018. The authorities are also working towards the transposition of EU legislation into domestic law on capital requirements, banking recovery and resolution, and deposit insurance. By 2019 it is expected that Montenegro will adopt amendments to an existing law on minimum standards for management of credit risk. This will be in line with EBA guidelines for the correct classification of loans as performing or non-performing, and the reclassification of non-performing assets to higher categories.

### 3.3.4. Bosnia and Herzegovina

New banking regulations were put in place in 2017, which moved Bosnia and Herzegovina further in the direction of harmonisation with EU standards. These included a new bankruptcy law in the Republika Srpska, and an amendment of the existing bankruptcy law in the Federation. These measures aimed at the improvement of bankruptcy proceeding initiation, the process of restructuring of debts, and a reduction in the length and cost of bankruptcy proceedings. In addition, a new law introduced pre-bankruptcy proceedings targeted specifically at the reorganisation of non-liquid companies. Since the start of 2018, banks have been implementing IFRS 9.

# 4. Risks and opportunities

## 4.1. RISK OVERVIEW

In the sections below we assess the chief areas of risk faced by a financial firm operating in Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia. We attempt to assess Country and Sovereign Risk[9] in a broad sense, taking into account a large number of relevant factors in order to build up a holistic view. We approach all risk assessments from the perspective of a company in the financial sector in the five relevant countries. Comparison with peers, groups of countries or 'benchmark'/'best practice' states is a central element of both Country and Sovereign Risk. In this chapter, we compare the five countries, depending on relevance, with each other, the rest of CESEE, and Austria.

In this chapter we assess the following areas of risk: political (section 4.2), sovereign (4.3, covering fiscal, external, financial and structural), business cycle (4.4) and operational (4.5). We summarise in Table 4.1 below our general assessments across the main categories, on a scale of high, medium and low[10]. We take the perspective of a five-year time horizon for assessing these risks, with the exception of the business cycle, which is by definition a more short-term (6-12 months) assessment. At the start of each section, we also provide a quantitative summary of our findings, ranking the five countries for each relevant indicator[11].

**Table 4.1 / General risk assessments by category**

| | Political | Sovereign | | | | Business cycle | Operational |
|---|---|---|---|---|---|---|---|
| | | *Fiscal* | *External* | *Financial* | *Structural* | | |
| **BA** | High | Medium | Medium | Medium | Medium | Low | Medium |
| **HR** | Medium | Medium | Medium | Low | Medium | Low | Medium |
| **ME** | Medium | Medium | High | Medium | Medium | High | Low |
| **RS** | Medium | Medium | Medium | Medium | Medium | Low | Medium |
| **SI** | Low | Medium | Low | Medium | Medium | Low | Low |

Note: Risks relate to five-year time horizon, and indicate the chance of risks materialising in a way that would cause developments in the economy and/or business environment to diverge significantly from our baseline assumptions. Risk probabilities are defined as follows: low = up to 10% chance of materialising, medium = 10-30% chance, high = 30-50% chance.
Source: Own assessment.

9 The boundary between Country and Sovereign Risk is often blurred. We take Sovereign Risk to be an assessment specifically of the likelihood of a 'credit event', such as a default. Country Risk is much broader, and takes into account the risks associated with doing business in a country more generally.

10 These indicate the likelihood of risks in each category materialising that would affect our baseline forecasts for each country in the next five years. Low = < 10% chance of materialising, medium = 10-30% chance, high = 30-50% chance.

11 This is a useful way to rank countries across several indicators, to gain a better understanding of how each economy compares with its peers. However, it should be treated with some caution, as a simple ranking does not account for the often big gaps between countries on certain indicators. For example, if on a particular indicator one country scores very well and the other four badly, a simple 1-5 ranking will not fully capture this. The second-placed country will appear closer to the first placed country, and further away from the third-placed country, than is really the case.

In addition to the mostly quantitative assessments of risk outlined above, we also include a risk matrix (section 4.6), which looks at risks in a qualitative sense, and ranks them based on likelihood and impact (a summary is included immediately below, Table 4.2). This includes an assessment of opportunities and risks related to the EU accession process for Bosnia and Herzegovina, Montenegro and Serbia.

**Table 4.2 / Risk matrix**

| | | Impact on countries | | |
|---|---|---|---|---|
| | | **High** | **Medium** | **Low** |
| Likelihood | **High** | New eurozone crisis<br>Global trade war | Smaller EU budget and no significant change to IPA financing | |
| | **Medium** | | Deterioration in rule of law and institutions | |
| | **Low** | Violent inter-ethnic conflict in one or more countries in the region<br>Armed conflict between Serbia and Kosovo<br>EU accession process stops<br>One or more countries joins the EU by 2025<br>Labour shortages stimulate higher investment<br>Conflicts between great powers in the Balkans<br>Rings of integration in EU become more formalised, and most of CESEE is left out | EM crisis spreads<br>Faster-than-expected ECB tightening<br>Hard/no deal Brexit | Improvement in EU-Russia relations |

Note: Risks relate to five-year time horizon, and indicate the chance of risks materialising in a way that would cause developments in the economy and/or business environment to diverge significantly from our baseline assumptions. Risk probabilities are defined as follows: low = up to 10% chance of materialising, medium = 10-30% chance, high = 30-50% chance. For a full elaboration of the expected likelihood and impact of each risk, see section 4.6 of this chapter.
Source: Own assessment.

## 4.2. POLITICAL RISK

- In general political stability in Slovenia is similar to that of Austria, i.e. very high. Stability in Croatia is also judged to be quite elevated.

- Political stability in the rest of the countries is much lower, although to differing extents. Of the three remaining countries, stability is higher in Montenegro and Serbia, and lower in Bosnia and Herzegovina.

› The chief threats to stability in the region come from social and/or ethnic tensions within countries, especially in Bosnia and Herzegovina but also in Serbia and (to a lesser extent) Croatia. International tensions are also important in the cases of Bosnia and Herzegovina and Serbia. Militarisation risks are viewed as higher in both Serbia and Croatia than in Bosnia and Herzegovina.

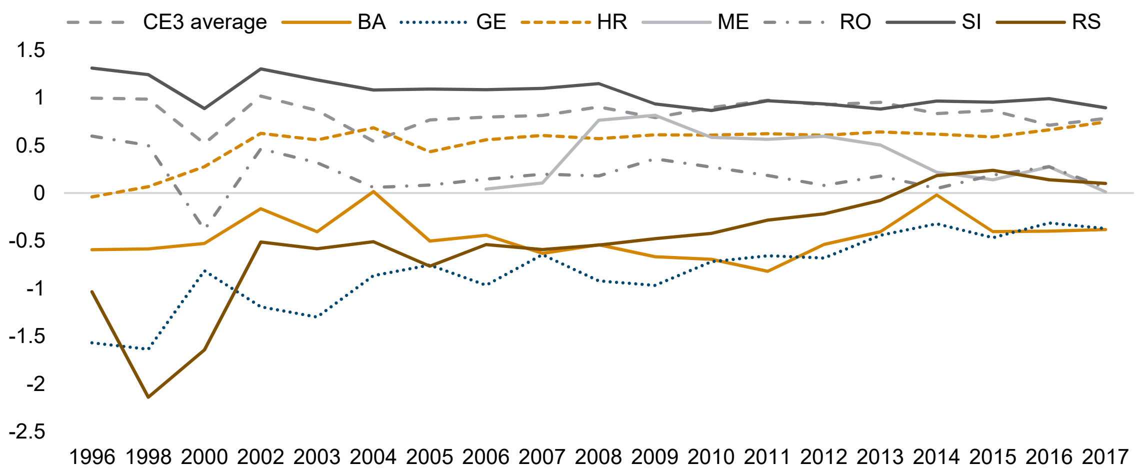
› The risks of tensions within Bosnia and Herzegovina, and between Serbia and Kosovo, developing into something more serious are probably higher than they have been for at least several years.

**Table 4.3 / Political risk summary: Ranking in region for each indicator (1 = best, 5 = worst)**

| | Average | Political stability | Government effectiveness | Global Peace Index | Economic costs of violence |
|---|---|---|---|---|---|
| **BA** | **4.3** | 5 | 5 | 5 | 2 |
| **HR** | **2.0** | 2 | 2 | 2 | 2 |
| **ME** | **3.5** | 4 | 4 | 4 | 2 |
| **RS** | **3.5** | 3 | 3 | 3 | 5 |
| **SI** | **1.0** | 1 | 1 | 1 | 1 |

Note: Political risk assessment is very far from an exact science. It requires both quantitative and qualitative measures to accurately assess. We look at three quantitative indicators: political stability and government effectiveness from the World Bank (to get a picture of domestic political risk), and the 2018 Global Peace Index produced by the Institute for Economics and Peace for international political risk. We assess qualitative political risk in the risk matrix (section 4.6).
Source: Own assessment.

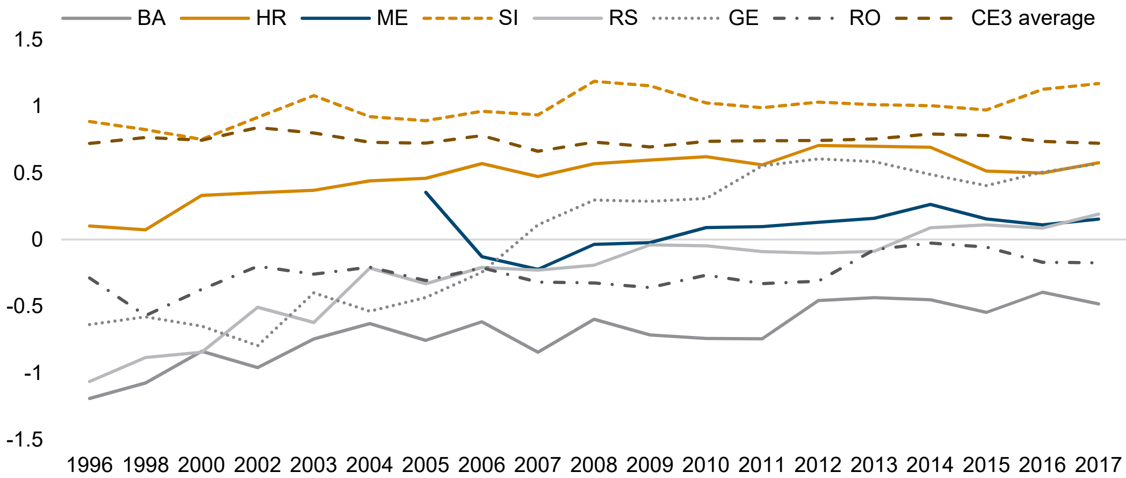
**Figure 4.1 / World Bank Political Stability Indicator**




Source: WBGI.

In terms of political stability and government effectiveness, the region is highly heterogeneous (Figure 4.1). Political stability in Slovenia is assessed to be roughly the same as in Austria, and Croatia is not far behind. However, stability in Serbia and Montenegro is much weaker, and Bosnia and Herzegovina lower still. Political stability has improved significantly over the past decade in Serbia, reflecting somewhat better ties with at least some neighbours, and growing international integration (including progress towards EU accession). However, stability has declined in Montenegro, not least because of turbulence since the 2016 election (most opposition parties have refused to join the parliament, alleging irregularities in the conduct of the election). After some improvement between 2011 and 2014, stability has also declined in Bosnia and Herzegovina[12], in part owing to inter-ethnic tensions and the potential for a constitutional crisis in the Federation. A small improvement has been recorded in recent years in Croatia. In terms of government effectiveness the impression is quite similar, with the ranking of countries the same as for stability (Figure 4.2). However, one notable difference is that Slovenia is clearly below Austria, while Croatia has regressed somewhat in recent years.

**Figure 4.2 / World Bank Government Effectiveness Indicator**



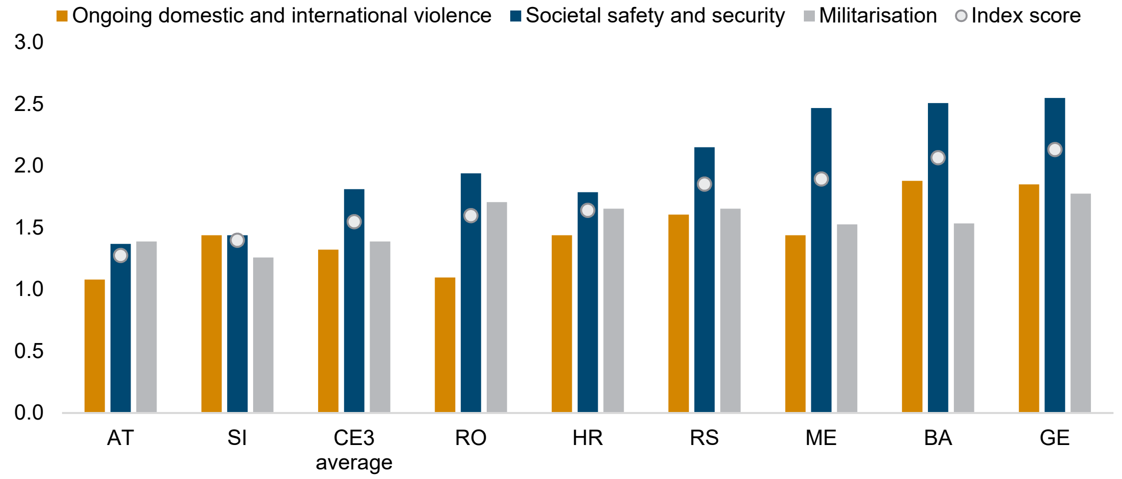

Source: WBGI.

The Global Peace Index (GPI) also shows quite a heterogeneous picture across the region (Figure 4.3).[13] Headline index scores suggest that the **greatest risks to peace** are found in Bosnia and Herzegovina, followed by Serbia, Montenegro and Croatia. Slovenia scores lower than the other countries in the region (meaning fewer risks to peace), although still higher than Austria. Across the five countries, the scores are generally much higher for the '**social safety and security**' category than the others (especially in the cases of Serbia, Montenegro and Bosnia and Herzegovina). Overall, both 'ongoing **domestic and international violence**' and '**militarisation**' score lower, although 'ongoing domestic and international violence' is generally substantially higher than in Austria in the region, especially in Bosnia and Herzegovina. According to the index, 'ongoing domestic and international violence' risks are higher than militarisation in Bosnia and Herzegovina and Slovenia, but lower in Croatia, Montenegro and Serbia. The GPI also includes an assessment of the economic costs of violence in each country (Figure 4.4). Here, it is notable that the costs are calculated to be much higher in Serbia (10% of GDP) than anywhere else in the region.

12 Political risk is long-standing in Bosnia and Herzegovina, but the current constitutional deadlock in the Federation means that risks of instability that could affect the economy and business are even higher than normal.

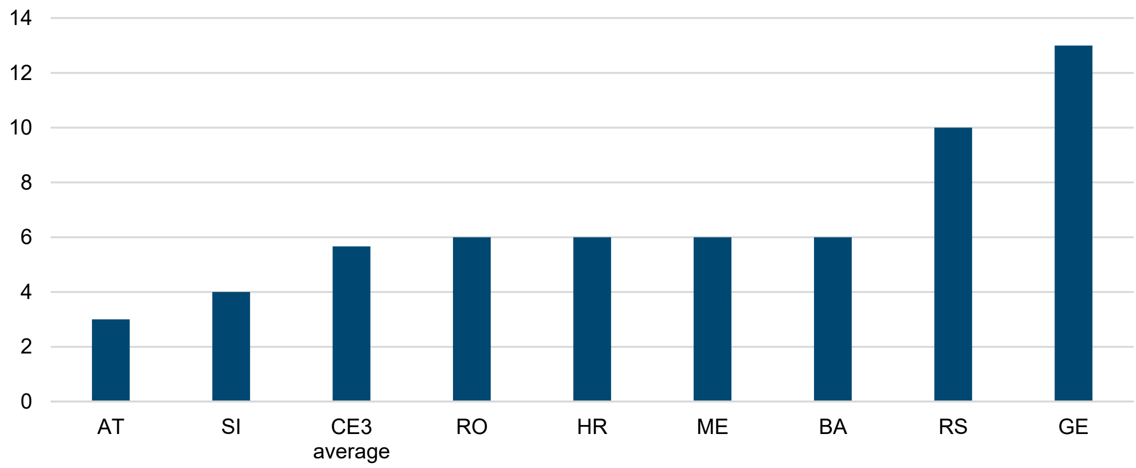
13 The GPI assesses countries based on three metrics: Ongoing domestic and international conflict (extent to which countries are involved in domestic and international conflicts); societal safety and security (level of discord within a country, using factors such as crime rates, terrorist activity, violent demonstrations, relations with neighbouring countries, stability of the political scene, and share of population internally displaced); and militarisation (including factors like military expenditure and armed service officers as a share of the population).

**Figure 4.3 / Global Peace Index scores**




Source: GPI.

**Figure 4.4 / Economic costs of violence, % of GDP**




Source: GPI.

## 4.3. SOVEREIGN CREDIT RISK

- Of the countries covered, only Slovenia is classed as 'investment grade', with the other four all sub-investment grade according to the major ratings agencies. However, Croatia is rated only one notch below investment grade and is on a positive outlook from both S&P and Fitch. Serbia is two notches below investment grade, but also has one positive outlook (from S&P).

- We find that all five countries exhibit a certain amount of structural risk, reflecting low per capita GDP (especially Bosnia and Herzegovina, Serbia and Montenegro) and relatively weak growth performance over the past decade. Inflation volatility has been high everywhere, although since 2014 inflation rates have increasingly converged at a low level with the eurozone.

- Fiscal risk is generally higher than a decade ago, with public debt rising sharply and interest payment taking up a much greater share of government revenues than in the past. However, this trend has been somewhat reversed in the last 2-3 years, owing to tighter fiscal policies and better growth. Currently, fiscal stances in the region suggest little cause for concern (and could even be argued to be too tight in some cases), with the exception of Montenegro.

- Financial sector risk has fallen since around 2013, reflected in much better asset quality in most countries. However, credit growth is quite strong in some places, and real interest rates are low (or negative), creating risks of the build-up of assets bubbles that could prove destabilising over the medium term.

- External risk has fallen quite markedly over the past decade in most places. Most countries have substantially reduced external imbalances since the crisis, although Montenegro is an exception. All countries appear to have adequate reserves, although Serbia is very close to the bottom of what the IMF defines to be an acceptable range. Serbia is also potentially vulnerable to higher US interest rates, given its large share of US dollar-denominated liabilities.

- In general the sovereign ratings of the five countries have improved in recent years. This reflects both policy measures at the local level (such as fiscal consolidation and a reduction in public debt) and better external conditions (such as higher growth in the eurozone which has increased exports, remittances and tourism inflows, boosting growth). Ratings agencies have also noted improvements in external metrics in recent years, notably on foreign debt positions. As a share of GDP, gross external debt has fallen quite substantially in Croatia, Serbia and Slovenia since 2012-2013. Bosnia and Herzegovina has a positive outlook from Moody's, Croatia from Standard and Poor's (S&P) and Fitch, Montenegro from Moody's, Serbia from S&P, and Slovenia from S&P. This implies that ratings across the region could be raised in the next reviews.

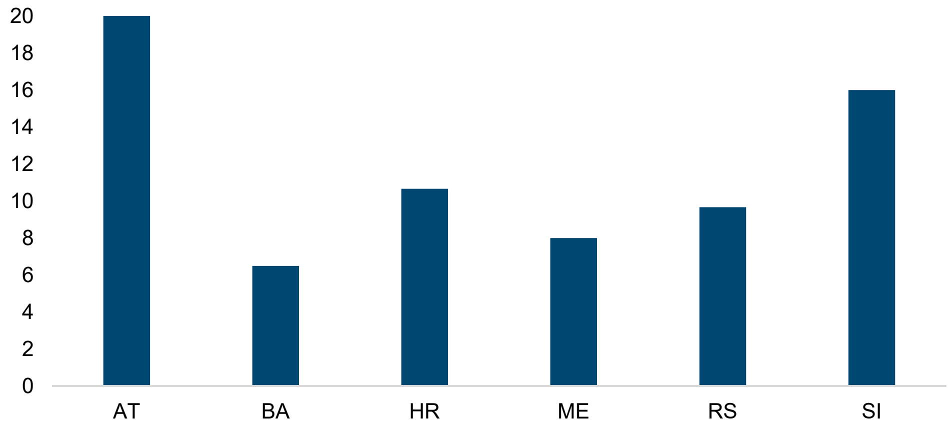
- Croatia, Serbia and Slovenia are rated by all three major credit ratings agencies (see Table 4.4). Bosnia and Herzegovina and Montenegro are not rated by Fitch. S&P and Fitch use the same rating scale, but Moody's use a different one. In Figure 4.5 below we convert Moody's scores to those of S&P and Fitch and average across the two or three (depending on how many agencies rate each country), to allow for a simpler comparison between the ratings.

- There are 21 ratings levels in total, so we award a score of 21 for AAA (the highest rating) and 1 for C (the lowest rating). Slovenia is rated substantially higher than the other four countries, followed by (in order) Croatia, Serbia, Montenegro and Bosnia and Herzegovina.

### Table 4.4 / Sovereign credit ratings

| | Moody's | S&P | Fitch |
|---|---|---|---|
| **Bosnia and Herzegovina** | B3 (stable) | B (stable) | NA |
| **Croatia** | Ba2 (stable) | BB+ (positive) | BB+ (positive) |
| **Montenegro** | B1 (positive) | B+ (stable) | NA |
| **Serbia** | Ba3 (stable) | BB (positive) | BB (stable) |
| **Slovenia** | Baa1 (stable) | A+ (positive) | A- (stable) |

**Figure 4.5 / Scores based on average ratings**




Source: Fitch, Moody's, S&P, wiiw calculations.

Ratings methodologies differ slightly across agencies, but (aside from political risk, which we have already dealt with above) four areas are considered to be important:

A. Structural factors
B. Fiscal risk
C. Financial sector risk
D. External risk

In order to come to our own assessment, we go through each of these areas of risk in turn.

### 4.3.1. Structural

We use structural risk as a way to measure each economy's level of development, in order to help gauge financing flexibility, the potential tax base, ability to respond to shocks, and general financing capacity. All else being equal, richer, faster-growing countries are better able to pay their debts than poorer, slower-growing ones. Models used by the ratings agencies tend to give these factors a high weighting in determining sovereign credit ratings.[14]

**Table 4.5 / Structural risk summary table: Ranking in region for each indicator (1 = best, 5 = worst)**

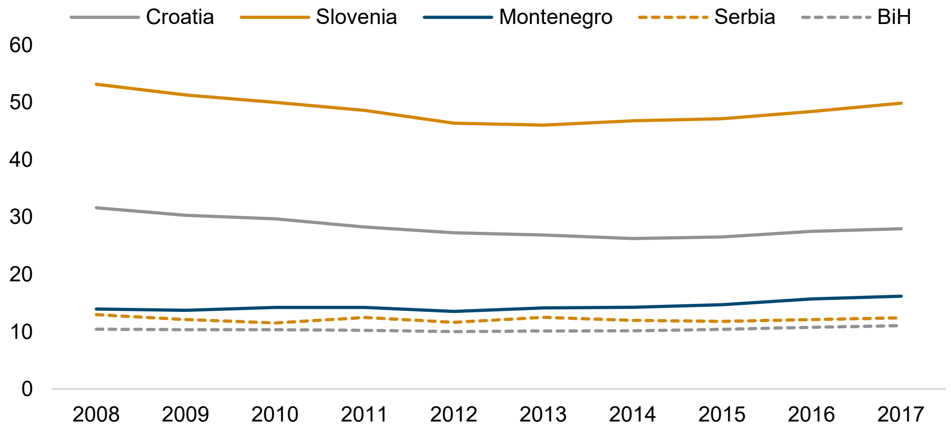
| | Average | Sovereign credit risk | Wealth level | Growth rate | Inflation volatility |
|---|---|---|---|---|---|
| **BA** | **4.3** | 5 | 5 | 3 | 4 |
| **HR** | **2.5** | 2 | 2 | 4 | 2 |
| **ME** | **2.8** | 4 | 3 | 1 | 3 |
| **RS** | **4.3** | 3 | 4 | 5 | 5 |
| **SI** | **1.3** | 1 | 1 | 2 | 1 |

Source: Own assessment.

[14] For example, Fitch's Sovereign Ratings Model awards structural factors a weighting of around 55%.

In **nominal euro per capita terms**, all countries in the region are much poorer than Austria (Figure 4.6). Slovenia is around 50% of the Austrian level, with Croatia at 28%, and the other three countries in the range of 11-16%. On this measure, countries across the region have shown little or no convergence with Austria since the crisis. Most countries actually de-converged post-2008, especially Croatia and Slovenia, reflecting prolonged fiscal austerity in the former and the implications of a banking crisis in the latter (a slow turn in trend can be observed in most countries since 2014, however).

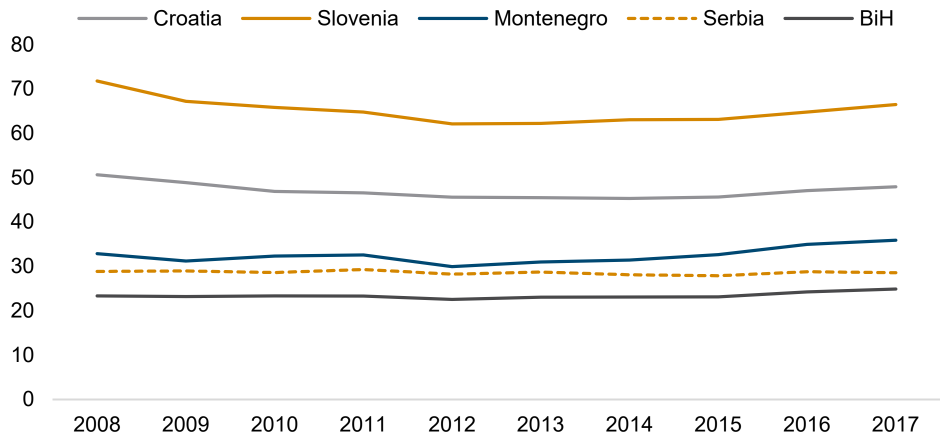
**Figure 4.6 / Nominal EUR per capita GDP, Austria = 100**




Source: Eurostat.

From a sovereign risk perspective, these data suggest limited capacity to respond to shocks, and a lack of financing flexibility in general, especially for the three poorest countries. In terms of **real per capita GDP in PPP terms**, the trends are similar (Figure 4.7), although the levels in relation to Austria are higher, reflecting lower price levels in the region. On this measure, Slovenia is at 66% of the Austrian level, Croatia at 48%, and the other three countries in the range of 25-36%.

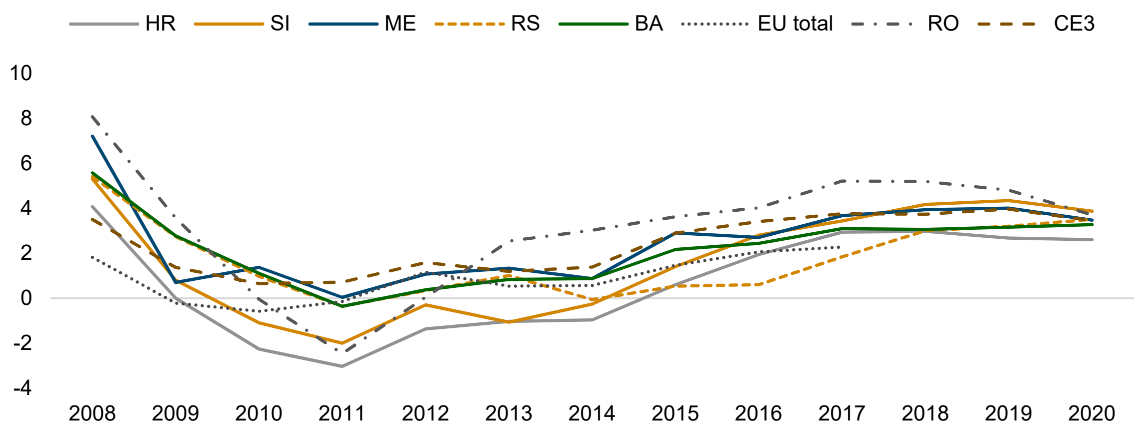
**Figure 4.7 / Real per capita GDP PPP, Austria = 100**




Source: Eurostat.

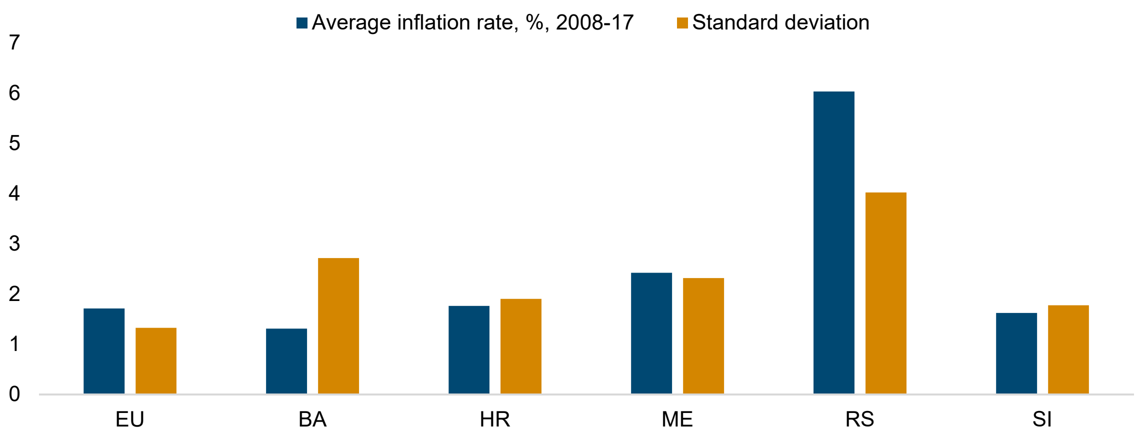
**Recent growth performance** has been generally decent, with activity in most of the region at a post-crisis high (Figure 4.8). However, this is partly only because growth performance since the crisis has been so poor (see chapter 1 for full details). It could also be argued that growth should currently be much higher than it is, particularly as the backdrop is extremely favourable: growth in the eurozone has been at or close to post-crisis highs (boosting exports, remittances and tourism inflows), interest rates are at all-time lows, the EU funds cycle is strong (important at least for Croatia and Slovenia), post-crisis austerity has been somewhat relaxed, and FDI inflows have been quite positive. In this context, growth in the region can actually be seen as quite disappointing. With the cycle now appearing to have decisively turned in the eurozone, regional growth rates can be expected to trend down from here (in line with wiiw forecasts).

**Figure 4.8 / Real GDP growth, 3-year average, %**




Source: Eurostat, data from 2018 onwards wiiw forecasts.

**Figure 4.9 / Inflation data**

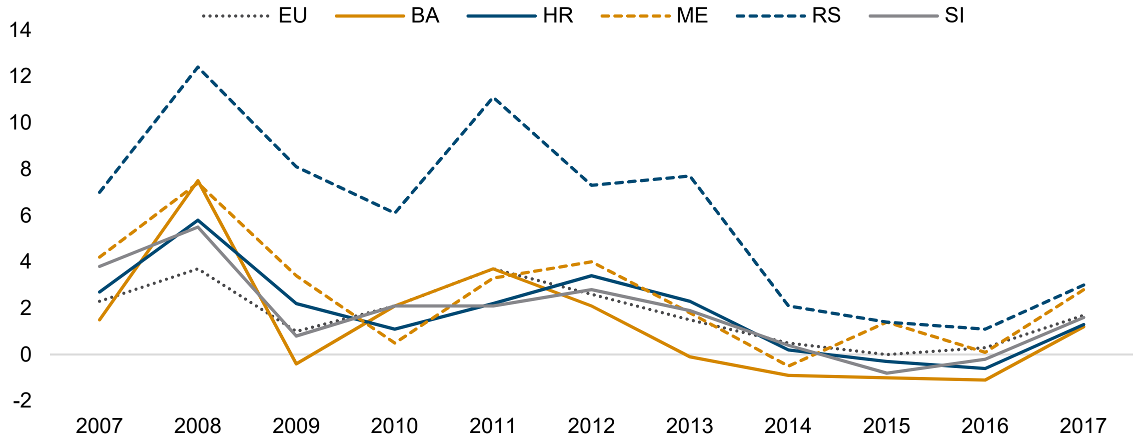



Source: National statistical offices, Eurostat, wiiw calculations.

A final relevant structural feature is the **volatility of inflation.** We find that in much of the region, inflation in 2008-2017 was on average lower than in Austria (Bosnia and Herzegovina, Croatia and Slovenia). However, in Montenegro it was higher, and in Serbia substantially higher[15] (Figure 4.9). Moreover, in all countries, inflation was more volatile than in the EU over the period.

Standard deviations from the mean were particularly high in Serbia, but also quite elevated in Bosnia and Herzegovina. It is worth noting, however, that especially in the Serbian case, this was largely related to the period before 2014 (Figure 4.10). Since then, we observe rough convergence to two levels of inflation in the region: a lower level for Bosnia and Herzegovina, Slovenia and Croatia, and a higher one for Montenegro and Serbia (and Austria).

**Figure 4.10 / Inflation, % per year**




Source: National statistical offices, Eurostat.

## 4.3.2. Fiscal risk

**Table 4.6 / Ranking in region for each indicator (1 = best, 5 = worst)**

| | Average | Public debt | Interest payments on public debt | Foreign currency government debt | Fiscal deficit |
|---|---|---|---|---|---|
| **BA** | **3.5** | 1 | 5 | 5 | 3 |
| **HR** | **3.3** | 5 | 3 | 3 | 2 |
| **ME** | **2.8** | 3 | 1 | 2 | 5 |
| **RS** | **3.0** | 2 | 4 | 4 | 2 |
| **SI** | **2.8** | 4 | 2 | 1 | 4 |

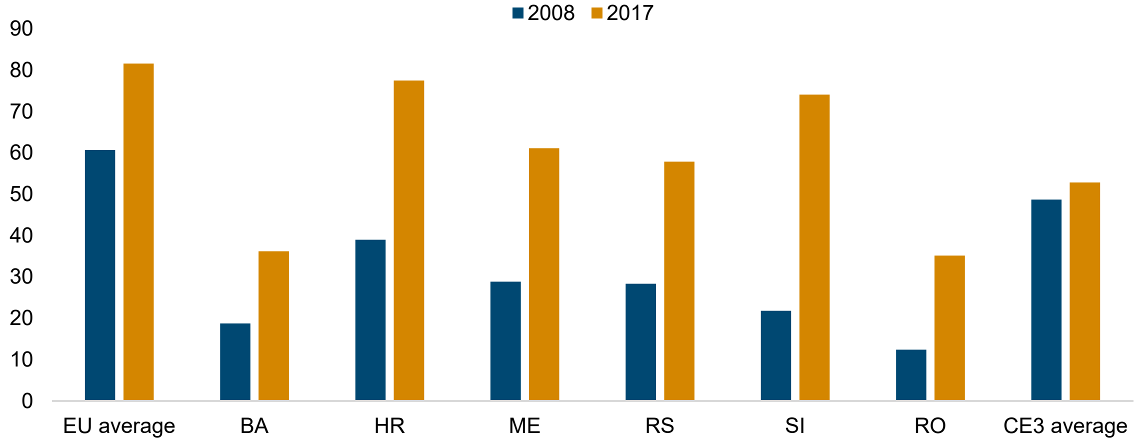
Source: Own assessment.

15 Serbia's high inflation levels have been a source of risk for the currency. However, the dinar has been supported by prudent central bank policy and strong financial account inflows, both in terms of foreign direct investment and portfolio flows. Inflation in Serbia is now at a much lower level and presents much less of a risk to the stability of the dinar.

**Public debt/GDP** levels have risen substantially since the crisis in almost all countries covered, and in the case of Croatia and Slovenia have largely converged with the overall (high) EU level (Figure 4.11).[16] The levels of debt/GDP remain much higher than before the global financial crisis, but there has however been some moderation in recent years as growth has improved. Countries' ability to service these debts is to some extent helped by supportive financing conditions (which we expect to generally continue, as the ECB is likely to only tighten monetary policy very slowly in the coming years). Moreover, with nominal growth at decent levels, and most countries running fairly tight fiscal policies (and in some cases primary surpluses), public debt/GDP loads should fall quite quickly in the coming years (this development has been underway since 2014-2015 in most countries, notably Serbia). Croatia, Serbia and Slovenia have all front-loaded fiscal consolidation, with Serbia in particular going further than even the IMF wanted. In the case of Bosnia and Herzegovina, not only is debt/GDP much lower than in the other countries, but a large share of public debt is from IFIs, and is therefore concessional. A further supportive factor in the case of Croatia is the high share of public debt held domestically; the equivalent of around 60% of GDP according to the European Commission. This compares with only around 35% for Slovenia.

Risks related to high public debt have risen particularly in Montenegro. As the government did not hedge against currency swings, the recent appreciation of the US dollar has pushed up the costs of the first phase of the Bar-Boljare highway project by 13% to about EUR 900 million (more than 20% of the country's GDP).

**Figure 4.11 / Public debt/GDP, %**



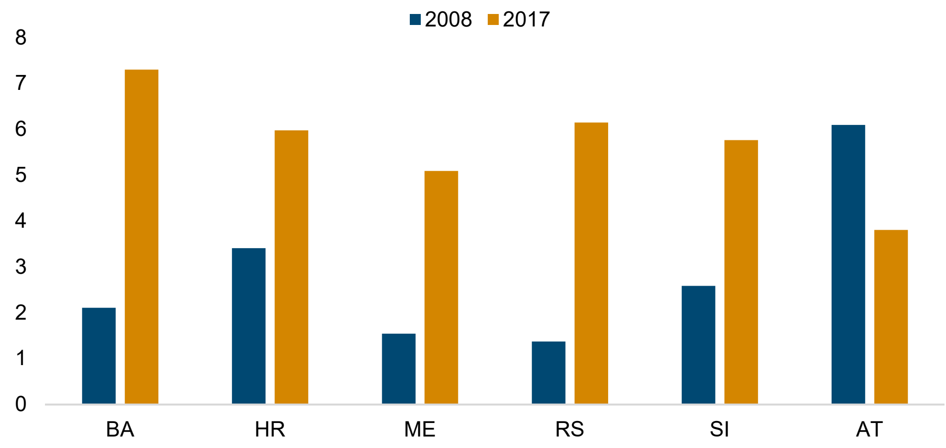

Source: wiiw Annual Database.

As public debt has risen, so have the interest payments on it. One way to measure the risks associated with this is to look at **interest payments on public debt as a share of government revenues**. Despite much lower interest rates now than at the time of the crisis on local and international markets, the ratio

[16] One thing that should be borne in mind when comparing public debt levels across countries is the inconsistent treatment of contingent liabilities. Inconsistent treatment of contingent liabilities can distort comparisons. Croatia and Serbia, for example, include contingent liabilities in their public debt calculations more fully than some other countries. The European Commission itself acknowledges that in relation to contingent liabilities 'estimation methods are still developing and depend largely on the available reporting by countries'. See for example European Commission (2018), pp. 73-83.

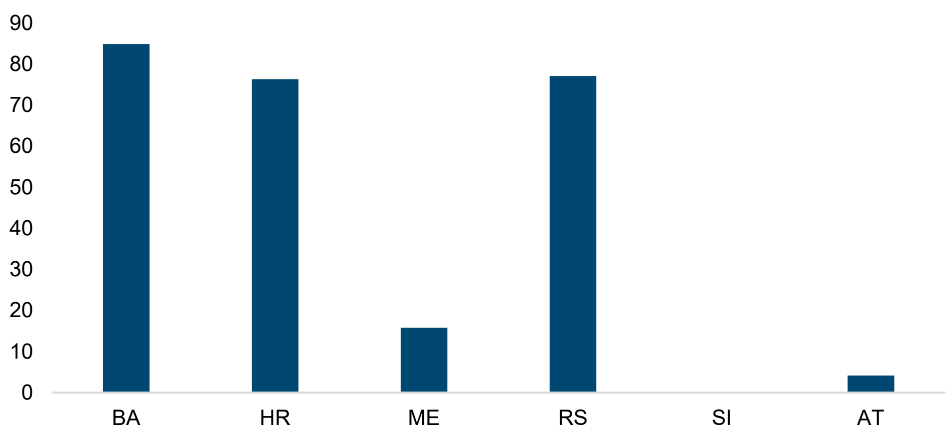
of interest payments to government revenues has increased substantially in all countries covered (Figure 4.12). Interest is therefore taking up a much greater share of government revenues than was the case in the past, limiting fiscal flexibility and increasing overall fiscal risks.

**Figure 4.12 / Interest payments on public debt, % of government revenues**




**Foreign currency exposure** is another important factor in assessing fiscal risks. We find that Slovenia and Montenegro (officially and unofficially members of the eurozone, respectively) have very little foreign currency debt, as would be expected. However, the levels for the other countries are very high, in the range of 77-85% of total government debt (Figure 4.13). This reinforces the importance of close management of national currencies, specifically against the euro in the cases of Bosnia and Herzegovina and Croatia.

**Figure 4.13 / Foreign currency government debt, % of total**

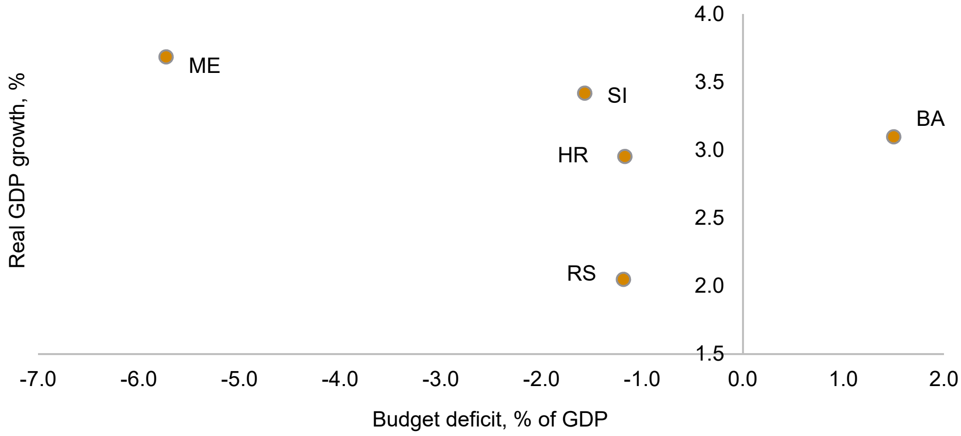



Source: National central banks, IMF, wiiw.

Ratings agencies also tend to look at budget balance to assess sovereign risk. However, this only makes sense if the economic cycle is also taken into account. Below, we use a simple measure to assess **fiscal policy in the context of the economic cycle**, by comparing three-year average real

GDP growth rates with three-year average budget deficits (Figure 4.14). Most countries ran either small deficits or small surpluses over the period, irrespective of their growth rates (one could argue that Serbia should have run a bigger deficit to stimulate demand at a time of weak growth). The clear outlier is Montenegro, which ran on average a budget deficit of 5.7% of GDP in 2015-2017, despite fairly solid real GDP growth rates.

**Figure 4.14 / Growth and fiscal balance, 2015-2017 averages**




Source: National statistical offices, national central banks, Eurostat, wiiw.

## 4.3.3. Financial sector risk

**Table 4.7 / Ranking in region for each indicator (1 = best, 5 = worst)**

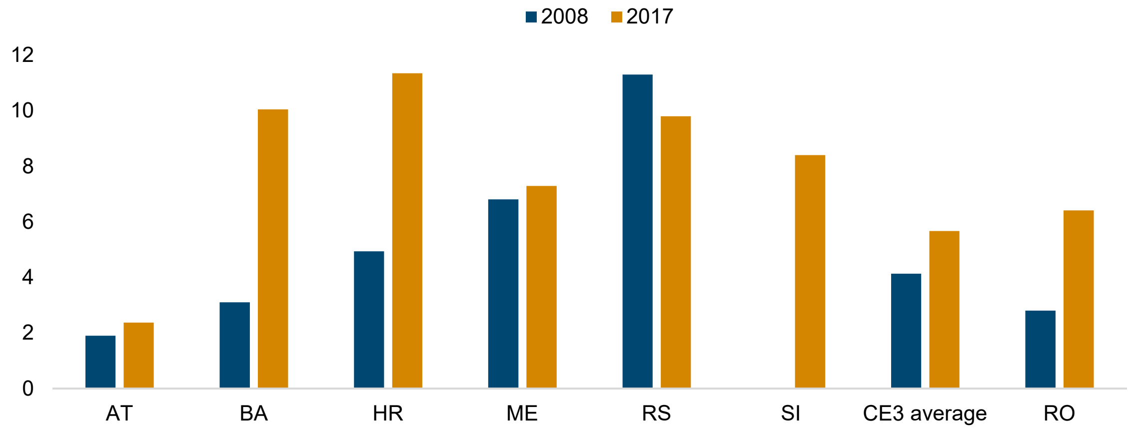
| | **Average** | Asset quality | Banking sector size | Money supply growth | Financial market development |
|---|---|---|---|---|---|
| **BA** | **3.5** | 4 | 2 | 4 | 4 |
| **HR** | **2.3** | 5 | 1 | 1 | 2 |
| **ME** | **2.8** | 2 | 3 | 5 | 1 |
| **RS** | **3.3** | 3 | 5 | 2 | 3 |
| **SI** | **3.3** | 1 | 4 | 3 | 5 |

Source: Own assessment.

**Asset quality** deteriorated substantially in the wake of the crisis, but has since improved everywhere (Figure 4.15). However, non-performing loan (NPL) ratios have generally not returned to pre-crisis levels, and in Croatia, Bosnia and Herzegovina and Serbia are among the highest in CESEE. Policy actions to clean-up bank balance sheets in the wake of the global financial crisis have produced quite positive results, with significant input from outside actors including the EBRD under the 'Vienna Initiative', and the EU. New legislation has been put in place at the national level in all countries to speed up the process of restructuring and insolvency.[17] Foreign banks, including Austria, are dominant in most of the markets in the region, which in theory adds an additional level of stability.

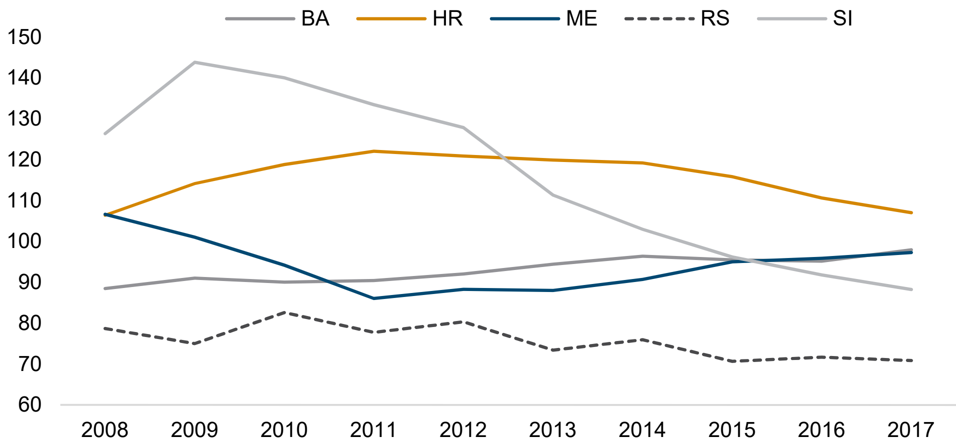
[17] For full details see the NPL Monitor for the CESEE Region, produced by the EBCI and the Vienna Initiative (EBCI/Vienna Initiative, 2018).

**Figure 4.15 / Non-performing loan ratios, %**




Note: For Slovenia NPLs defined as non-performing exposure including forborne exposure, comparable 2008 data not available.
Source: National central banks, IMF.

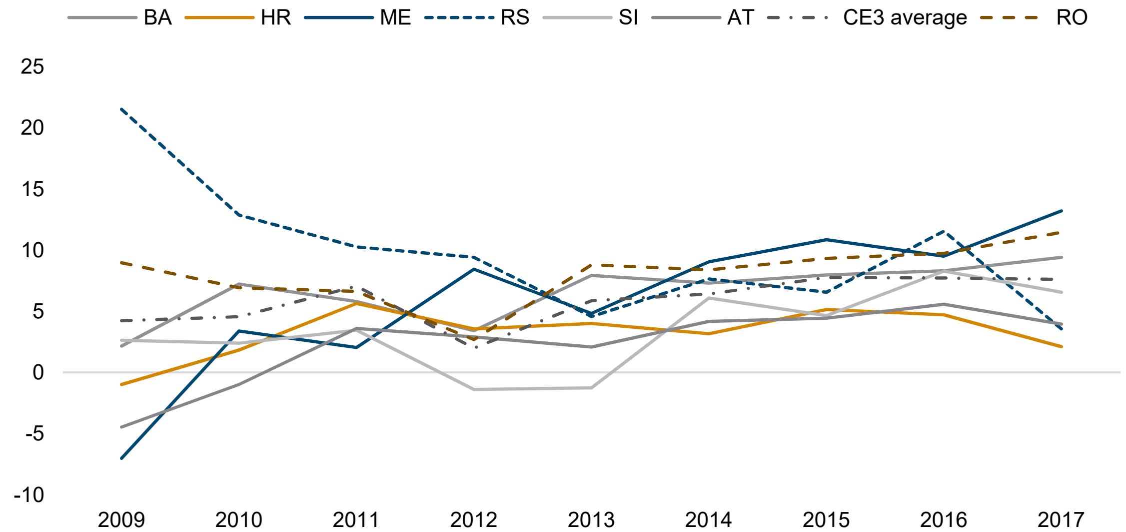
**Figure 4.16 / Banking sector assets, % of GDP**




Source: National central banks.

All else being equal, countries with higher levels of financial intermediation can sustain higher public debt levels. The **size of banking sectors** across the region have generally stayed the same or declined since the crisis (Figure 4.16). A particularly sharp decline (measured in terms of assets/GDP) can be observed in Slovenia, reflecting a banking crisis there. Serbia has by far the smallest banking sector on this measure (71% of GDP), while Croatia has the largest (107%). **Money supply growth** can be a further indicator of financing sector risk. Booming money supply growth can contribute to unsustainable asset bubbles which are then followed by a bust. Relative to Austria, all countries except Croatia have seen quite strong money supply growth in recent years, but especially in Montenegro (Figure 4.17). Loose ECB policy could be contributing to this. With the ECB unlikely to increase interest rates soon, this is likely to continue, and could contribute to instability.

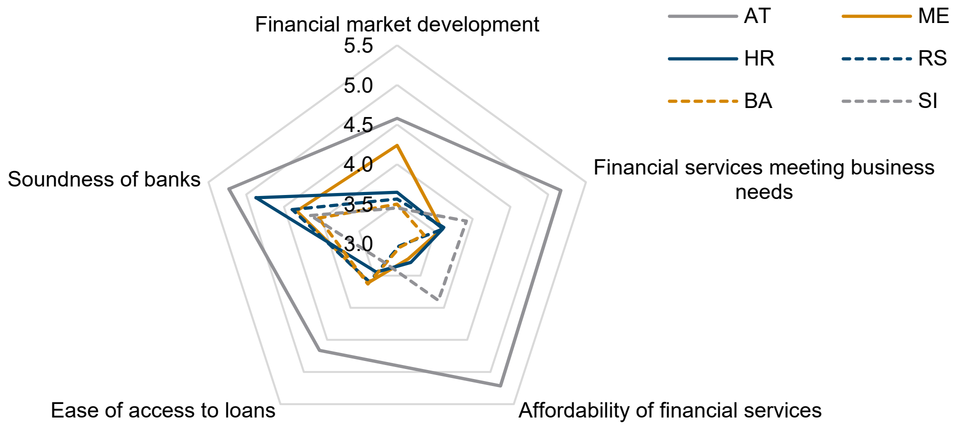
## Figure 4.17 / Money supply, % change year on year




Source: National central banks.

The **development and depth of local capital markets** is a key input in sovereign rating criteria, providing an indicator of fiscal financing flexibility. In terms of the development of local capital markets, the countries in this study are still very far behind Austria (Figure 4.18). Using the World Economic Forum's indicator for 'financial market development' and its four sub-components, after Austria, Montenegro receives by far the highest overall score for overall market development. On 'soundness of banks' the region as a whole scores quite well, but it is particularly weak (with the partial exception of Slovenia) for 'affordability of financial services' and 'financial services meeting business needs'.

## Figure 4.18 / Development of capital markets




Source: WEF.

### 4.3.4. External risk

**Table 4.8 / Ranking in region for each indicator (1=best, 5=worst)**[18]

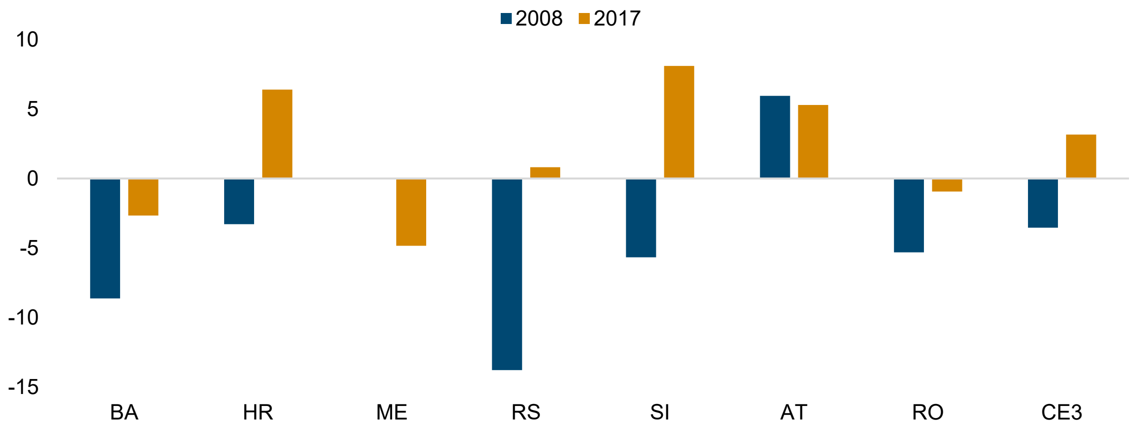
| | Average | Current account + FDI | External debt | Commodity dependence |
|---|---|---|---|---|
| **BA** | **3.0** | 4 | 2 | 3 |
| **HR** | **3.3** | 2 | 4 | 4 |
| **ME** | **3.7** | 5 | 1 | 5 |
| **RS** | **2.7** | 3 | 3 | 2 |
| **SI** | **2.3** | 1 | 5 | 1 |

Source: Own assessment.

Much like the Southern eurozone, **external imbalances** and their legacy were a key factor behind the very subdued post-crisis recovery in the region. In most cases, this has changed over the past decade, and countries' external exposure is much reduced. However, the stock of liabilities accumulated before the crisis remains an issue for some. Moreover, other indicators of vulnerability also suggest reason to worry for some countries.

Looking at **current account deficits adjusted for net foreign direct investment** (FDI) inflows (which tend to be more stable than other forms of current account financing), the situation has mostly improved (Figure 4.19). This is especially the case in Slovenia and Croatia, where pre-crisis deficits have disappeared and turned into very significant surpluses. Serbia's external position has been more volatile, but also improved, helped by persistent strong net FDI inflows (on average equivalent to 5.4% of GDP in these years). The most problematic case here is Montenegro, which posted quite significant deficits in 2016-2017, despite attracting substantial inflows of FDI in these years. The country continues to run a huge current account deficit (16.1% of GDP in 2017).

**Figure 4.19 / Current account balance plus net FDI inflows**

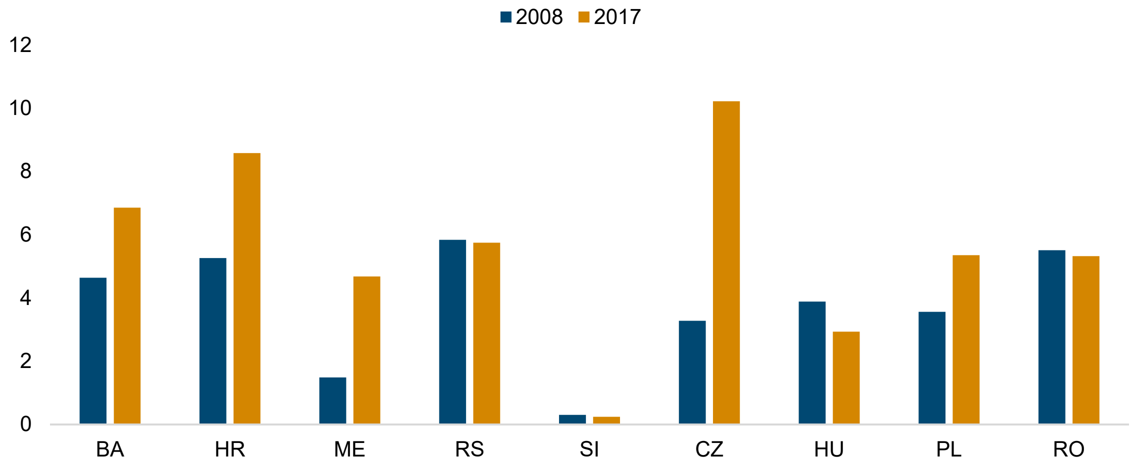



Source: National central banks.

[18] Indicators are only used when available for all five countries.

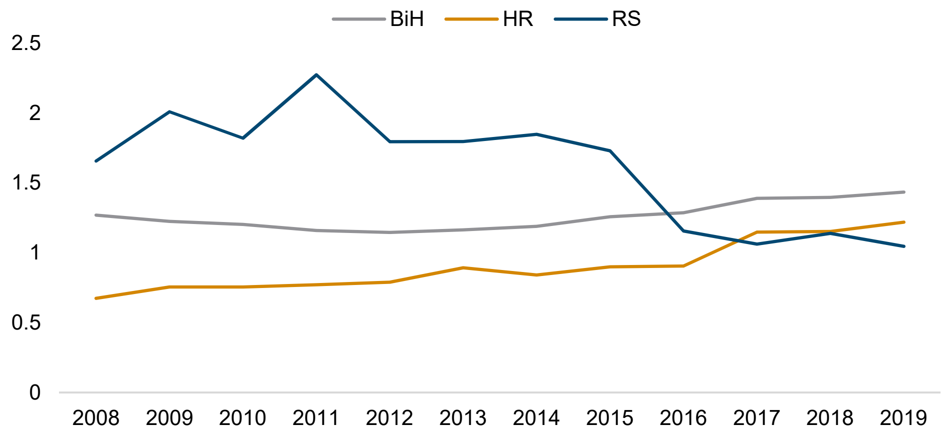
**Months of import cover expressed in foreign exchange (FX) reserves (excluding gold)** is a key way to assess an economy's ability to respond to external shocks, and in particular to alleviate pressure on the exchange rate. This is particularly important in the cases of Serbia and Croatia given their high euroisation levels. We find that Croatia's FX reserves cover over eight months of imports, which seems a healthy level in the regional comparison. Bosnia and Herzegovina's cover 6.9 months, also a good level (Figure 4.20). In Serbia, the coverage is 5.7 months, which is still probably sufficient, but it is notable how far this has fallen since 2009. The ratio of reserves to the Assessing Reserve Adequacy (ARA) metric, a broader measure of reserve adequacy compiled by the IMF, is only available for Serbia, Croatia and Bosnia and Herzegovina (Figure 4.21). However, the results are broadly similar, with Serbia's ratio standing at 1.05 (ratios between 1 and 1.5 are considered adequate by the IMF). Croatia's ratio is 1.2, and Bosnia and Herzegovina's 1.4, indicating more comfortable positions.

**Figure 4.20 / Foreign exchange reserves excluding gold, months of import cover**




Source: National central banks, IMF, wiiw.

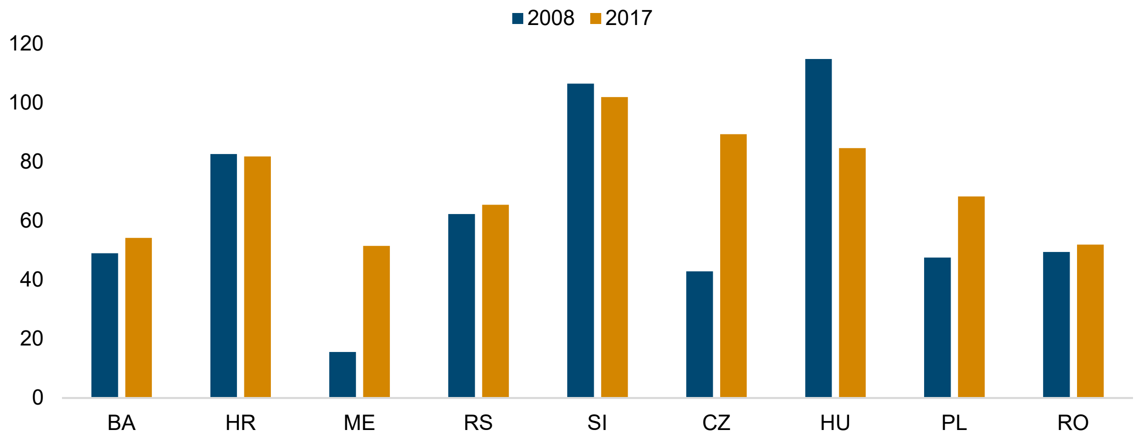
**Figure 4.21 / IMF reserves/ARA ratio**




Source: IMF.

Overall **external debt levels** are quite heterogeneous across the region. Slovenia[19] has by far the highest external debt, followed by Croatia, Serbia and Bosnia and Herzegovina (see Figure 4.22). Montenegro's is the lowest, but has risen substantially since the crisis. In general, across the region, external debt as a share of GDP is likely to fall in the coming years. Croatia and Slovenia are both set to continue running current account surpluses, while in the case of the former write-offs of Agrokor debts will also contribute. External deleveraging in Croatia in particular has been proceeding at a fairly rapid pace. From above 60% of GDP in 2013, net external debt is now only around half of that level.

**Figure 4.22 / Gross external debt, % of GDP**



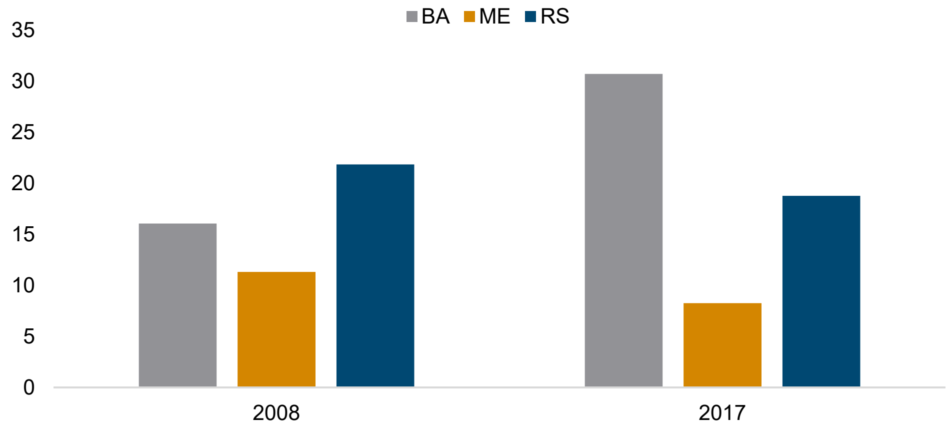

Source: National central banks, IMF.

The external debt profile in terms of **interest payments** and **maturity** is quite heterogeneous across the region, and the countries have shown very different developments over the past decade (here we exclude Slovenia as a euro member, and Croatia due to data limitations[20]). From the perspective of interest payments and maturity, Bosnia and Herzegovina appears to be by far in the strongest position. Its average maturity on new external debt commitments is almost 31 years, compared with 19 for Serbia and 8 for Montenegro (Figure 4.23). This maturity has increased significantly since 2008, whereas for Serbia and Montenegro it has fallen, increasing their potential exposure to changes in interest rates. In terms of interest payments, Bosnia and Herzegovina also looks to be well-positioned (Figure 4.24). For both Bosnia and Herzegovina and Serbia, interest payments on new debt have fallen substantially since the crisis (in Montenegro they have risen). All three countries spend around 2% of gross national income (GNI) on external debt interest payments each year. One clear positive across all three countries is the marked reduction in short-term external debt as a share of reserves (Figure 4.25). As of 2016 (latest data available), Montenegro's short-term debt was 20% of reserves (from 211% in 2009), with Bosnia and Herzegovina's at 13% and Serbia's at 11%.

[19] Slovenia's 'external' debt is mostly in euros, its national currency, which significantly reduces the risks associated with this relatively high level.

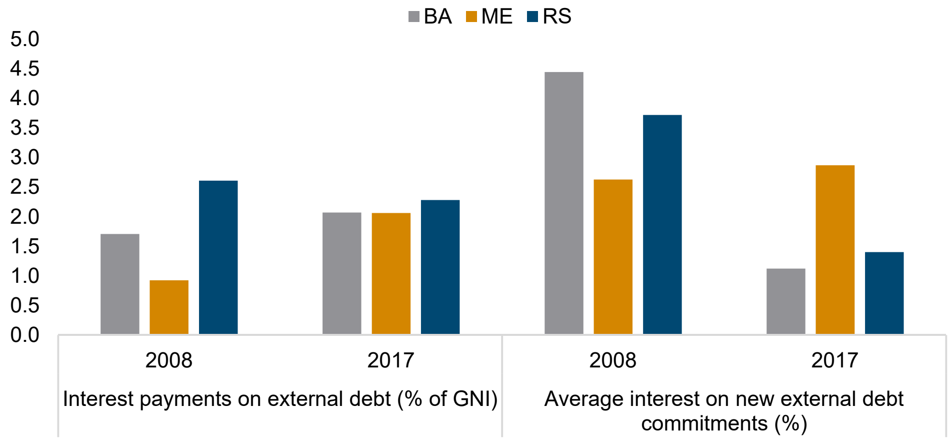
[20] The World Bank does not provide detailed external debt data for Croatia. It is anyway likely to soon join the euro.

**Figure 4.23 / Average maturity on new external debt commitments**



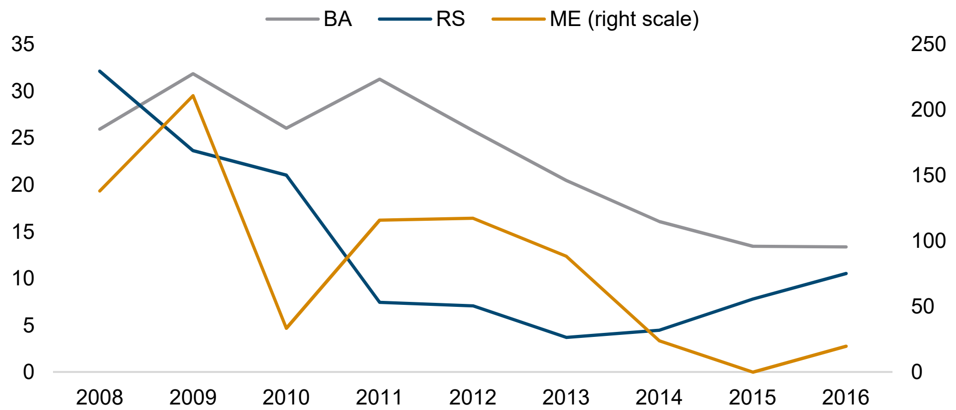

Source: World Bank.

**Figure 4.24 / Interest payments on external debt**




Source: World Bank.

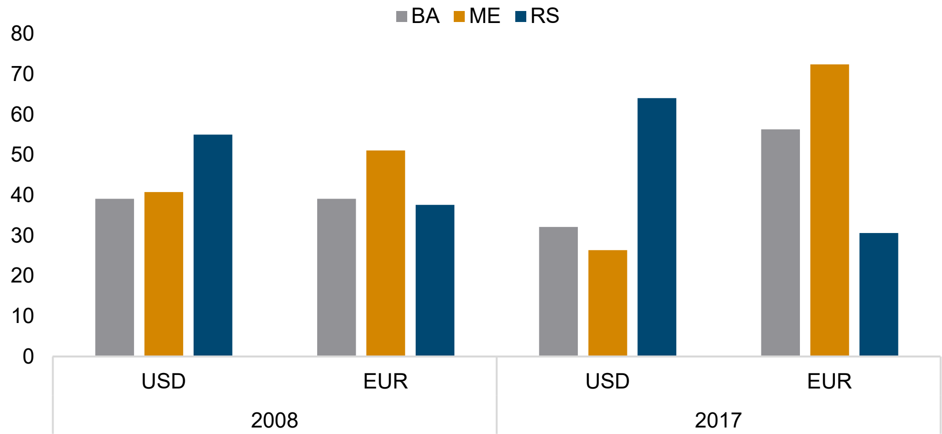
**Figure 4.25 / Short-term external debt as a % of total reserves**




Source: World Bank.

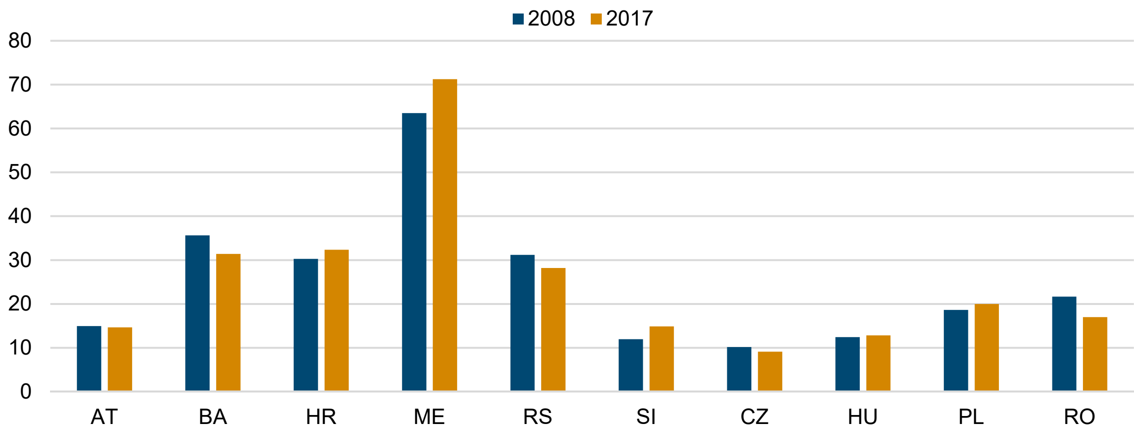
With the US Federal Reserve raising interest rates, the **currency composition of external debt** has become much more important than a few years ago, when all major central banks were in loosening mode. In CESEE, most foreign debt is held in euros or dollars. Given that the ECB is yet to start tightening policy, and will only do so (very slowly, and at the earliest) at the end of 2019, countries with external debt holdings primarily in euros are in a much safer position than those with a lot of dollar liabilities to rollover (the recent difficulties of Turkey, primarily a USD borrower, are a good example of this). Using World Bank data, and excluding Slovenia and Croatia (as the former is a euro member and the latter borrows largely in euros), it is clear that Serbia faces greater potential risks from rising US interest rates than Bosnia and Herzegovina or Montenegro (Figure 4.26). As of 2017, 64% of Serbian external debt was in dollars, compared with 32% for Bosnia and Herzegovina and 26% for Montenegro. Moreover, while Bosnia and Herzegovina and especially Montenegro have reduced their relative exposure to US interest rates since 2008 (and increased their exposure to the euro interest rate), Serbia has gone in the opposite direction.

**Figure 4.26 / Share of external debt in EUR and USD, %**




Source: World Bank.

**Figure 4.27 / Primary commodity exports, % of total exports**




Source: UNCTAD.
Primary commodities defined under SITC codes 0, 1, 2, 3, 4 + 68.

A final relevant category when assessing external risk is a country's **dependence on commodity exports.** High dependence on commodity exports leaves a country exposed to sharp changes in prices (and to a lesser extent exchange rates, as commodities tend to be priced in US dollars). As Figure 4.27 shows, Montenegro stands out as particularly exposed on this measure, with primary commodities accounting for 71% of total merchandise exports in 2017. For Bosnia and Herzegovina, Croatia and Serbia, the equivalent level is around 30%, and for Austria and Slovenia 15%.

## 4.4. BUSINESS CYCLE/OVERHEATING RISK

› The only country of the five studied exhibiting strong signs of potential 'overheating' is Montenegro.

› Particular areas of concern for Montenegro are rising external debt, low real interest rates, and large 'twin' current and fiscal deficits.

› There are some general areas of potential overheating for the five countries, especially tight labour markets and low/negative real interest rates, but so far we see little signs of a strong rise in inflation or credit growth as a result. This suggests to us that the risks of overheating in general are quite low.

wiiw created a 'business cycle monitor' in 2018 in an attempt to assess how serious were the widely-discussed risks of 'overheating' in the CESEE region. The index is updated as of Q2 2018, covers developments in the domestic economy, external finances and domestic finances, and gives a snapshot of the stage of the business cycle in two ways. In both cases we use a four-quarter average to strip out seasonal volatility.

First, following the IMF, we assess relevant indicators against their historical mean (Table 4.9). For the five countries studied, we find that risks of overheating are most prevalent in the labour market and the real exchange rate, indicating that the unemployment rate and real interest rates are very low relative to the historical mean. The former creates the risk of wage-led inflation, and the latter of a borrowing binge and the building-up of asset bubbles. Moreover, for Montenegro we also note potential overheating in terms of real exchange rate appreciation and high external debt. Of the countries studied, on this measure Montenegro exhibits by far the greatest signs of 'overheating'. On the flipside, we also note instances of 'under-heating' in the region, especially in terms of current accounts and the fiscal balance (although not in the case of Montenegro). Moreover, in all countries inflation and private credit growth are below their historical mean, suggesting that 'overheating' is not happening.

Second, we also assess countries in the region relative to each other (Table 4.10). The colour scale below indicates relative overheating (compared with regional peers) in red, relative under-heating in green, and with yellow and orange in between. Looking at the colour scale, the five countries studied here cannot really be said to be exhibiting signs of 'overheating', again with the partial exception of Montenegro. Also on this measure, Montenegro's large current account and fiscal deficits indicate reasons for concern.

### Table 4.9 / Business cycle index A – current levels compared with historical mean

| | Domestic economy | | | External finance | | | Domestic finance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Real GDP | Labour market | Inflation | CA | RER | Ext debt | RIR | Private credit | Broad money | Fiscal balance |
| **HR** | 0.3 | 1.4 | -0.5 | -1.3 | 0.2 | -0.1 | 1.0 | -0.5 | -0.7 | -2.6 |
| **SI** | 0.8 | 0.8 | -0.6 | -1.9 | 0.0 | 0.3 | 1.4 | -0.2 | 0.0 | -1.3 |
| **BA** | -0.1 | 2.5 | -0.3 | -1.2 | -1.5 | 0.0 | 0.7 | -0.2 | -0.4 | -1.3 |
| **ME** | 0.6 | 1.3 | -0.3 | 0.0 | 1.0 | 1.0 | 1.4 | -0.4 | -0.3 | 0.5 |
| **RS** | 0.1 | 1.1 | -0.6 | -0.4 | 0.8 | -0.1 | -0.2 | -0.9 | -0.9 | -1.4 |

Note: Standard deviations from historical mean (2000-2017) of four-quarter moving averages for relevant data up to Q2 2018. Values > 1 indicate potential overheating, values < -1 indicate potential under-heating.
Source: wiiw.

### Table 4.10 / Business cycle index B – current levels compared with regional peers

| | Domestic economy | | | External finance | | | Domestic finance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Real GDP | Labour market | Inflation | CA | RER | External debt | RIR | Private credit | Broad money | Fiscal balance |
| BG | 3.6 | 5.7 | 1.6 | 4.2 | 98.0 | 62.8 | -1.6 | 4.2 | 8.6 | 0.6 |
| CZ | 4.0 | 2.5 | 2.2 | 0.6 | 107.5 | 85.2 | -1.5 | 6.2 | 8.8 | 1.1 |
| EE | 3.9 | 5.6 | 3.7 | 2.2 | 103.2 | 80.4 | -3.5 | 0.9 | 7.4 | -0.9 |
| **HR** | **2.7** | **9.5** | **1.5** | **1.9** | **100.8** | **79.9** | **1.5** | **0.8** | **3.6** | **1.2** |
| HU | 4.5 | 3.9 | 2.4 | 2.5 | 100.7 | 83.5 | -1.5 | 5.9 | 12.5 | -3.6 |
| LT | 3.8 | 6.6 | 3.5 | 0.8 | 103.0 | 80.4 | -3.4 | 5.1 | 7.3 | -0.6 |
| LV | 4.8 | 8.1 | 2.5 | 1.3 | 101.3 | 131.9 | -2.4 | -5.0 | 3.4 | -0.9 |
| PL | 5.0 | 4.3 | 1.3 | 0.0 | 98.0 | 65.7 | 0.2 | 4.3 | 5.8 | -0.8 |
| RO | 5.9 | 4.6 | 2.9 | -3.4 | 95.3 | 50.0 | -0.8 | 6.3 | 12.1 | -3.3 |
| **SI** | **4.7** | **5.8** | **1.6** | **7.5** | **99.5** | **98.3** | **-1.6** | **2.4** | **7.2** | **0.4** |
| SK | 3.7 | 7.4 | 2.2 | -1.8 | 99.4 | 106.0 | -2.2 | 10.3 | 6.4 | -1.0 |
| AL | 4.0 | 13.0 | 1.9 | -6.5 | 107.8 | 66.2 | -0.7 | -0.1 | 0.2 | -2.0 |
| **BA** | **2.9** | **20.0** | **1.1** | **-4.6** | **97.8** | **25.9** | **-1.1** | **7.2** | **9.6** | **2.7** |
| **ME** | **4.5** | **15.6** | **3.4** | **-20.5** | **102.0** | **51.2** | **2.6** | **7.4** | **12.3** | **-5.0** |
| MK | 1.1 | 21.7 | 1.7 | -0.1 | 99.2 | 76.6 | 1.4 | 5.3 | 7.2 | -2.1 |
| **RS** | **3.6** | **13.6** | **2.3** | **-5.4** | **103.9** | **62.8** | **1.0** | **2.4** | **5.1** | **0.9** |
| TR | 7.8 | 10.3 | 11.5 | -6.6 | 80.3 | 55.8 | -0.9 | 19.8 | 18.2 | -2.4 |
| KZ | 4.1 | 4.9 | 6.9 | -1.9 | 74.4 | 97.3 | 2.7 | 1.4 | 1.2 | -2.5 |
| RU | 1.6 | 5.0 | 2.7 | 3.7 | 104.1 | 32.0 | 4.9 | 4.9 | 7.4 | 0.2 |
| UA | 2.9 | 9.2 | 13.8 | -2.0 | 102.4 | 92.8 | 1.3 | 3.6 | 8.7 | -2.3 |

Note: Data are four-quarter averages as of Q2 2018. Red = greatest potential signs of overheating relative to peers, green = fewest potential signs of overheating relative to peers.
Source: wiiw.

## 4.5. OPERATIONAL RISK

› Business environments in the region are not especially good, particularly in relation to Austria.

› Bosnia and Herzegovina clearly has the worst business environment, with Croatia (maybe surprisingly) second worst, and Slovenia the best.

› However, on the sub-indicators, the scores for the countries are very mixed: Croatia is best for enforcing contracts, Slovenia for resolving insolvency and paying taxes, and Montenegro for getting credit. Despite a good overall score, Slovenia has the lowest score among the five countries for both getting credit and enforcing contracts.

› In terms of governance – regulatory quality, control of corruption and the rule of law – there is a clear hierarchy of (in order) Slovenia, Croatia, Montenegro, Serbia and Bosnia and Herzegovina. All are far behind Austria.

› One positive is that, unlike in Austria and much of the rest of CESEE, governance scores for the countries covered here have generally improved over the past decade.

**Table 4.11 / Ranking in region for each indicator (1 = best, 5 = worst)**

| | **Average** | Ease of doing business | Enforcing contracts | Getting credit | Resolving insolvency | Paying taxes | Regulatory quality | Control of corruption | Rule of law | Inward FDI stock |
|---|---|---|---|---|---|---|---|---|---|---|
| **BA** | **4.1** | 5 | 4 | 2 | 2 | 5 | 5 | 5 | 5 | 4 |
| **HR** | **3.0** | 4 | 1 | 4 | 5 | 4 | 2 | 2 | 2 | 3 |
| **ME** | **2.3** | 3 | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 1 |
| **RS** | **3.1** | 2 | 3 | 2 | 4 | 3 | 4 | 4 | 4 | 2 |
| **SI** | **2.3** | 1 | 5 | 5 | 1 | 1 | 1 | 1 | 1 | 5 |

Note: Operational risk measures the potential problems for firms doing business in a particular market. In this case, we focus on operational risk from the perspective of a foreign firm in the financial sector.
Source: Own assessment.

The World Bank's Doing Business ranking marks Bosnia and Herzegovina as the clear laggard among the countries covered here (Figure 4.28). Bosnia and Herzegovina ranks 89$^{th}$ in the world. Among the rest, Croatia is 58$^{th}$, Montenegro 50$^{th}$, Serbia 48$^{th}$ and Slovenia 40$^{th}$. All are well below Austria (26$^{th}$). The World Bank data are very detailed and not all is relevant here. However, several points stand out as relevant for a financial firm in the region (Figure 4.29).

› **Bosnia and Herzegovina** scores fairly well compared to regional peers on several indicators. Of the indicators chosen, only on paying taxes is it the weakest in the sample. Bosnia and Herzegovina is behind only Austria and Slovenia for resolving insolvency.

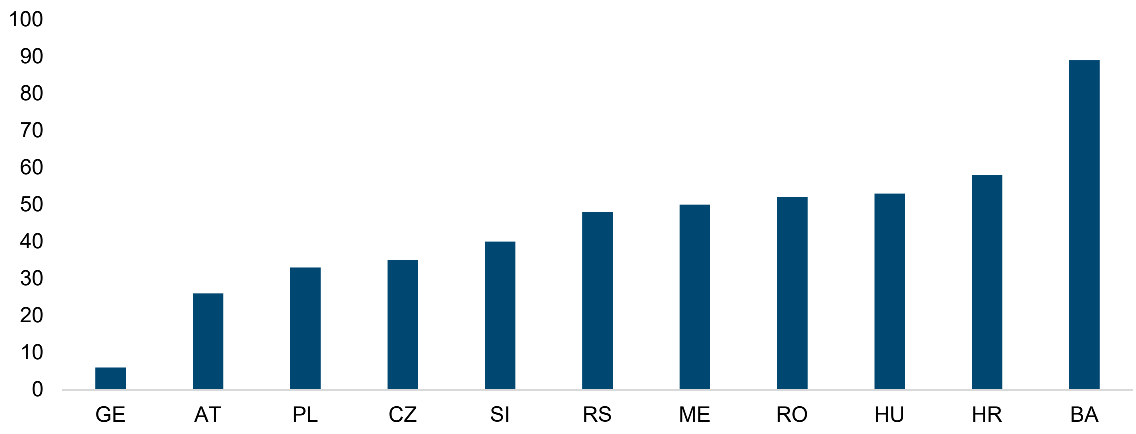
› **Croatia** scores fairly badly in the regional comparison for both getting credit and resolving insolvency. It is much stronger on enforcing contracts and paying taxes.

› **Montenegro** appears to be the strongest country in the region on the indicators chosen. Its average across the four indicates is 74, even higher than Austria (73). It scores particularly well for getting credit.

› On average, **Serbia**'s scores for the selected sub-components are similar to Bosnia and Herzegovina and Croatia as the weakest in the sample. Unlike the other countries in the sample, Serbia appears quite average at all four, with each score between 61 and 75.

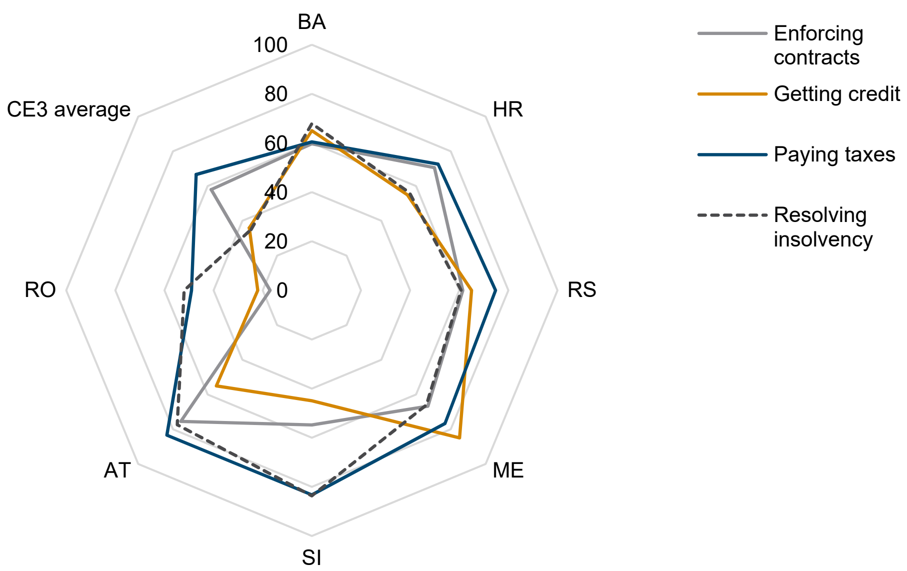
› **Slovenia** is a particularly interesting case. Contract enforcement appears to be a particular problem in Slovenia. Here the score is even worse than Bosnia and Herzegovina. However, for paying taxes and resolving insolvency Slovenia is as good as, if not better than, even Austria.

**Figure 4.28 / Ease of doing business 2019, global rank**




Source: World Bank.

**Figure 4.29 / Ease of doing business sub-components, selected, score**



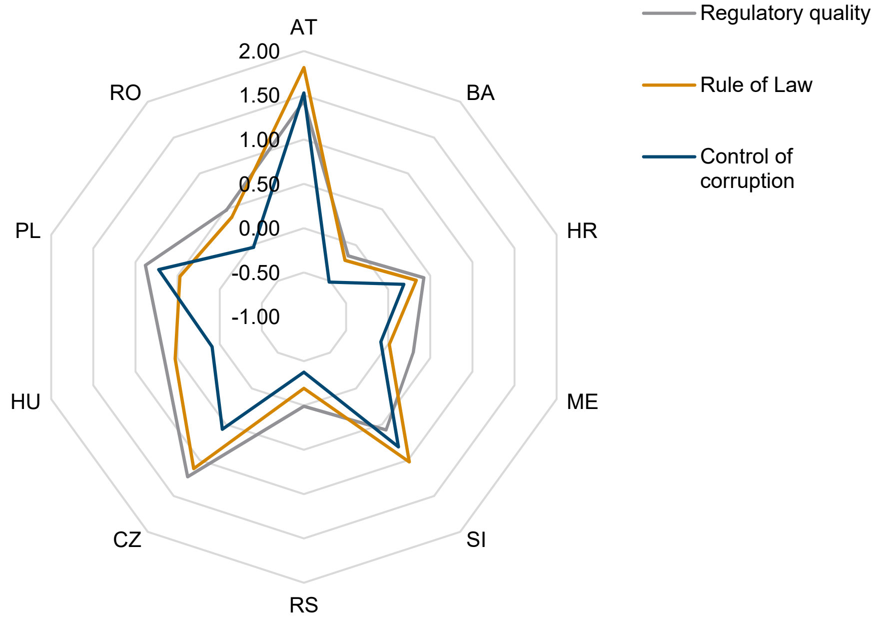

Source: World Bank.

A second key indicator of operational risk is provided by the World Bank Governance Indicators (WBGI), which show the quality and independence of institutions. This also suggests whether the operating environment is predictable or open to political interference.

Looking across the three relevant World Bank Governance Indicators – regulatory quality, control of corruption and rule of law – there is a clear hierarchy of countries (Figure 4.30). Austria is (quite far ahead) in first place, followed (in order) by Slovenia, Croatia, Montenegro, Serbia and finally Bosnia and

Herzegovina. Slovenia is relatively strong on rule of law and control of corruption, but much closer to its regional peers in terms of regulatory quality. The weakest scores across the sample are for control of corruption, with Bosnia and Herzegovina and Serbia scoring particularly badly. Bosnia and Herzegovina has a negative score for all three indicators, while Serbia has two (rule of law and control of corruption) and Montenegro one (control of corruption). Taken together, the data suggest that a foreign company in the five countries would find operating conditions quite different to those in Austria, albeit less so in the case of Slovenia.

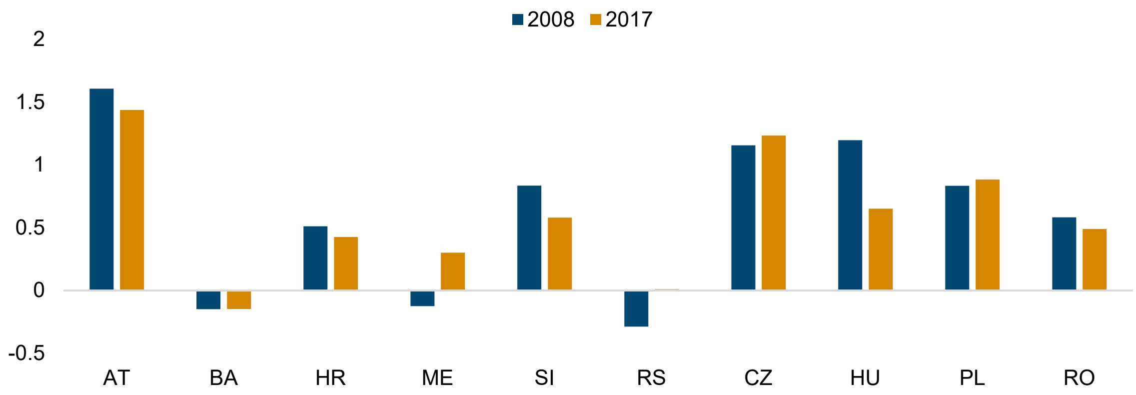
**Figure 4.30 / World Bank Governance Indicators**




Source: World Bank.

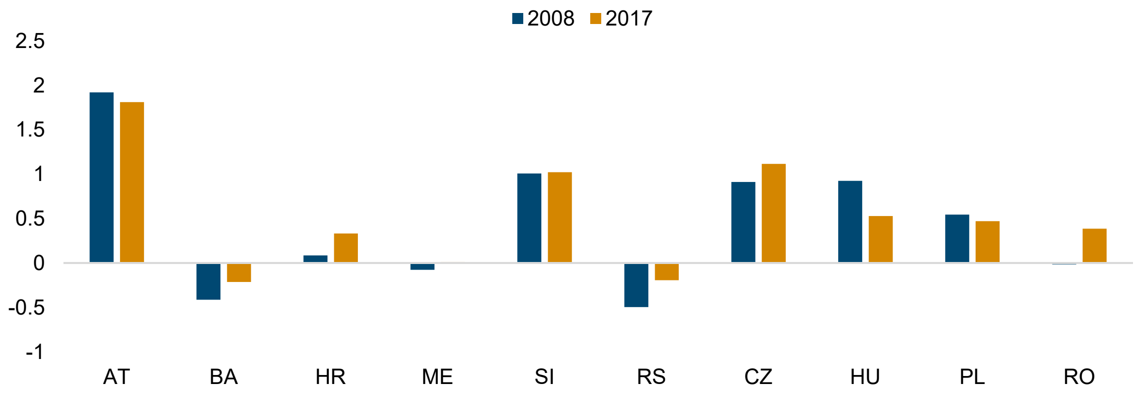
One other interesting thing to note is the development of these indicators over time. In much of CESEE (and indeed in Austria), these indicators have deteriorated over the past decade, consistent with political developments in some cases (the obvious examples being Hungary, Poland and Turkey). However, in much of the sample covered here, the opposite is the case (Figures 4.31-4.33). While operating at generally lower levels, since 2008 we note improvements in regulatory quality in Serbia and Montenegro, the rule of law in all five countries, and control of corruption in Croatia and Montenegro. These improvements could be related to the EU accession process, either completed (Slovenia and Croatia) or, and perhaps more importantly, ongoing (Bosnia and Herzegovina, Serbia, Montenegro).

**Figure 4.31 / Regulatory quality score**



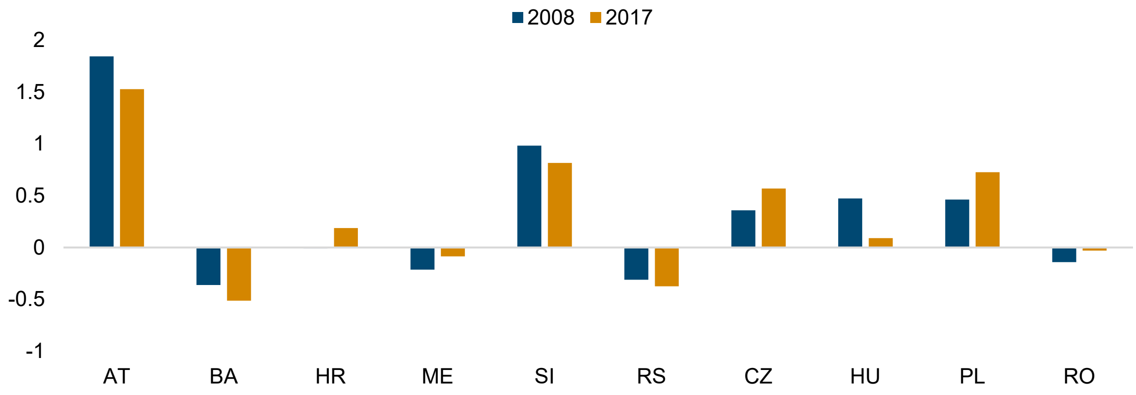

Source: World Bank Governance Indicators. Scores between 2.5 (best) and -2.5 (worst).

**Figure 4.32 / Rule of law score**




Source: World Bank Governance Indicators. Scores between 2.5 (best) and -2.5 (worst).

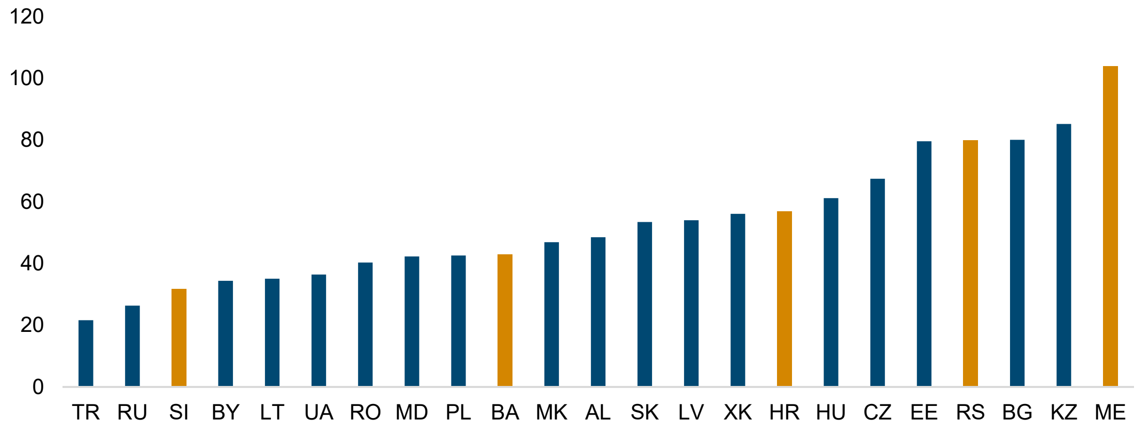
**Figure 4.33 / Control of corruption score**




Source: World Bank Governance Indicators. Scores between 2.5 (best) and -2.5 (worst).

The results of this in terms of actual FDI attraction are quite heterogeneous (Figure 4.34). Among the 23 countries in CESEE tracked by wiiw, Montenegro has the highest inward FDI stock as a share of GDP, and Serbia the fourth highest. The latter has actively pursued FDI in recent years and appears to have been successful. Croatia and Bosnia and Herzegovina are both closer to the regional average, while Slovenia is the third lowest in CESEE after Turkey and Russia (both of which are affected by their large size). However, Slovenia's low stock is at least partly because of a conscious decision not to aim to attract FDI to the same extent as many other new EU Member States.

**Figure 4.34 / FDI inward stock, % of GDP**




Source: wiiw FDI Database.

**Table 4.12 / Top five sources of FDI stock, 2017 or latest available**

| | BA | HR | ME | RS | SI |
|---|---|---|---|---|---|
| **1** | Austria | Austria | Italy | Netherlands | Austria |
| **2** | Croatia | Netherlands | Russia | Austria | Luxembourg |
| **3** | Serbia | Hungary | United Arab Emirates | Cyprus | Switzerland |
| **4** | Slovenia | Italy | Cyprus | Russia | Germany |
| **5** | Netherlands | Luxembourg | Serbia | Germany | Italy |

Source: wiiw FDI Database.

**Table 4.13 / Top five sectors for inward FDI**

| | BA | HR | RS | SI |
|---|---|---|---|---|
| 1 | Financial and insurance activities | Financial and insurance activities | Financial and insurance activities | Manufacturing |
| 2 | Manufacturing | Manufacturing | Manufacturing | Financial and insurance activities |
| 3 | Information and communication | Wholesale, retail trade, repair of motor vehicles etc. | Wholesale, retail trade, repair of motor vehicles etc. | Wholesale, retail trade, repair of motor vehicles etc. |
| 4 | Wholesale, retail trade, repair of motor vehicles etc. | Real estate activities | Professional, scientific and technical activities | Real estate activities |
| 5 | Other not elsewhere classified activities (A-U) | Information and communication | Real estate activities | Information and communication |

Source: wiiw FDI Database.

## 4.6. RISK ASSESSMENT MATRIX

wiiw produces a risk assessment matrix for the CESEE region, breaking down the main risks to our baseline forecasts and ranking them in terms of likelihood and impact. We have replicated this methodology for the five countries included in this study.

The overview risk matrix table presented above (Table 4.2) gives an overview of the risks as we see them. As is clear, we see quite a high number of negative risks (marked in red) in the upper left corner of the matrix. These are things that we think are both quite likely and would have a material impact on economic conditions and business in the five countries. Positive risks (of which there are fewer) are marked in green. The full risk matrix, with explanations of likelihood and impact, is displayed below.

In particular, we are worried about a renewed outbreak of the eurozone crisis and a global trade war. Both have become more likely over the past six months, and both would have material negative consequences for the five countries studied here. Another high-likelihood risk is a smaller post-Brexit EU budget, and an unchanged (or even smaller) amount of IPA funding for the EU accession countries. Both the EU and non-EU members among the five countries would suffer from this. Finally, while a renewed outbreak of violence in the Western Balkan region (either within or between states) remains quite unlikely, we think that the chances are currently higher than has been the case for some time. Needless to say, if such a scenario played out, the implications for business would be very negative.

| Positive risks | | | | |
|---|---|---|---|---|
| **Risk** | **Likelihood** | | **Impact on the five countries** | |
| Labour shortages stimulate virtuous cycle of rising wages and investment. | Low | Many countries in CESEE are facing labour shortages, and this is even now apparent in the Western Balkans. It remains unclear how this will go in the long run. Foreign firms in the Visegrád countries, where labour shortages are generally most acute and wages are rising quickly, may decide to move production east, benefiting some of the countries covered here. However, they have many big incentives to stay in the Visegrád countries, including proximity to home markets, labour quality and high sunk costs. Production is already moving into Serbia, and this could continue (also for other countries covered here), although a large-scale shift of production from central Europe to the Balkans is quite unlikely in our view. | High | Higher investment in productivity-enhancing improvements would lift the region's growth potential, and could increase per capita real GDP growth quite significantly. This could also feasibly improve the pace of convergence. More broadly, a lack of labour could stimulate higher investment in automation, leading to higher productivity in the services sector as well. |
| One or more countries join the EU by 2025. | Low | We analysed this possibility in a recent paper (Grieveson et al. 2018), and found that in economic terms, there is no reason that at least Serbia and Montenegro could not join the EU by 2025. However, we see this as quite unlikely, chiefly because of political factors both in the region and at the EU level. In the case of Serbia, the requirement to essentially recognise Kosovo will be a particularly difficult issue to resolve. On this basis, Montenegro looks well positioned, as it has no serious conflicts with other states in the region. EU accession for Bosnia and Herzegovina will certainly not happen in the next five years. | High | EU accession would certainly be positive for the country or countries joining, and could also act as a powerful incentive for other accession states to speed up reforms. However, it could also lead to new bilateral tensions in the region, as the new EU Member State(s) uses its status as leverage against non-members in the region (as both Slovenia and Croatia have done). |
| Improved EU-Russia relationship leads to removal of sanctions and increased trade and investment flows between the two. | Low | This has become moderately more likely now because of US policy, which has resulted in closer EU ties with countries under pressure from the US such as Iran and Turkey. However, Russia remains a special case, especially because EU sanctions on it are tied so closely to Minsk II (the terms of which are almost impossible to imagine Russia meeting). Nevertheless, opinion surveys indicate significant positive sentiment towards Russia in many EU countries, including in Germany, and the next Chancellor in Berlin could take a different line to Angela Merkel. | Low | An unwinding of Russia-EU sanctions would matter more for Russia than other countries, but it is unlikely that it would be a game changer for anyone. The reasons that the Russian economy is doing so badly are most either structural or because of the weaker oil price of the last few years, not the sanctions. There would be a small positive impact on Russian growth, with spill-overs for other CIS countries. For the rest of CESEE, the impact would be minimal. Most have diverted trade away from Russia since the sanctions were introduced, and would not quickly go back. Many EU investors would remain wary, especially if tensions between Russia and the US remain high. |

| Negative risks | | | | |
|---|---|---|---|---|
| **Risk** | **Likelihood** | | **Impact on the five countries** | |
| A renewed outbreak of the eurozone crisis. | High | Looking at the politics of Germany and Italy in particular, reform of the eurozone to safeguard against future crises looks less and less likely. In Germany, such reforms tend to be seen as the German taxpayer subsidising profligate Southern Europeans. The new government in Italy and its current budget plans make this an ever harder sell in Germany. Recent developments in Italy could be the trigger for a new eurozone crisis. | High | This matters a lot, because the eurozone is not in great shape for a next downturn. In the long run it needs a banking union and some kind of fiscal sharing to be able to ward off speculative market attacks during downturns. Any break-up of the eurozone (which is highly unlikely, although no longer unthinkable with the current Italian government in particular) would badly affect the economies of the Western Balkans, via the trade, remittances, FDI, finance and tourism channels. |
| Global trade war involving exchange of sanctions between US and China and visible impact on global trade volumes. | High | This is already to an extent underway. Trade restrictions on imports into both the US and China have increased significantly over the past decade, and global trade relative to GDP has been flat since the crisis. However, several exchanges of sanctions between the US and China would have a significant additional impact on global growth and trade. Neither side appears willing to back down, so this appears to be becoming more likely. | High | This is a key risk for growth in the Western Balkans during the forecast period. Most economies in the region are increasingly open in terms of exports/GDP, and many deliver inputs into the German supply chain that go directly to China or the US. |
| Rule of law and institutional quality deteriorates. | Medium | This is already happening to an extent in CESEE, especially in Turkey, Poland and Hungary. For the countries covered in this paper, trends are mostly in the other direction, but this is not guaranteed to last. For the EU countries, Brussels has so far shown itself largely unable to take any action. The anchor of EU accession could help to keep reform on track in Bosnia and Herzegovina, Serbia and Montenegro. | Medium | Governments can get away with it for a while, but as the example of Turkey shows, an undermining of institutional independence can contribute to a crisis. In the case of Poland and Hungary, there are already signs that it is affecting domestic private investment. Lower-quality institutions also threaten long-term growth. The generally lower level of institutional development in the countries studied here would make backsliding on reform particularly problematic for the economy and business. |
| EU budget is cut and CESEE countries receive significantly less money in the new financing period | High | A smaller post-Brexit EU budget is highly likely. Funding priorities may also change, including a linking of future EU funding to certain benchmarks. There is a growing feeling in some Western European capitals that funding should be tied more closely to benchmarks such as compliance with EU law. IPA funding could be frozen at its currently quite low levels. | Medium | EU-CEE countries receive 2-5 percentage points of GDP per year from the EU, so cuts to the budget would be very important for Slovenia and Croatia. For the non-EU Member States covered here, a continuation of EU funding inflows at current (quite low) levels would hamper efforts to improve infrastructure quality, which is a key factor holding back regional development. |
| Rings of EU integration are formalised and most of EU-CEE left out. | Low | Irritation in some Western European capital with parts of EU-CEE has been growing for some time. This is for three main reasons: a lack of 'solidarity' on the sharing of refugees, threats to institutional independence and the rule of law, and corruption in the use of EU funds. Recent French proposals suggested 'rings' of integration, which could lead to a more formalised 'core' and 'periphery' in the EU. | High | Any formalisation of 'core' and 'periphery' could have important political and economic consequences, particularly if it affects things like Schengen. It is feasible, but not guaranteed, that Slovenia could end up in the 'inner' ring, but unlikely that Croatia would. For the other countries, this could increase disenchantment with the EU accession process, reducing incentives for reforms and increasing the appeal of closer ties with third countries such as China, Russia and Turkey. |
| Hard/no-deal Brexit | Low | The EU-27 and the UK have reached a deal on the latter's withdrawal from the bloc. A much more tricky issue is what happens when that deal is then put to the UK parliament. The main opposition Labour Party is desperate for a general election, and may use the opportunity to bring the government down. Meanwhile many on the right of the ruling Conservative Party may rebel against any deal that they feel keeps the UK too close to the EU. | Medium | The UK and EU-27 economies are heavily intertwined, and London has huge importance for eurozone finance. A breakdown of talks and 'hard' Brexit in March 2019 would likely have quite serious economic and political consequences, which would filter through to CESEE, including the countries covered here. |

tbc.

| Risk | Likelihood | | Impact on the five countries | |
|---|---|---|---|---|
| Emerging markets crisis moves beyond Turkey to affect more countries in the CESEE region. | Low | So far, most countries in our region have been relatively unaffected. Countries in our region tend to be much more exposed to the euro interest rate than the dollar, and the ECB is (and will remain) at a very different point in the tightening cycle to the Fed. In addition, most countries have reduced private debt/GDP since the crisis, including in foreign currency, and generally external vulnerabilities are lower (current account deficits have mostly been cut or disappeared over the past decade). Turkey seems like a big outlier in our region. | Medium | The impact in recent months on Turkey's currency and bond markets, and then as a follow-through on inflation and the economy, are a big warning sign to the rest of the region. However, the much lower external vulnerabilities of almost all other CESEE countries provide a lot of insulation. The most exposed are probably those which also tend to borrow in US dollars. On this measure Serbia stands out among the countries covered here. |
| Faster-than-expected monetary tightening by the ECB causes financing difficulties for countries in CESEE. | Low | The ECB is currently expected to begin cautiously tightening monetary policy by end-2019, but even this is subject to risks of further delay. Core inflation trends in much of the eurozone remain very weak, reflecting major slack in many labour markets. Meanwhile economic growth outside of Germany has slowed quite significantly this year, and is unlikely to pick up again soon. | Medium | Most countries covered here are more exposed to euro interest rates rather than dollars, and as such have been relatively insulated from the recent market turmoil. If the ECB did start a fairly quick tightening cycle, this would change, and other countries in CESEE could run into trouble. However, few would find themselves in the position of Turkey under this scenario. Turkey is not only more exposed than most to the US dollar interest rate, it also has much bigger external imbalances and financing needs than other countries in CESEE. |
| Violent inter-ethnic conflict in one or more countries in the region. | Low | In the case of Bosnia and Herzegovina, the risks are low. There are three main sources: One, secession of the Republika Srpska; two, the push by leading Serbian and Croat parties for further devolution, e.g. by the disintegration of the Federation into Croat and a Bosniak entities; and, three, a more assertive stance by the Bosniaks. For any of the three, regional and international support is needed, and none is forthcoming. The other country where such a risk exists is Montenegro, although here it is also low. There are constitutional disagreements, which could prompt a legitimacy crisis and civil strife. However, here again, outside (in this case Serbian) involvement would be necessary for violence, and this is highly unlikely. | High | Inter-ethnic conflicts would naturally be highly destabilising for the country involved, with significant negative implications for business. Moreover, such conflicts would almost automatically also have an international element, creating implications for more countries in the region. Violent ethnic conflict in Bosnia and Herzegovina, for example, could re-open various ‘frozen’ conflicts in the region. |
| Armed conflict between Serbia and Kosovo. | Low | The risks are low, but higher than was the case until fairly recently. Recent speculations about the swap of territories have increased the risk of a violent civilian conflict in both the north of Kosovo and in the Preševo Valley in Serbia. The risk of civil unrest in the north of Kosovo in particular is increasing. This is similar to the developments in 2010 and thereafter. This time, however, the Serbian government appears to be encouraging a legitimacy challenge to the Kosovo government in response to tariffs which the government imposed on the imports of goods from Serbia. As this development is in early stages, it remains to be seen how far it will go, but the risks of state failure in the north of Kosovo is certainly increasing. An intervention by the EU or US (which would in theory help to restore stability) could be less likely than has been the case in the past, owing to internal political factors in both cases. China is supporting Serbia in its conflict with Kosovo, which may prove consequential if the normalisation process stalls, as seems probable. | High | Kosovo is NATO’s responsibility, and indeed the responsibility of the Security Council of the UN. Therefore if Serbia were to engage in a conflict, e.g. to control the north of Kosovo, that would lead to potentially military and certainly political confrontation with NATO. Serbia could then feasibly find itself back in the position it was in at the end of the 1990s and early 2000s, facing semi-isolation internationally, with quite severe economic and business implications. Dependence on Russia would increase significantly. Moreover, the region’s strength in tourism, which has been quite crucial to supporting post-crisis economic growth, would take a big hit. |

tbc.

| Risk | Likelihood | | Impact on the five countries | |
|---|---|---|---|---|
| EU accession process stops. | Low | The three countries covered here which are not already EU members face many challenges to accession. We view the Commission's 2025 target date for Serbia and Montenegro as highly ambitious. Nevertheless, the process of accession should continue. The main risks are political, especially for Serbia and Bosnia and Herzegovina, and there is a chance that serious tensions within or between countries derail talks. There is also a chance that enlargement fatigue in the current EU, or a referendum result against accession of one or more countries, takes places. However, we view this as unlikely, especially during the next five years. | High | Most citizens in Bosnia and Herzegovina, Serbia and Montenegro are aware that EU accession will not happen soon. However, despite quite widespread frustration at the pace of the process, they expect accession to continue, and for progress to be visible. Signs that the EU is wavering in its commitment to accept them at some point (as has been the case with Turkey, for example) could have serious negative political consequences in one or more countries in the region. Under this scenario, greater political and economic influence of outside actors such as Russia, China and Turkey, would be quite likely in the region. This would be quite negative for economics and business in our view. |
| Conflicts between great powers in the Balkans. | Low | 100 years on from the end of World War One, it is tempting again to see dangerous potential for 'great powers' to collide in the Balkans. A partial retreat of the US under the current administration, and signs of wavering commitment from the EU (albeit less so this year with the new Commission strategy) have created something of a vacuum, which Russia, Turkey, China and others have appeared willing to partially fill. However, two things suggest that a collision between these powers is unlikely in the region. First, the extent of their economic interests are not very high, especially in relation to the EU (this could change over time with China's BRI). Second, the division of power between Russia and Turkey especially seems quite stable – Turkey is generally more active in Muslim areas, while Russia sees its strategic interests chiefly in Serbia, Montenegro and the Republika Srpska in Bosnia and Herzegovina. The only country which really seems unhappy with the current 'balance of power' in the Balkans is Russia, and even here it does not seem that it is really willing to put significant resources into the region to change things. China's interest is mostly commercial, while Turkey has been keen to play the role of mediator in post-Ottoman parts of the Balkans. | High | A conflict involving two or more of the US, EU, China, Russia and Turkey in the region would be highly destabilising, and almost certainly have big negative implications for business. |

# 5. Market forecasts

## 5.1. LONG-RUN FORECAST OF UNSECURED HOUSEHOLD LOANS IN THE COUNTRIES OF ADDIKO OPERATION

The financial markets in general and the retail household loan market segment in particular are expected to grow in the long run consistent with the macroeconomic fundamentals of the countries of Addiko operation. Under the most likely scenario, by the year 2047 the size of unsecured household loans will increase up to EUR 8.7 bn in Bosnia and Herzegovina, EUR 19.6 bn in Croatia, EUR 2.1 bn in Montenegro, EUR 21.4 bn in Serbia and EUR 14.0 bn in Slovenia. This signifies a marked increase in the size of the market in nominal terms. Further details, including alternative forecast scenarios, are provided in Table 5.1. An in-depth discussion of the projections, methodology and economic underpinning is provided in the sections below.

**Table 5.1 / 30-year projections for unsecured household loans, EUR million**

| Country | Fact | Forecast | | | |
|---|---|---|---|---|---|
| | | *Scenario:* | *A. Baseline* | *B. Optimistic* | *C. Pessimistic* |
| | | | The region improves in economic terms as EU negotiations with the Western Balkan countries move forward slowly but steadily. Eventually all the countries become EU members until 2040, at the latest. The most recent trends in manufacturing FDI continue as the EU accession prospects improve. GDP growth is robust | Political stalemates can be solved swiftly as Serbia goes for a pragmatic solution of Kosovo (and Bosnia and Herzegovina) status issues. The Western Balkan countries can join the EU by 2030. The massive inflow of manufacturing FDI lets the region become an integral part of the Central European manufacturing core and GDP growth is impressive | Despite EU mediation the countries of the region are unable to solve their border problems and the political situation deteriorates. EU accession is not in view. The much needed economic upgrading and a broad inclusion into global value chains fail. The economies of the region continue muddling along. GDP growth is unimpressive |
| | | *Probability:* | *60%* | *10%* | *30%* |
| | *2017* | *Forecast horizon:* | *2047* | *2047* | *2047* |
| **BA** | 3,585 | | 8,685 | 17,984 | 6,000 |
| **HR** | 8,634 | | 19,558 | 34,339 | 14,708 |
| **ME** | 787 | | 2,053 | 3,996 | 1,464 |
| **RS** | 4,583 | | 21,407 | 43,594 | 14,917 |
| **SI** | 3,759 | | 13,983 | 22,109 | 11,094 |

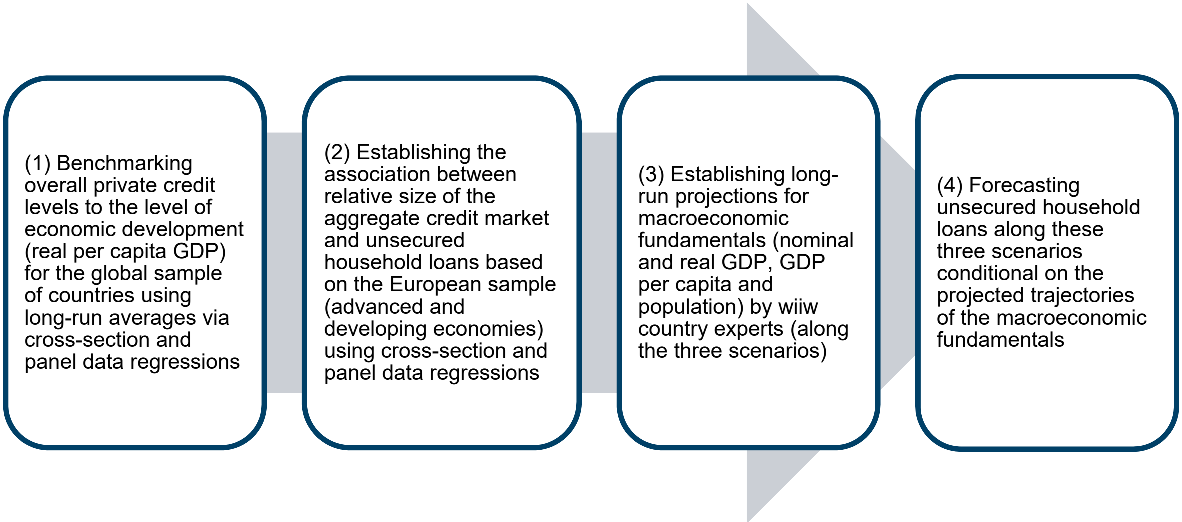
Source: wiiw estimates.

### 5.1.1. Analytical framework, assumptions and discussion

Apparently, the forecast of unsecured household loans for the 30-year forecast horizon is subject to high uncertainty, particularly in the context of the Western Balkan countries which are characterised by significant challenges as regards their institutions and infrastructure development and uncertainty concerning how these structural bottlenecks will be addressed in the future – that is, over the period 2019-2047.

Therefore, the forecast of unsecured household loans in the countries of Addiko operation is computed conditional on their expected trajectory of the overall financial and macroeconomic development. The latter, in turn, is made conditional on wiiw country expert judgements as regards EU accession, real income convergence and economic development of the respective countries in the future along several scenarios. Overall, the methodology follows a 4-step framework as described in Figure 5.1.

**Figure 5.1 / The methodology of the long-run forecast of unsecured household loans**




Source: Own elaboration.

In particular, the underlying macroeconomic projections are based on the assumptions of further multi-speed real income convergence within Europe. However, expert judgement is used to incorporate uncertainties in this process and factors that may influence the path of convergence. The forecast is therefore structured along three scenarios with probabilities attached to each outcome:

I. **Baseline:** The region improves in economic terms as EU negotiations with the Western Balkan countries move forward slowly but steadily. Eventually, all the countries become EU members until 2040, at the latest. The most recent trends in manufacturing FDI continue as the EU accession prospects improve. GDP growth is robust. Likelihood: 60%.

II. **Optimistic:** Political stalemates can be solved swiftly as Serbia goes for a pragmatic solution of Kosovo (and Bosnia and Herzegovina) status issues. The Western Balkan countries can join the EU by 2030. The massive inflow of manufacturing FDI lets the region become an integral part of the Central European manufacturing core and GDP growth is impressive. Likelihood: 10%.

III. **Pessimistic:** Despite EU mediation the countries of the region are unable to solve their border problems and the political situation deteriorates. EU accession is not in view. The much-needed economic upgrading and a broad inclusion into global value chains fail. The economies of the region continue muddling along. GDP growth is unimpressive. Likelihood: 30%.

**Table 5.2 / Summary of the forecast of unsecured household loans along three scenarios**

**Panel A / 30-year projections for unsecured household loans, EUR million**

| Country | Fact | Forecast | | | |
|---|---|---|---|---|---|
| | | *Scenario:* | *A. Baseline* | *B. Optimistic* | *C. Pessimistic* |
| | | | The region improves in economic terms as EU negotiations with the Western Balkan countries move forward slowly but steadily. Eventually all the countries become EU members until 2040, at the latest. The most recent trends in manufacturing FDI continue as the EU accession prospects improve. GDP growth is robust | Political stalemates can be solved swiftly as Serbia goes for a pragmatic solution of Kosovo (and Bosnia and Herzegovina) status issues. The Western Balkan countries can join the EU by 2030. The massive inflow of manufacturing FDI lets the region become an integral part of the Central European manufacturing core and GDP growth is impressive | Despite EU mediation the countries of the region are unable to solve their border problems and the political situation deteriorates. EU accession is not in view. The much needed economic upgrading and a broad inclusion into global value chains fail. The economies of the region continue muddling along. GDP growth is unimpressive |
| | | *Probability:* | *60%* | *10%* | *30%* |
| | *2017* | *Forecast horizon:* | *2047* | *2047* | *2047* |
| **BA** | 3,585 | | 8,685 | 17,984 | 6,000 |
| **HR** | 8,634 | | 19,558 | 34,339 | 14,708 |
| **ME** | 787 | | 2,053 | 3,996 | 1,464 |
| **RS** | 4,583 | | 21,407 | 43,594 | 14,917 |
| **SI** | 3,759 | | 13,983 | 22,109 | 11,094 |

**Panel B / 30-year projections for unsecured household loans, % of GDP**

| Country | Fact | Forecast | | | |
|---|---|---|---|---|---|
| | | *Scenario:* | *A. Baseline* | *B. Optimistic* | *C. Pessimistic* |
| | | | The region improves in economic terms as EU negotiations with the Western Balkan countries move forward slowly but steadily. Eventually all the countries become EU members until 2040, at the latest. The most recent trends in manufacturing FDI continue as the EU accession prospects improve. GDP growth is robust | Political stalemates can be solved swiftly as Serbia goes for a pragmatic solution of Kosovo (and Bosnia and Herzegovina) status issues. The Western Balkan countries can join the EU by 2030. The massive inflow of manufacturing FDI lets the region become an integral part of the Central European manufacturing core and GDP growth is impressive | Despite EU mediation the countries of the region are unable to solve their border problems and the political situation deteriorates. EU accession is not in view. The much needed economic upgrading and a broad inclusion into global value chains fails. The economies of the region continue muddling along. GDP growth is unimpressive |
| | | *Probability:* | *60%* | *10%* | *30%* |
| | *2017* | *Forecast horizon:* | *2047* | *2047* | *2047* |
| **BA** | 22.4 | | 10.3 | 11.1 | 9.9 |
| **HR** | 17.6 | | 11.2 | 11.9 | 10.9 |
| **ME** | 18.3 | | 10.5 | 11.3 | 10.1 |
| **RS** | 11.4 | | 10.7 | 11.5 | 10.3 |
| **SI** | 8.7 | | 11.6 | 12.2 | 11.3 |

tbc.

**Table 5.2 / tbc.**

**Panel C / 30-year projections for unsecured household loans, real EUR PPS 2002 GDP**

| Country | Fact | Forecast | | | |
|---|---|---|---|---|---|
| | | Scenario: | A. Baseline | B. Optimistic | C. Pessimistic |
| | | | The region improves in economic terms as EU negotiations with the Western Balkan countries move forward slowly but steadily. Eventually all the countries become EU members until 2040, at the latest. The most recent trends in manufacturing FDI continue as the EU accession prospects improve. GDP growth is robust | Political stalemates can be solved swiftly as Serbia goes for a pragmatic solution of Kosovo (and Bosnia and Herzegovina) status issues. The Western Balkan countries can join the EU by 2030. The massive inflow of manufacturing FDI lets the region become an integral part of the Central European manufacturing core and GDP growth is impressive | Despite EU mediation the countries of the region are unable to solve their border problems and the political situation deteriorates. EU accession is not in view. The much needed economic upgrading and a broad inclusion into global value chains fails. The economies of the region continue muddling along. GDP growth is unimpressive |
| | | Probability: | 60% | 10% | 30% |
| | 2017 | Forecast horizon: | 2047 | 2047 | 2047 |
| BA | 3,585 | | 6,420 | 11,082 | 4,871 |
| HR | 8,634 | | 13,245 | 20,354 | 10,663 |
| ME | 787 | | 1,425 | 2,361 | 1,104 |
| RS | 4,583 | | 15,694 | 25,953 | 12,170 |
| SI | 3,759 | | 9,608 | 13,631 | 8,056 |

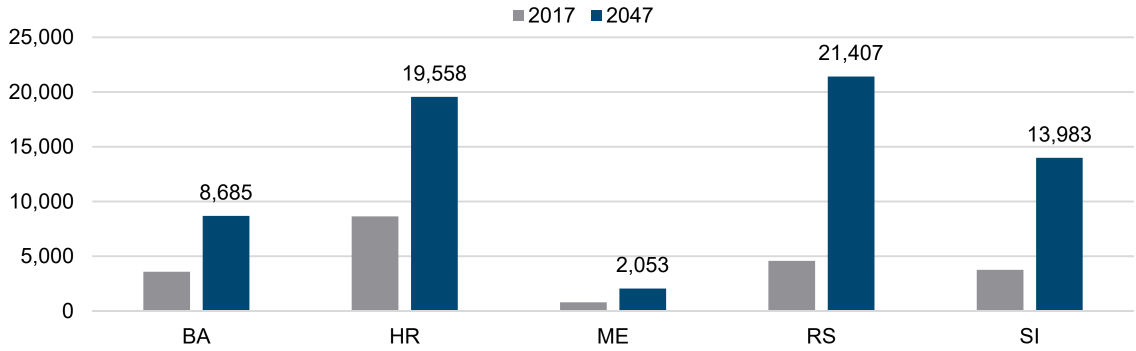
Source: wiiw estimates.

The 30-year forecast (that is, for the year 2047) structured along these three scenarios is reported in Table 5.2. Besides the requested nominal loan figures in EUR, additional (mutually consistent) projections are provided for the value of unsecured household loans as a percentage of GDP and in terms of purchasing-power-adjusted real terms (2002 prices). In addition, Figures 5.2 and 5.3 provide a comparative assessment of the projections along different scenarios.

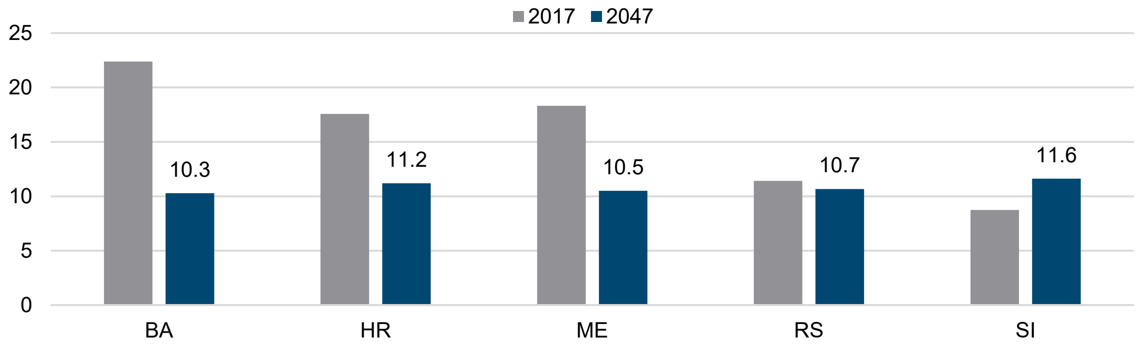
The forecasting logic behind the baseline forecast and scenarios is as follows. One should keep in mind that a 30-year forecast is subject to high uncertainty in general and especially when it comes to forecasting a narrow specific segment of financial markets in the Western Balkan countries. An educated guess about possible future developments over such a long-run horizon could possibly be made by relating to past experiences of European countries and, to address the forecast uncertainty, developing several scenarios of possible future developments. The projected figures therefore, naturally, should be interpreted as ballpark numbers and not precise forecasts, which in macroeconomics in general are not done with high precision even for a short-run horizon. In general, the trajectories of unsecured household loans over the 30-year period will evolve consistent with the real income levels and the expected relative share of unsecured household loans in real incomes as evidenced by aggregate average relationship for the broad European sample of countries. In this regard, in the long run it is assumed that the share of unsecured loans will decline as the countries of Addiko operations become more developed (assumed rising per capita incomes under different scenarios). Conceptually, it is natural that as real incomes increase, consumers need to borrow less to finance consumption of durables and non-durables. Thus, for countries with relatively high ratio of unsecured loans to GDP the ratio should gradually converge to more sustainable levels over time as households rely increasingly less on borrowed funds and increasingly more on their own disposable incomes and savings to finance current consumption. This is particularly the case for Europe, in contrast, for instance, to the US consumer markets that have a high reliance on credit cards to finance daily consumption.

**Figure 5.2 / 30-year projections for unsecured household loans, EUR million (baseline scenario )**

**Panel A / 30-year projections for unsecured household loans, EUR million**



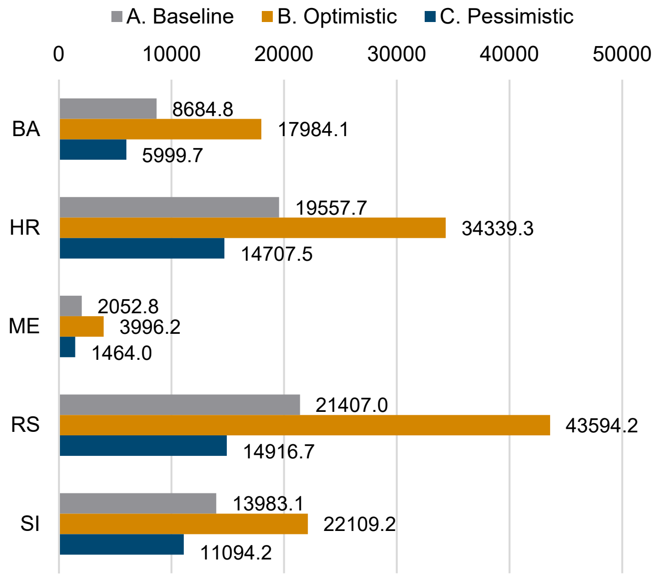

**Panel B / 30-year projections for unsecured household loans, % of GDP**




Source: wiiw estimates.

In the long run, transitory developments are irrelevant and the trajectory of the expected credit growth in general and unsecured retail loans in particular is determined by equilibrium structural considerations rather than transitory demand and supply shocks. Therefore, the long-run (unsecured household) credit growth forecast estimations are based on the idea of ‘equilibrium’ (trend) dynamics, whereas the short-to-medium-run forecast picks up deviations from this equilibrium trend path due to various supply and demand factors (business cycles, overheating in the financial markets, policy shocks, etc.). The expected correction path to the trend differs across the countries under consideration as discussed in the short-run forecast section of the report.

**Figure 5.3 / Comparison of the forecast along the three scenarios**




Source: wiiw estimates.

Thus, the forecast of the financial sector is made conditional upon assumptions about long-run macroeconomic projections made by wiiw country experts for the project along the three scenarios as outlined for nominal GDP and real per capita GDP (which implicitly includes a population forecast). Specific numbers are provided in Table 5.3.

**Table 5.3 / Technical assumption behind the scenarios**

| | | ***scenario*** | | | | | |
|---|---|---|---|---|---|---|---|
| | | ***baseline*** | | ***optimistic*** | | ***pessimistic*** | |
| | | The region improves in economic terms as EU negotiations with the Western Balkan countries move forward slowly but steady. Eventually all the countries become EU members until 2040, at the latest. The most recent trends in manufacturing FDI continue as the EU accession prospects improve. GDP growth is robust | | Political stalemates can be solved swiftly as Serbia goes for a pragmatic solution of Kosovo (and Bosnia and Herzegovina) status issues. The Western Balkan countries can join the EU by 2030. The massive inflow of manufacturing FDI lets the region become an integral part of the Central European manufacturing core and GDP growth is impressive | | Despite EU mediation the countries of the region are unable to solve their border problems and the political situation deteriorates. EU accession is not in view. The much needed economic upgrading and a broad inclusion into global value chains fails. The economies of the region continue muddling along. GDP growth is unimpressive | |
| | ***probability*** | ***60%*** | | ***10%*** | | ***30%*** | |
| **country** | ***year*** | ***GDP, mn EUR*** | ***real per capita GDP 2002 PPP, EUR*** | ***GDP, mn EUR*** | ***real per capita GDP 2002 PPP, EUR*** | ***GDP, mn EUR*** | ***real per capita GDP 2002 PPP, EUR*** |
| **BA** | | 84381.13 | 20015.95 | 161808.38 | 31994.12 | 60604.02 | 15787.51 |
| **HR** | | 174625.61 | 33524.29 | 288609.93 | 48494.81 | 135390.02 | 27825.14 |
| **ME** | | 19527.84 | 22772.83 | 35406.53 | 35142.23 | 14436.54 | 18288.26 |
| **RS** | | 200558.00 | 24993.63 | 380503.52 | 38506.74 | 144845.12 | 20088.24 |
| **SI** | | 120278.90 | 42097.25 | 181041.22 | 56853.87 | 97826.12 | 36182.82 |

Source: wiiw estimates.

Based on the literature on the 'finance-growth nexus'[21], the equilibrium level of financial development is determined by 'deep' structural macroeconomic characteristics of countries, in particular, the population size, income levels, development of institutions and infrastructure. The variety of structural factors in the long run is, in turn, associated with the level of economic development of a country typically measured by real per capita income. Therefore, as a first step of the analysis, we conduct a benchmarking exercise linking the key measure of economic development to the key measure of financial development based on a global sample of countries. Adding additional covariates (e.g. infrastructure and institutional development) is impractical as those are determined by per capita income levels and are also mutually highly collinear, both in the case of cross-sections and panel data over short- and long-run horizons. Real per capita income, however, can be decomposed further into nominal GDP, deflator and population size, which allows us to model various scenarios of interest conditional on these variables (institutions, infrastructure development, economic integration and other factors pertaining to productivity and growth are thus implicitly captured in the forecast real GDP growth trajectory).

Table 5.4 shows the results of the regression analysis for this benchmarking exercise. The baseline specification further used in the parametrisation of projections is specification 3, which is based on long-run averages and the global sample and therefore is more robust. Averaging and using the global sample allows to remove the transitory effects due to business cycle fluctuations or country-specific shocks.

**Table 5.4 / Benchmarking relative private credit level to economic development**

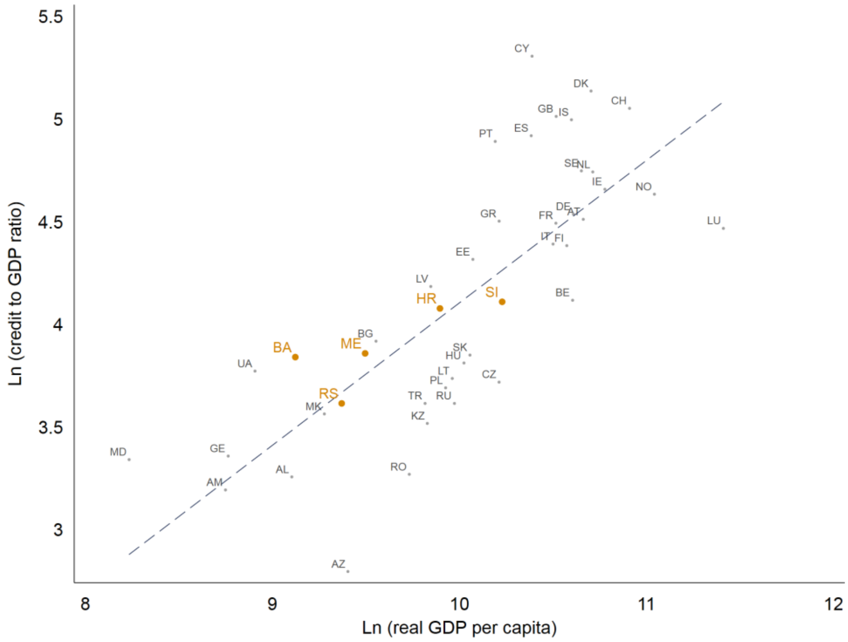
| | European sample | | Global sample | |
|---|---|---|---|---|
| | Cross-section 2000-2017 avg | Panel FE | **Cross-section 2000-2017 avg** | Panel FE |
| | (1) | (2) | **(3)** | (4) |
| Real per capita GDP (log) | 0.694*** | 1.200*** | **0.512*** ** | 0.366*** |
| | (0.0200) | (0.242) | **(0.00808)** | (0.136) |
| Constant | -2.836*** | -8.166*** | **-1.101*** ** | 0.307 |
| | (0.200) | (2.442) | **(0.0745)** | (1.257) |
| Year FE | | yes | | yes |
| Country FE | | yes | | yes |
| Observations | 774 | 716 | **4,104** | 3,848 |
| R-squared | 0.598 | 0.477 | **0.484** | 0.321 |

Note: Dependent variable is credit to GDP ratio (log). The baseline result is specification 3, based on the global sample and long-run average (2000-2017). *** , **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

To aid interpretation of this assessment, Figure 5.4 also depicts the scatterplot of private credit to GDP and real GDP per capita for the economies of Europe and Central Asia in the post-crisis period. Confirming the initial conjecture and in line with the literature, the relationship between financial development and economic development is strong and robust. In this regard, financial markets in the countries of Addiko operations appear to be well-aligned with their macroeconomic fundamentals over the long-run period. Figure 5.5 is provided for reference and depicts the same relationship based on the global sample of countries (as can be noted, the relationship holds well in the global context; the relationship is consistent with the baseline specification regression in Table 5.4, although the latter also accounts for cross-country heteroscedasticity).

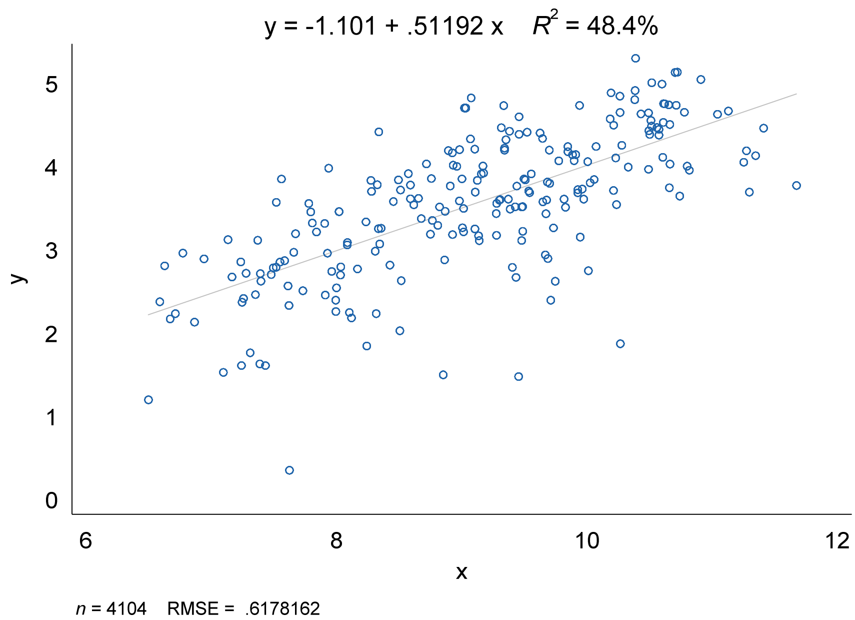
21 See, for instance, Beck et al. (2000); Levine (2004); Levine et al. (2000).

**Figure 5.4 / Relationship between economic development and private credit to GDP, Europe and Central Asia (including countries of Addiko operation), 2000-2017 average**




Note: The figure shows average over the period 2000-2017 for real GDP per capita and private credit to GDP ratios (in log-form), as well as the fitted linear regression line. The countries of Addiko operation are highlighted.
Source: Own computations based on the World Bank's World Development Indicators.

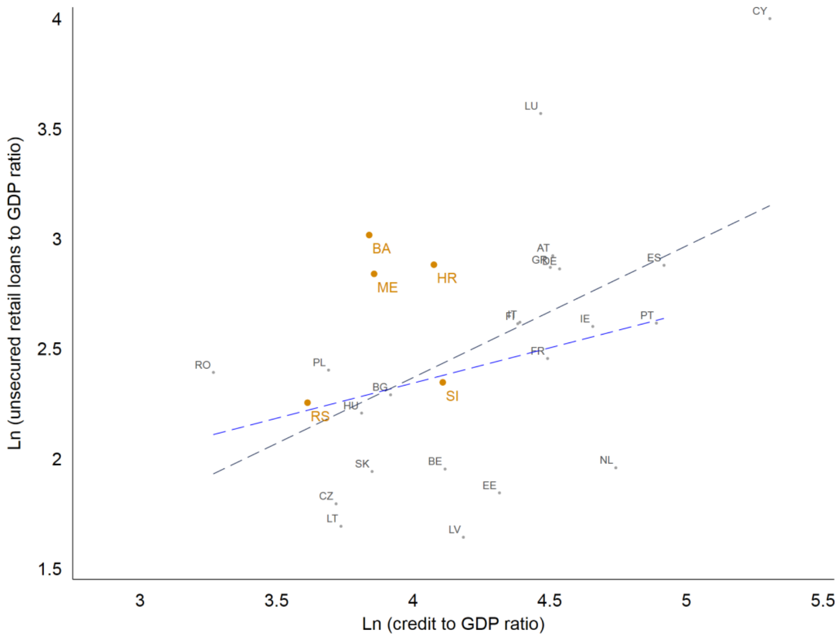
**Figure 5.5 / Relationship between economic development and credit to GDP level, global sample**



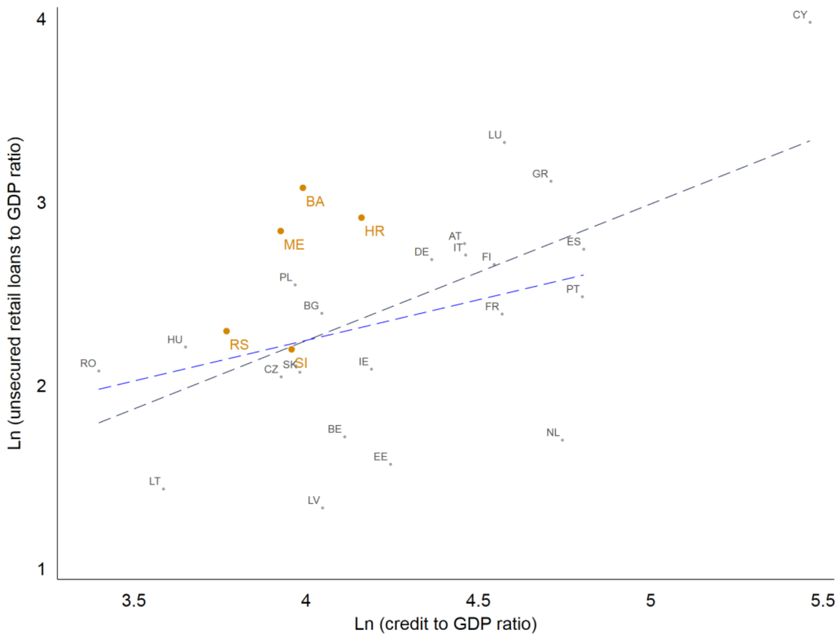

Note: The figure shows the relationship between real GDP per capita (horizontal x axis) and private credit to GDP ratios (vertical y axis) in log-form for the global sample of countries (average over the period 2000-2017), as well as the fitted linear regression line.
Source: Own computations based on the World Bank's World Development Indicators.

**Figure 5.6 / Association between total private credit and unsecured loans to households**

**Panel A. 2000-2017 average**




**Panel B. 2013-2017 average**




Note: The blue line shows the regression line excluding LU and CY, the grey line the linear fit for the full sample of countries. The countries of Addiko operation are indicated by orange. Domestic credit to private sector refers to financial resources provided to the private sector by financial corporations, such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises. The financial corporations include monetary authorities and deposit money banks, as well as other financial corporations where data are available (including corporations that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other financial corporations are finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies (taken from WB, IMF definitions). All credit to households are naturally therefore included in the definition.
Source: Own computations based on WB data, national sources, wiiw data.

Next, for a more nuanced analysis of retail unsecured loans we zoom in in our analytical framework along two dimensions: from the global sample to the European sample of countries and from the general financial market to its unsecured household loan segment. Figure 5.6 depicts the relationship between total private credit and unsecured loans to households. While the level of credit market depth of the five countries analysed is consistent with the long-run fundamentals, the level of unsecured household loans appears to be excessive in Montenegro, Croatia and especially Bosnia and Herzegovina (that is, their levels are more characteristic of more advanced economies like Austria and Spain) – close to, or exceeding, 20% of GDP. It may also be noted that, while we operate with official figures and estimates, apparently, the GDP figures may be imprecisely measured on account of shadow economy activity, while the relative share of the shadow economy in the Addiko countries could be higher than that in the advanced EU countries according to some estimates (for instance, for a recent discussion see Savelin and Alvarez Orviz, 2017). As Figure 5.6, Panel B shows, these persistent excessive unsecured retail credit levels are still present in the post-crisis period (see also the discussion of the unsecured loan dynamics in relation to wages in the chapter on the banking sector developments). These potentially unsustainable dynamics in Bosnia and Herzegovina, Montenegro and Croatia thus may face a correction to more sustainable trend levels in the short to medium run as discussed in the short-run forecast below. In general, as these economies develop and real disposable incomes grow, reliance on financing household consumption via credit should diminish. Complementing the visual benchmarking of unsecured household loans to the overall private credit market size, Table 5.5 shows the results of a formal analysis. Specification 2 is the baseline specification used for parametrisation in the related forecasting routines – it yields robust estimates based on long-run averages (therefore, the effects of business and financial cycles are netted out) and excludes Luxembourg and Cyprus as clear outliers.

**Table 5.5 / Association between unsecured loans to households and private credit, regression results**

| | (1) Unsec. loans to HH (avg) | **(2) Unsec. loans to HH (avg) excl. LU, CY** | (3) Unsec. loans to HH | (4) Unsec. loans to HH excl. LU, CY |
|---|---|---|---|---|
| Ln (private credit to GDP) | | | 0.210<br>(0.159) | 0.208<br>(0.164) |
| Ln (private credit to GDP), avg | 0.599***<br>(0.0520) | **0.320***<br>(0.0371)** | | |
| Constant | -0.0279<br>(0.216) | **1.061***<br>(0.158)** | 1.513**<br>(0.668) | 1.442**<br>(0.678) |
| Year FE | | | yes | yes |
| Country FE | | | yes | yes |
| Observations | 486 | **450** | 369 | 341 |
| R-squared | 0.259 | **0.106** | 0.428 | 0.461 |

Note: 'avg' refers to the average over the period 2000-2017. Dependent variable: log of unsecured loans to households ('Unsec. loans to HH'). The columns indicate specifications, column 2 is the baseline specification used as an input for projections. Specifications 1 and 2 are cross-section regressions based on 2000-2017 averages with heteroscedasticity-robust standard errors. Specifications 3 and 4 are panel data regressions (fixed effects with standard errors clustered by country).

As already noted earlier, the final step then involves computing the unsecured household loan forecasts in nominal, real and relative terms (as a share of GDP) using (i) the elasticities derived in the regressions above and (ii) projections of macroeconomic fundamentals along the three scenarios made by wiiw country experts. The three scenarios help address the uncertainty as regards the underlying assumptions over the 30-year horizon and probabilities are assigned also based on the expert judgement of the country experts.

## 5.2. SHORT-RUN FORECAST OF UNSECURED HOUSEHOLD LOANS IN THE COUNTRIES OF ADDIKO OPERATION

Short-run dynamics of loans in Southeast European countries typically follow an idiosyncratic path that is difficult to forecast. Nevertheless, we have explored important impact factors that have shaped the development so far. Here we have also drawn on the rich experience that the Croatian National Bank has on estimating credit demand and supply (Gattin-Turkalj et al., 2007; Ceh et al., 2011; Ljubaj, 2012; Dumicic and Ljubaj, 2017; Bambulovic and Valdec, 2018).

However, we had to adapt the model to the statistical needs of the wider region and have, apart from simple correlations by country and by explanatory variable, employed panel data estimators – a time-series cross-sections dynamic specification fixed-effects (country and time) estimator as well as an Arellano-Bond linear dynamic panel-data estimator.

As a dependent variable we have used the quarterly year-on-year growth of the stock of unsecured household loans (i.e. household loans minus the housing component) for 13 CESEE countries for the period Q1 2000 to Q4 2017. As regards the independent variables we have tested the following ones, based on the literature and data availability. All data are annual growth rates and on a quarterly periodicity.

Demand: household final consumption; average wages; employment; unemployment.

Supply: broad money M3; 3 months money market rate; NPL share; loans to non-financial corporations; government budget balance.

The correlation coefficients of the lagged demand variables with the unsecured household variable are moderate but all significant. Among the lagged supply variables' correlation coefficients only the growth of the government budget balance is insignificant. Here we find two indicators which are highly correlated (above 70%) with the growth of unsecured household loans: lagged growth of M3 as well as loans to non-financial corporations.

In the regression models it turns out that in various specifications and with different estimators only the lagged growth of the M3 coefficient remains statistically significant. In addition, we also find the lagged left-hand side variable to be statistically significant. Given that also in M3 household loans are included the modelling exercise hints at a very strong persistence in the growth of unsecured household loans, at least in the short run.

The coefficient of the lagged left-hand side variable is large – in the simplest fixed effects model it is as large as 0.87. The coefficient of the lagged growth of M3 is only 0.14. The difference in the estimated coefficients compared to other specifications and estimators with more explanatory variables is minimal. The results are thus very robust. Thus, **overwhelmingly current growth of unsecured household**

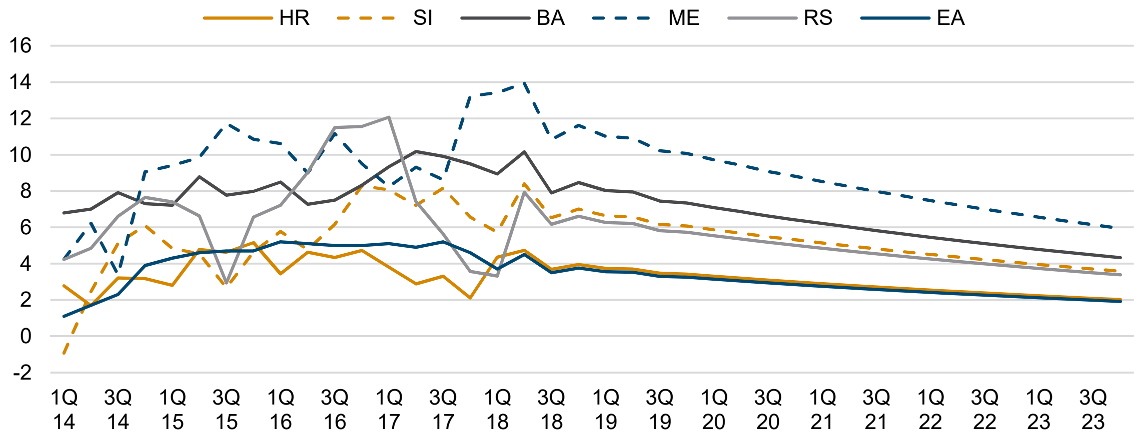
**loans depends on the previous period's growth of unsecured household loans; and to a smaller extent on the previous period's growth of the broad money aggregate M3**.

Interestingly, **growth of M3 in the region is only weakly to moderately correlated with GDP growth. A much stronger correlation can be found with the growth of the euro area M3**. Correlation is particularly strong in Slovenia and Montenegro (more than 70%), which are using the euro as a currency, and moderate (around 50%) in the other cases where a de facto fixed exchange rate against the euro exists.

With the help of the most recent four quarters of euro area M3 growth of the growth rate we extended all the M3 growth rates until the fourth quarter of 2023 (Figure 5.7). Given the announced slow phasing-out of the ECB's expansionary monetary policy and the troubles looming in the Italian economy, a smooth reduction in broad money growth seems to be quite realistic. It is also interesting to note that euro area M3 since 2000 only dropped in two quarters – the fourth quarter 2009 and the first quarter 2010.

With the help of the M3 growth projections we can forecast the growth of unsecured household loans for the coming years. It is important to note that the starting point of the forecasting exercise in 2018 (an extrapolation of the unsecured household loan data from January 2018 to November 2018) is crucial for the level of the projections in the following years given the very strong path dependency feature of the model. Thus, modelled growth decelerates but remains fairly robust. Translated into euro this implies that a market of about EUR 24 billion in 2018 becomes a market of almost EUR 35 billion by 2023. Expressed as shares of GDP (using wiiw GDP forecasts) this implies an increase of the already high average level of more than 16% in 2018 to almost 19% in 2023.

**Figure 5.7 / Growth of M3, year-on-year quarterly data and forecast, Q1 2014 – Q4 2023**




Source: wiiw Monthly Database incorporating national statistics, own calculations.

However, the above results are based on a short-run model using quarterly data for statistical reasons. While in the short run it makes sense that path dependency is very strong, we must acknowledge that in the long run convergence patterns gain strength. Thus, we want to draw on our long-run forecasts in order to blend them with our short-run forecasts for the medium term.

We hence apply the compound annual growth rates from the three scenarios of the long-run forecasting exercise (baseline, optimistic and pessimistic scenario with attached likelihoods of 60%, 10% and 30%, respectively) in order to blend the above forecasts stepwise in the medium term. By 2023 the level of unsecured household loans in euro is assumed to have reached the convergence path level calculated with the help of the long-run scenario growth rates from 2018 onwards. Thus, the task is to adjust the growth rates in between (2019-2022) to first follow the short-run model and then drop below the long-run growth rates to smoothly reach the given 2023 level.

We weight the resulting nominal growth rates for 2019, 2020, 2021 and 2022 with a share of 20%, 40%, 60% and 80% of the respective scenario growth rates and the remainder with the above short-run model-based forecast rates. In addition, we reduce in the baseline scenario case the acquired nominal growth rates for 2020 and 2022 to a half and for 2021 even to a sixth in order to reach the 2023 target. In the optimistic scenario it is only in 2021 that we reduce the growth rate to a fourth. In the pessimistic scenario we have a reduction to half in 2019, 2020 and 2022 as well as to a twelfth in 2021. **In blending the short-run forecasts with the long-run forecasts over the medium term, the implicit assumption is that short-run path-dependent growth rates start to align to the long-run convergence level by first overshooting and then undershooting the long-run convergence growth rate**. This should also be in line with the likely weakening of the business cycle and related consumer sentiment in the years to come.

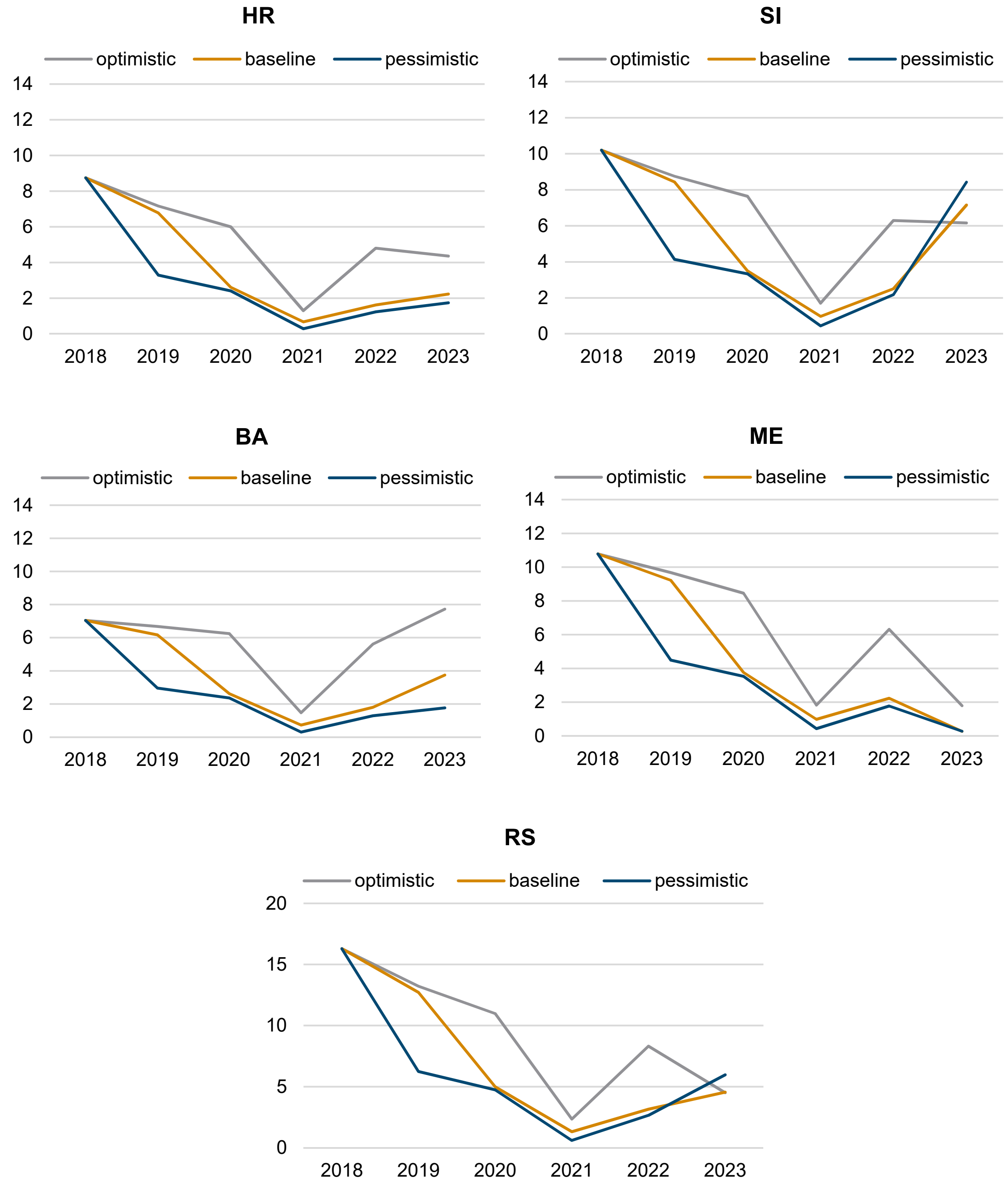
**Table 5.6 / Growth of unsecured household loans 2018 and blended forecasts 2019-2023**

| | | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|
| HR | Optimistic | 8.7 | 7.2 | 6.0 | 1.3 | 4.8 | 4.4 |
| HR | Baseline | 8.7 | 6.8 | 2.6 | 0.7 | 1.6 | 2.2 |
| HR | Pessimistic | 8.7 | 3.3 | 2.4 | 0.3 | 1.2 | 1.7 |
| | | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| SI | Optimistic | 10.2 | 8.8 | 7.6 | 1.7 | 6.3 | 6.2 |
| SI | Baseline | 10.2 | 8.4 | 3.5 | 1.0 | 2.5 | 7.2 |
| SI | Pessimistic | 10.2 | 4.1 | 3.3 | 0.4 | 2.2 | 8.4 |
| | | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| BA | Optimistic | 7.0 | 6.7 | 6.2 | 1.5 | 5.6 | 7.7 |
| BA | Baseline | 7.0 | 6.2 | 2.6 | 0.7 | 1.8 | 3.7 |
| BA | Pessimistic | 7.0 | 3.0 | 2.4 | 0.3 | 1.3 | 1.8 |
| | | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| ME | Optimistic | 10.8 | 9.7 | 8.5 | 1.8 | 6.3 | 1.8 |
| ME | Baseline | 10.8 | 9.2 | 3.8 | 1.0 | 2.2 | 0.3 |
| ME | Pessimistic | 10.8 | 4.5 | 3.5 | 0.4 | 1.8 | 0.3 |
| | | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| RS | Optimistic | 16.3 | 13.2 | 11.0 | 2.3 | 8.3 | 4.5 |
| RS | Baseline | 16.3 | 12.7 | 5.0 | 1.3 | 3.2 | 4.6 |
| RS | Pessimistic | 16.3 | 6.2 | 4.7 | 0.6 | 2.6 | 6.0 |

Note: 2018 growth rate estimate is based on an extrapolation of January to November data.
Source: wiiw Monthly Database incorporating national statistics, own calculations.

In the following (Table 5.6) we present the acquired forecasts for the three scenarios. The differences are driven by the different compound annual growth rates from the three long-run scenarios of an average of 3.8% (baseline), 5.9% (optimistic) and 2.7% (pessimistic) for the period 2017-2047 across the region.

**Figure 5.8 / Growth of unsecured household loans 2018 and blended forecasts 2019-2023**




Source: wiiw Monthly Database incorporating national statistics, own calculations.

The forecasts from Table 5.6 are replicated country by country in the panels of Figure 5.8 and scenario by scenario in Tables 5.7-5.9. It has to be noted that these forecasts do not consider either erratic changes in the legal environment of the countries in question, or unpredictable short- and medium-run economic shocks. However, given the currently robust GDP growth and the expected slow deceleration of growth in the wider region, we believe that the potential for massive economic shocks in the near future is rather limited. Nevertheless, an event similar to the global financial crisis cannot be completely excluded, given also the current developments in the global financial markets. However, it has to be noted that the countries of the region (with the exception of Croatia) have recorded higher GDP growth since 2008 than the euro area. Also there are indications that their resilience to external shocks has improved. Comparing the average current account balance 2005-2007 with 2015-2017 yields an average improvement of more than 12 percentage points in GDP.

Another caveat is that our unsecured household loans data include for reasons of comparability also loans for the purchase of cars. However, from the two countries for which this data item is available – Bosnia and Herzegovina and Croatia – we know that **car loans make up only a small proportion of total household loans** (2017: 0.1% for the former and 0.7% for the latter country).

**Table 5.7 / Unsecured household loans 2017-2018 and forecasts 2019-2023, baseline scenario**

| Growth | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|
| | HR | 3.8 | 8.7 | 6.8 | 2.6 | 0.7 | 1.6 | 2.2 |
| | SI | 9.4 | 10.2 | 8.4 | 3.5 | 1.0 | 2.5 | 7.2 |
| | BA | 7.3 | 7.0 | 6.2 | 2.6 | 0.7 | 1.8 | 3.7 |
| | ME | 15.4 | 10.8 | 9.2 | 3.8 | 1.0 | 2.2 | 0.3 |
| | RS | 20.2 | 16.3 | 12.7 | 5.0 | 1.3 | 3.2 | 4.6 |
| **In EUR** | | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| | HR | 8634 | 9389 | 10026 | 10287 | 10357 | 10525 | 10760 |
| | SI | 3759 | 4142 | 4492 | 4649 | 4694 | 4812 | 5156 |
| | BA | 3585 | 3837 | 4074 | 4180 | 4211 | 4286 | 4447 |
| | ME | 787 | 872 | 953 | 989 | 998 | 1021 | 1023 |
| | RS | 4583 | 5330 | 6008 | 6307 | 6390 | 6591 | 6891 |
| **GDP share** | | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| | HR | 17.6 | 18.4 | 18.8 | 18.4 | 17.7 | 17.3 | 16.9 |
| | SI | 8.7 | 9.1 | 9.3 | 9.1 | 8.8 | 8.6 | 8.8 |
| | BA | 22.4 | 23.0 | 23.2 | 22.6 | 21.5 | 20.6 | 20.1 |
| | ME | 18.3 | 18.8 | 19.6 | 19.3 | 18.4 | 17.8 | 17.0 |
| | RS | 11.7 | 12.8 | 13.6 | 13.4 | 12.8 | 12.4 | 12.3 |

Source: wiiw Monthly Database incorporating national statistics, own calculations.

**Table 5.8 / Unsecured household loans 2017-2018 and forecasts 2019-2023, optimistic scenario**

| Growth | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|
| | HR | 3.8 | 8.7 | 7.2 | 6.0 | 1.3 | 4.8 | 4.4 |
| | SI | 9.4 | 10.2 | 8.8 | 7.6 | 1.7 | 6.3 | 6.2 |
| | BA | 7.3 | 7.0 | 6.7 | 6.2 | 1.5 | 5.6 | 7.7 |
| | ME | 15.4 | 10.8 | 9.7 | 8.5 | 1.8 | 6.3 | 1.8 |
| | RS | 20.2 | 16.3 | 13.2 | 11.0 | 2.3 | 8.3 | 4.5 |
| **In EUR** | | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| | HR | 8634 | 9389 | 10062 | 10666 | 10805 | 11324 | 11818 |
| | SI | 3759 | 4142 | 4505 | 4849 | 4932 | 5243 | 5566 |
| | BA | 3585 | 3837 | 4093 | 4349 | 4413 | 4660 | 5021 |
| | ME | 787 | 872 | 957 | 1038 | 1057 | 1123 | 1144 |
| | RS | 4583 | 5330 | 6035 | 6697 | 6854 | 7424 | 7758 |
| **GDP share** | | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| | HR | 17.6 | 18.4 | 18.9 | 19.1 | 18.5 | 18.6 | 18.5 |
| | SI | 8.7 | 9.1 | 9.3 | 9.5 | 9.2 | 9.4 | 9.5 |
| | BA | 22.4 | 23.0 | 23.3 | 23.5 | 22.6 | 22.4 | 22.7 |
| | ME | 18.3 | 18.8 | 19.7 | 20.3 | 19.5 | 19.6 | 19.0 |
| | RS | 11.7 | 12.8 | 13.6 | 14.2 | 13.7 | 14.0 | 13.8 |

Source: wiiw Monthly Database incorporating national statistics, own calculations.

**Table 5.9 / Unsecured household loans 2017-2018 and forecasts 2019-2023, pessimistic scenario**

| Growth | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|
| | HR | 3.8 | 8.7 | 3.3 | 2.4 | 0.3 | 1.2 | 1.7 |
| | SI | 9.4 | 10.2 | 4.1 | 3.3 | 0.4 | 2.2 | 8.4 |
| | BA | 7.3 | 7.0 | 3.0 | 2.4 | 0.3 | 1.3 | 1.8 |
| | ME | 15.4 | 10.8 | 4.5 | 3.5 | 0.4 | 1.8 | 0.3 |
| | RS | 20.2 | 16.3 | 6.2 | 4.7 | 0.6 | 2.6 | 6.0 |
| **In EUR** | | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| | HR | 8634 | 9389 | 9698 | 9933 | 9961 | 10084 | 10261 |
| | SI | 3759 | 4142 | 4314 | 4458 | 4478 | 4576 | 4961 |
| | BA | 3585 | 3837 | 3951 | 4044 | 4056 | 4109 | 4181 |
| | ME | 787 | 872 | 912 | 944 | 948 | 965 | 967 |
| | RS | 4583 | 5330 | 5662 | 5930 | 5965 | 6123 | 6488 |
| **GDP share** | | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** |
| | HR | 17.6 | 18.4 | 18.2 | 17.8 | 17.1 | 16.5 | 16.1 |
| | SI | 8.7 | 9.1 | 8.9 | 8.7 | 8.4 | 8.2 | 8.5 |
| | BA | 22.4 | 23.0 | 22.5 | 21.9 | 20.7 | 19.8 | 18.9 |
| | ME | 18.3 | 18.8 | 18.7 | 18.5 | 17.5 | 16.9 | 16.1 |
| | RS | 11.7 | 12.8 | 12.8 | 12.6 | 11.9 | 11.5 | 11.6 |

Source: wiiw Monthly Database incorporating national statistics, own calculations.

Finally, we would like to mention a number of impact factors that might influence the forecasts. Upward pressure could come from the following factor: As the region's money supply is to a large extent dependent on the euro area's money supply (via the exchange rate as well as the foreign-owned banking sector) a further deterioration of the economic prospects for Italy and related deflationary pressures might induce a much slower tightening of monetary policy by the ECB than originally expected. A **continuation of the ECB's quantitative easing could (at least in the short to medium run) cause also a higher supply of unsecured loans in the countries investigated** in this report.

High house ownership rates in the region make it less attractive to take out mortgage loans. Thus, there is more space for consumer loans. Continued **outward migration might thus have mixed effects on the loans structure and dynamics**. While it reduces the potential number of borrowers, it also makes it easier for the remaining population to draw on existing house ownership and hence there is less need for mortgage loans and consequently more space for consumer loans. In addition, further increases in remittances might reduce the need for loans in general. However, after a continued emigration stay, family ties begin to weaken and remittances will be reduced. In parallel, consumption patterns of family members abroad might create needs for catch-up consumption, which in turn could counteract the former effect on loans. While demographic change and ageing might be challenging for the loans market, current experience from Central and Eastern Europe shows that the countries can turn quite quickly from net emigration countries into net immigration countries with the respective opposite effects.

**The effects of other relevant impact factors such as digitalisation or the evolution of the shadow economy are more difficult to predict.** While the former might lead to strong changes in market shares among competitors, the overall impact on the total volume of loans might be limited. With regard to the shadow economy and related cash payments that are channelled outside the banking system, it is fair to assume that these practices are rather endogenous to low living standards and wage levels. Further economic development will make it less necessary and riskier to not declare parts of the income, which in turn might positively affect the ability of people to take out loans.

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# Appendix

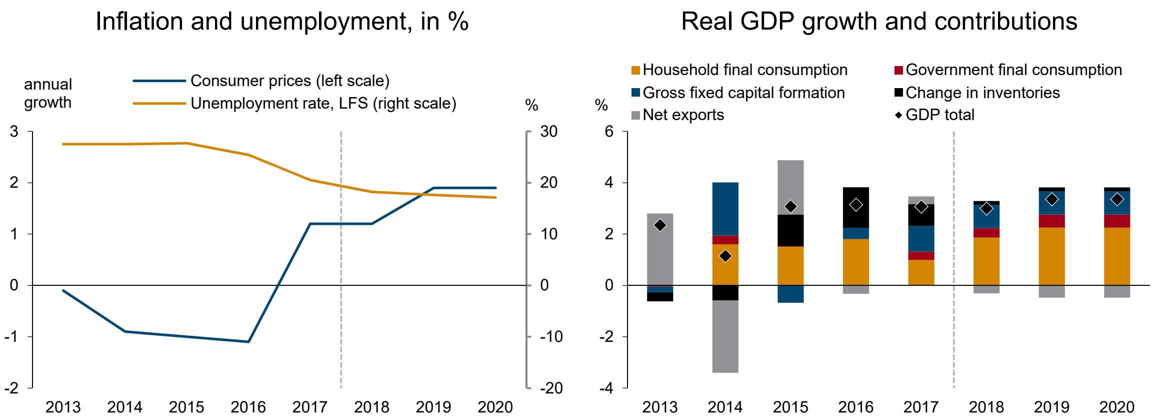
The Appendix contains the relevant country reports from the wiiw Autumn 2018 Forecast Report titled ‘Strong Growth Amid Increased Negative Risks’ as well as the respective economic indicators and banking sector overview tables.


# BOSNIA AND HERZEGOVINA: Elevated political risk unlikely to derail growth

RICHARD GRIEVESON

**Political risk is unusually high following the recent election, and in particular the potential for a constitutional crisis in the Federation. This will have an impact on reforms and policy-making, but shouldn't impact growth too much. We think that growth will remain in the range of 3-3.5% during the forecast period, with external factors such as remittances, exports and tourism likely to remain important. Inflation will stay low, while the labour market will improve slowly.**

**Figure A1 / Bosnia and Herzegovina: Main macroeconomic indicators**




Source: wiiw Annual Database incorporating national and Eurostat statistics, own calculation. Forecasts by wiiw.

**The outcome of the election on 7 October was inconclusive, and as such is unlikely to ease the political crisis in Bosnia and Herzegovina.** Voters went to the polls to elect a new parliament, assemblies in both entities, ten cantonal assemblies in the Federation, and the three-member national presidency. In total 518 positions were up for election. Milorad Dodik, the nationalist president of the Republika Srpska, looks to have won the Serb seat in the tripartite national presidency. He is likely to use his position to continue to push for the separation of Republika Srpska from the rest of Bosnia and Herzegovina. Šefik Džaferović won the Bosniak seat, and Željko Komšić the Croat seat.

**Political noise around elections is nothing new in Bosnia and Herzegovina, but a particular issue this time is whether the results in the Federation will be accepted, and this could prolong political stasis for some time.** As a result, we think that political risks in the country are even higher than is normally the case. Currently there is no legal basis for the election of the Federation's House of Peoples, meaning that a constitutional crisis is possible. Whatever happens, this will hamper efforts to form a new government at both the Federation and national level. In addition to this constitutional uncertainty, there were allegations of fraud and manipulation in the election. Heightened political risk in the region, related to discussions over a possible land swap between Serbia and Kosovo, could also have big implications for Bosnia and Herzegovina.

**Broad financial and macroeconomic stability looks relatively secure for now.** The major rating agencies have not changed their assessments of Bosnia and Herzegovina, indicating that political noise is already baked into foreign investor expectations (despite some fiscal loosening ahead of the election). Most of the funding for the country's large current account deficit is concessional and long-term in nature, further reducing stability risks. The IMF postponed disbursements under the Extended Fund Facility (EFF) programme earlier this year, reflecting pre-election reform stasis. It is likely that it will take some time to restart the EFF programme, but this is not necessarily a big problem, at least from the perspective of fiscal sustainability. The bigger issue around the EFF is that it is an important stability and reform anchor, but we expect it to eventually resume.

**The economy is doing reasonably well, and this should continue into 2019, with growth set to remain in the 3-3.5% range during the forecast period.** Private consumption will be the main driver, helped by rising wages and its particularly large share in overall GDP. High-frequency indicators suggest good underlying momentum, with industrial production, retail sales and construction output all growing at healthy rates. Meanwhile inflation remains low, and this is likely to remain the case (in line with eurozone trends), providing further support for real income growth.

**External factors have been particularly supportive in driving growth in recent years, which has been important given generally subdued trends in domestic consumption and investment.** As a result of this, the economy has become more open, with exports of goods and services now accounting for around 40% of GDP, from 25% in 2009. Latest data indicate that this is continuing: nominal euro-denominated merchandise exports increased by an average 13% year on year in the 12 months to August, with total tourist nights up 14.2% over the same period. Remittances have also risen strongly.

**The importance of external factors for driving growth insulates the economy somewhat from domestic political noise.** However, it also makes the country more exposed to an external slowdown than would otherwise have been the case. Momentum has already slowed in the EU, Bosnia and Herzegovina's main export market, and the threat of a global trade war could exacerbate this. Notably, tourism sources are becoming more diversified. The latest data show that, while Croatia, Serbia, Turkey and Italy remain the main sources, inflows from countries such as China and Saudi Arabia are also growing quickly.

**Although the economy has become much more open, the export structure remains quite dominated by low value goods.** So far, Bosnia and Herzegovina has had limited success in attempts to move up the value chain. Political factors may be dissuading bigger investors from committing long-term capital in the same way as has been seen in some regional peers. The strong performance of the external sector (trade, remittances and tourism) has kept the current account deficit roughly steady over the past year (measured as the four quarters to Q2 2018 versus the same period a year earlier). A wider goods deficit (owing to the much bigger absolute size of imports versus exports) was largely offset by stronger surpluses on the services and secondary income accounts, helped by tourism and remittances, respectively.

**Decent growth trends have done little to alleviate the major structural issues in the labour market.** The unemployment rate has reached a historically low level, but still stood at 36% in July (registration data basis). Female unemployment on the same basis was 42.3%. However, while Bosnia and Herzegovina is not suffering labour shortages in the same way as many other CESEE countries, skills shortages have been reported in certain sectors. The weakness of the labour market is likely to be one factor contributing to continued pessimism about the future among Bosnians. The 2018 Balkan Barometer, produced by the Regional Cooperation Council, again showed Bosnians as the region's least hopeful citizens about their economic future.

**Conditions in the banking sector should continue to improve, with decent economic growth helping to drive a further improvement in asset quality.** The ratio of non-performing loans (NPLs) to total loans fell to 9.3% in June 2018, its lowest level since 2010. Meanwhile credit growth is continuing to rise. Loans to the non-private financial sector rose by around 8% in the year to August 2018.

**In summary our forecasts are largely unchanged from our previous forecast.** We still think that a growth rate of around 3.5% during the medium term is achievable, with external factors more important than during the historical period, and very little inflation (in line with eurozone trends). The main risk to our forecast comes from political factors, with risks more elevated than usual (owing to both domestic and regional developments).

## Table A1 / Bosnia and Herzegovina: Selected economic indicators

| | 2014 | 2015 | 2016 | 2017 1) | 2017 | 2018 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | January-June | | | Forecast | |
| Population, th pers., mid-year | 3,526 | 3,518 | 3,511 | 3,505 | . | . | 3,506 | 3,503 | 3,499 |
| Gross domestic product, BAM mn, nom. 2) | 27,359 | 28,586 | 29,900 | 31,332 | 14,892 | 15,600 | 32,700 | 34,400 | 36,200 |
| annual change in % (real) | 1.1 | 3.1 | 3.1 | 3.1 | 3.4 | 2.7 | 3.0 | 3.4 | 3.4 |
| GDP/capita (EUR at PPP) 2) | 8,300 | 8,700 | 9,000 | 9,300 | . | . | . | . | . |
| Consumption of households, BAM mn, nom. 2) | 22,830 | 23,157 | 23,653 | 24,347 | . | . | . | . | . |
| annual change in % (real) | 1.9 | 1.8 | 2.2 | 1.2 | . | . | 2.4 | 2.9 | 2.9 |
| Gross fixed capital form., BAM mn, nom. 2) | 5,330 | 5,097 | 5,189 | 5,653 | . | . | . | . | . |
| annual change in % (real) | 11.5 | -3.5 | 2.5 | 5.8 | . | . | 5.0 | 5.0 | 5.0 |
| Gross industrial production | | | | | | | | | |
| annual change in % (real) | 0.2 | 3.1 | 4.4 | 3.2 | 2.2 | 3.1 | 3.3 | 3.0 | 2.8 |
| Gross agricultural production 3) | | | | | | | | | |
| annual change in % (real) | -16.8 | 12.6 | 12.0 | 4.1 | . | . | . | . | . |
| Construction output total | | | | | | | | | |
| annual change in % (real) | 6.3 | 1.7 | -2.2 | -1.3 | -2.3 | 1.2 | . | . | . |
| Employed persons, LFS, th, April | 812.0 | 822.0 | 801.0 | 815.7 | 815.7 | 822.4 | 830 | 840 | 850 |
| annual change in % | -1.2 | 1.2 | -2.6 | 1.8 | 1.8 | 0.8 | 1.8 | 1.5 | 1.3 |
| Unemployed persons, LFS, th, April | 308.0 | 315.0 | 273.0 | 210.7 | 210.7 | 185.5 | 185 | 180 | 175 |
| Unemployment rate, LFS, in %, April | 27.5 | 27.7 | 25.4 | 20.5 | 20.5 | 18.4 | 18.2 | 17.6 | 17.1 |
| Reg. unemployment rate, in %, eop | 43.6 | 42.9 | 40.9 | 38.7 | 39.3 | 35.7 | . | . | . |
| Average monthly gross wages, BAM | 1,290 | 1,289 | 1,301 | 1,321 | 1,316 | 1,348 | 1,350 | 1,390 | 1,430 |
| annual change in % (real, gross) | 0.8 | 1.0 | 2.0 | 0.4 | 0.5 | 1.3 | 1.1 | 0.9 | 0.8 |
| Average monthly net wages, BAM | 831 | 830 | 838 | 851 | 848 | 867 | 870 | 900 | 930 |
| annual change in % (real, net) | 1.3 | 1.0 | 2.0 | 0.4 | 0.5 | 1.2 | 1.0 | 1.0 | 0.9 |
| Consumer prices, % p.a. | -0.9 | -1.0 | -1.1 | 1.2 | 1.1 | 1.1 | 1.2 | 1.9 | 1.9 |
| Producer prices in industry, % p.a. | -0.5 | 0.6 | -2.1 | 3.0 | 2.6 | 3.6 | 1.8 | 2.1 | 2.1 |
| General governm.budget, nat.def., % of GDP | | | | | | | | | |
| Revenues | 43.7 | 43.2 | 42.7 | 43.0 | . | . | 42.7 | 42.9 | 43.2 |
| Expenditures | 45.8 | 42.5 | 41.5 | 40.4 | . | . | 41.7 | 42.5 | 42.9 |
| Deficit (-) / surplus (+) | -2.0 | 0.7 | 1.2 | 2.6 | . | . | 1.0 | 0.4 | 0.3 |
| General gov.gross debt, nat.def., % of GDP | 41.6 | 41.9 | 40.5 | 36.2 | . | . | 39.9 | 39.6 | 39.7 |
| Stock of loans of non-fin.private sector, % p.a. | 1.7 | 2.0 | 3.5 | 7.3 | 6.2 | 7.0 | . | . | . |
| Non-performing loans (NPLs), in %, eop | 14.2 | 13.7 | 11.8 | 10.0 | 11.1 | 9.3 | . | . | . |
| Central bank policy rate, % p.a., eop 4) | . | . | . | . | . | . | . | . | . |
| Current account, EUR mn 5) | -1,025 | -774 | -711 | -754 | -404 | -392 | -777 | -809 | -840 |
| Current account, % of GDP | -7.3 | -5.3 | -4.7 | -4.7 | -5.3 | -4.9 | -4.6 | -4.6 | -4.5 |
| Exports of goods, BOP, EUR mn 5) | 3,501 | 3,678 | 3,936 | 4,775 | 2,221 | 2,496 | 5,040 | 5,350 | 5,680 |
| annual change in % | 3.0 | 5.1 | 7.0 | 21.3 | 20.5 | 12.4 | 5.5 | 6.1 | 6.1 |
| Imports of goods, BOP, EUR mn 5) | 7,527 | 7,355 | 7,546 | 8,551 | 4,052 | 4,332 | 8,960 | 9,430 | 9,920 |
| annual change in % | 7.1 | -2.3 | 2.6 | 13.3 | 13.2 | 6.9 | 4.8 | 5.2 | 5.2 |
| Exports of services, BOP, EUR mn 5) | 1,252 | 1,419 | 1,514 | 1,654 | 736 | 771 | 1,750 | 1,850 | 1,960 |
| annual change in % | 2.4 | 13.3 | 6.7 | 9.2 | 9.8 | 4.7 | 6.1 | 5.9 | 5.9 |
| Imports of services, BOP, EUR mn 5) | 395 | 440 | 450 | 500 | 196 | 223 | 530 | 560 | 600 |
| annual change in % | 0.8 | 11.2 | 2.3 | 11.0 | 7.6 | 13.7 | 6.0 | 6.0 | 7.0 |
| FDI liabilities, EUR mn 5) | 408 | 345 | 256 | 413 | 229 | 231 | 420 | . | . |
| FDI assets, EUR mn 5) | 7 | 85 | -1 | 83 | 33 | 13 | 34 | . | . |
| Gross reserves of NB excl. gold, EUR mn 5) | 3,908 | 4,307 | 4,768 | 5,293 | 4,735 | 5,572 | . | . | . |
| Gross external debt, EUR mn 6) | 7,470 | 7,936 | 8,378 | 8,683 | . | . | 9,080 | 9,620 | 10,199 |
| Gross external debt, % of GDP 6) | 53.4 | 54.3 | 54.8 | 54.2 | . | . | 54.3 | 54.7 | 55.1 |
| Average exchange rate BAM/EUR | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 |

1) Preliminary. - 2) According to ESA'10 (FISIM not yet reallocated to industries). - 3) Based on UN-FAO data, wiiw estimate in 2017. - 4) Bosnia and Herzegovina has a currency board. There is no policy rate and even no money market rate available. - 5) Converted from national currency. - 6) Based on IMF estimates.

Source: wiiw Databases incorporating national statistics and IMF. Forecasts by wiiw.

## Table A2 / Bosnia and Herzegovina: Banking sector overview

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| **Size and growth** | | | | | | | |
| Number of banks | . | . | . | . | . | . | 23 |
| Total assets of banks, EUR mn | 12131 | 12340 | 12925 | 13481 | 13956 | 14551 | 15692 |
| Total assets of banks, % change yoy (EUR based) | 3.9 | 1.7 | 4.7 | 4.3 | 3.5 | 4.3 | 7.8 |
| Total assets of banks, NCU mn | 23726 | 24134 | 25280 | 26367 | 27296 | 28459 | 30691 |
| Total assets of banks, % change yoy (NCU based) | 3.9 | 1.7 | 4.7 | 4.3 | 3.5 | 4.3 | 7.8 |
| Banking sector concentration, share of assets of five major banks in % (acc. to 2017 ranking) | . | . | . | . | 52.8 | 54.2 | 53.6 |
| **Liquidity** | | | | | | | |
| Loans-to-deposit ratio (LTD) for non-financial private sector | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 |
| **Loans development** | | | | | | | |
| Stock of loans of non-fin. private sector, EUR mn | 7251 | 7474 | 7688 | 7817 | 7976 | 8258 | 8863 |
| Stock of loans of non-fin. corporations, EUR mn | 3823 | 4000 | 4076 | 4019 | 3996 | 4129 | 4459 |
| Stock of loans of households, EUR mn | 3428 | 3474 | 3612 | 3798 | 3980 | 4129 | 4404 |
| Stock of loans of non-secured retail loans, EUR mn | 2608 | 2676 | 2841 | 3029 | 3170 | 3341 | 3585 |
| Stock of loans of non-fin. private sector, NCU mn | 14182 | 14619 | 15037 | 15290 | 15599 | 16151 | 17335 |
| Stock of loans of non-fin. corporations, NCU mn | 7477 | 7824 | 7972 | 7861 | 7815 | 8075 | 8721 |
| Stock of loans of households, NCU mn | 6705 | 6795 | 7065 | 7428 | 7784 | 8076 | 8614 |
| Stock of loans of non-secured retail loans, NCU mn | 5101 | 5234 | 5557 | 5925 | 6201 | 6535 | 7011 |
| Stock of loans of non-fin. private sector, % of GDP | 54.1 | 55.7 | 56.2 | 55.9 | 54.6 | 54.0 | 55.3 |
| Stock of loans of non-fin.corporations, % of GDP | 28.5 | 29.8 | 29.8 | 28.7 | 27.3 | 27.0 | 27.8 |
| Stock of loans of households, % of GDP | 25.6 | 25.9 | 26.4 | 27.2 | 27.2 | 27.0 | 27.5 |
| Stock of loans of non-secured retail loans, % of GDP | 19.4 | 20.0 | 20.8 | 21.7 | 21.7 | 21.9 | 22.4 |
| Stock of loans of non-fin. private sector, growth rate in % (NCU based) | 4.3 | 3.1 | 2.9 | 1.7 | 2.0 | 3.5 | 7.3 |
| Stock of loans of non-fin.corporations, growth rate in % (NCU based) | 2.8 | 4.6 | 1.9 | -1.4 | -0.6 | 3.3 | 8.0 |
| Stock of loans of households, growth rate in % (NCU based) | 6.0 | 1.3 | 4.0 | 5.1 | 4.8 | 3.8 | 6.7 |
| Stock of loans of non-secured retail loans, growth rate in % (NCU based) | 9.9 | 2.6 | 6.2 | 6.6 | 4.7 | 5.4 | 7.3 |
| Stock of loans of non-fin. private sector, growth rate in % (EUR based) | 4.3 | 3.1 | 2.9 | 1.7 | 2.0 | 3.5 | 7.3 |
| Stock of loans of non-fin. corporations, growth rate in % (EUR based) | 2.8 | 4.6 | 1.9 | -1.4 | -0.6 | 3.3 | 8.0 |
| Stock of loans of households, growth rate in % (EUR based) | 6.0 | 1.3 | 4.0 | 5.1 | 4.8 | 3.8 | 6.7 |
| Stock of loans of of non-secured retail loans, growth rate in % (EUR based) | 9.9 | 2.6 | 6.2 | 6.6 | 4.7 | 5.4 | 7.3 |
| **Deposits development** | | | | | | | |
| Stock of deposits of non-fin. private sector, EUR mn | 5356 | 5590 | 6085 | 6476 | 6984 | 7500 | 8173 |
| Stock of deposits of non-fin. private sector, NCU mn | 10475 | 10933 | 11902 | 12666 | 13659 | 14669 | 15986 |
| Stock of deposits of non-fin. private sector, % of GDP | 39.9 | 41.7 | 44.4 | 46.3 | 47.8 | 49.1 | 51.0 |
| Stock of deposits of non-fin. private sector, growth rate in % | 4.9 | 4.4 | 8.9 | 6.4 | 7.8 | 7.4 | 9.0 |
| **Profitability** | | | | | | | |
| Net interest income, EUR mn | . | . | . | . | . | 804 | 830 |
| Net interest margin, % | . | . | . | . | . | . | . |
| ROE, in % | 3.4 | 5.8 | 6.2 | 8.4 | 8.6 | 4.2 | 10.2 |
| ROA, in % | 0.7 | 0.7 | 0.9 | 0.8 | 0.4 | 0.1 | 1.5 |
| **Capitalisation** | | | | | | | |
| CAR, in % | 10.7 | 11.8 | 13.6 | 14.2 | 14.4 | 14.4 | 14.0 |
| **Asset quality** | | | | | | | |
| Non-performing loans (NPLs), in %, eop | 11.8 | 13.5 | 15.1 | 14.2 | 13.7 | 11.8 | 10.0 |
| Non-performing loans (NPLs) of non-fin. corporations, in %, eop | . | . | . | . | . | . | . |
| Non-performing loans (NPLs) of households, in %, eop | . | . | . | . | . | . | . |
| **Interest rates development** | | | | | | | |
| Money market rate - 3-month | 1.4 | 0.6 | 0.2 | 0.2 | 0.0 | -0.3 | -0.3 |
| Central bank policy rate, % p.a., eop | . | . | . | . | . | . | . |
| **Exchange rate** | | | | | | | |
| Exchange rate, NCU/EUR eop | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 |

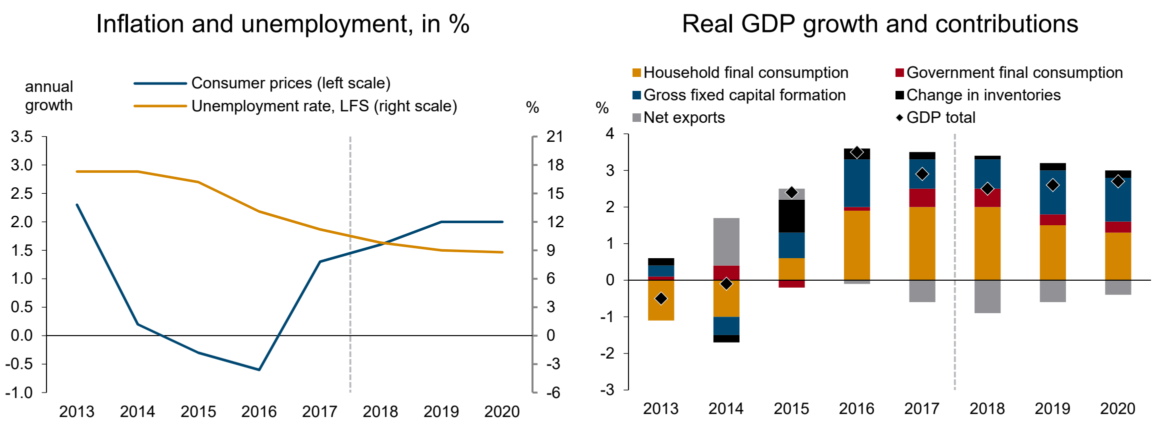
Source: National bank statistics.


# CROATIA: Low absorption of EU funds holding back growth

HERMINE VIDOVIC

Croatia's economy will continue its path of moderate growth, with annual GDP growth of slightly below 3% in the period 2018-2020; increasing the absorption of EU funds will be an important precondition for achieving this growth rate. Demographic changes, coupled with continued emigration of young and educated people and rising labour shortages in crucial sectors, will become a major challenge in the future.

**Figure A2 / Croatia: Main macroeconomic indicators**




Source: wiiw Annual Database incorporating national and Eurostat statistics, own calculation. Forecasts by wiiw.

**Croatia's real GDP grew by 2.7% year on year in the first half of 2018 on the back of rising domestic demand.** Private consumption growth was mainly due to rising disposable income, i.e. growing real wages and pensions as well as increasing remittances from abroad. Gross fixed capital formation grew only moderately, indicating still low absorption of EU funds. Hence, the output growth in construction was only modest, at 2.2%. The contribution of net exports to GDP growth was negative due to rising imports. Industrial production growth was almost stagnant (0.5%) during the first six months of 2018, with most pronounced output declines in the production of fabricated metal products and of chemicals and chemical products. In shipbuilding, which has been on a downward trend for years, production shrank by one third compared to the first half of 2017. Difficulties in the shipbuilding sector became evident at the beginning of 2018 when the Croatian government gave a guarantee for a loan (EUR 96 million) to help the Uljanik shipyard stay afloat. The crisis became even more acute when the workers of the shipyard went on strike in summer because of delayed wage payments. The latter could be secured only through a government guarantee to a state-owned bank, so that the company could pay out the salaries. But the future of the company remains uncertain. So far the restructuring plan submitted by Uljanik's management at the beginning of the year has not been approved by the European Commission. The restructuring of the shipyards was a key condition of Croatia's EU accession in 2013.

**The labour market situation has continued to improve.** According to Pension Insurance data employment increased by 1.8% during the first half of the year, while based on the Labour Force Survey employment went up by 3.4% and the unemployment rate fell to 9%. Despite these improvements the unemployment rate is still 2pp above the EU average and youth unemployment stand at about 23%, representing the third highest rate in Europe, after Spain and Cyprus. The reduction in unemployment is only partly a result of rising domestic employment. Despite improving economic conditions, outward migration continues. In Germany alone, the number of Croatian workers increased from 75,800 in July 2013, when Croatia joined the EU, to 178,000 in September 2018. The stock of Croatian employees in Austria, the second most important destination country for Croatian migrants, rose in the same period from 19,000 to 32,500 persons. Despite still high unemployment Croatia has experienced labour shortages, particularly in the tourism and construction sectors, which are mainly covered by foreign labour, especially from Bosnia and Herzegovina. In 2018 over 30,000 work permits to foreign nationals were issued. Real net wages continued to increase and were up by 3% during the first half of 2018.

**External trade in goods performed disappointingly** with exports up by a mere 3% in euro terms during the first half of the year, reflecting the poor industrial performance. The trade deficit was about EUR 370 million higher than in the same 2017 period, while the surplus in the services trade remained unchanged at EUR 2.7 billion. Earnings from tourism reached again a record high in 2018, still benefiting from political uncertainties particularly in Northern Africa, one of Croatia's main competitors. Hence, the current account will remain in surplus in 2018, at an estimated 2.7% of GDP. The inflow of FDI was by EUR 200 million higher than in 2017, at close to EUR 900 million.

**After reporting the first general government surplus in 2017 since gaining independence, fiscal consolidation continues in 2018**. The general government budget closed again with a surplus in the first half of 2018 mostly on account of rising tax revenues (VAT in particular) as well as lower expenditures, e.g. on subsidies and interest payments. For the whole year the government expects a 0.4% surplus-to-GDP ratio. This will also translate into a further reduction in public debt to about 74% of GDP. Only recently the government has proposed a package of tax changes to be implemented at the beginning of 2019. The proposal includes the lowering of the VAT rate from 25% to 13% for fresh meat, fish, fruits and eggs, reducing the income tax rate from 36% to 24% for monthly wages up to HRK 30,000 as well abolishing contributions for work safety, while increasing the contributions for health insurance. The overall VAT rate is supposed to be reduced from 25% to 24% in 2020.

**The absorption of EU funds is still very low**, due to limited administrative capacities and strategic planning as well as insufficient information of potential recipients. Although this circumstance has been known for years little has been done solving this problem so far. Only recently the Minister of Regional Development, Gabrijela Žalac, emphasised (again) the need for strengthening administrative capacities on the ground, in order to increase the absorption of EU funds. A more effective and efficient use of these funds would be the key to supporting investments and stimulating GDP growth. Up to now contracts worth 54% within the current financial perspective worth EUR 10.7 billion were signed – particularly for projects in Slavonia and the Pelješac Bridge, an important prestige project.

**In September S&P affirmed Croatia's long- and short-term local and foreign currency rating at BB+ and revised the outlook from stable to positive.** The main reasons behind this decision are expectations of further fiscal consolidation and the continuation of economic growth as well as a reduction of the risks related to Agrokor after having reached a settlement deal with a large majority of the company's creditors in July.

**Assuming that absorption of EU funds will accelerate, GDP growth may come close to 3% p.a. in the forecasting period.** Household consumption should benefit from a further gradual improvement in the labour market, while a more pronounced increase in investments should be spurred by better absorption of EU funds. The strengthening of domestic demand will lead to rising imports and consequently result in higher trade deficits. The services trade surplus, by contrast, may remain at high levels due to high earnings from tourism. Thus, the current account will remain in positive territory, but is expected to decline along with higher trade deficits. Assuming further improvement in the general government budget, public debt is expected to continue its downward path in the coming two years, but downside risks are related to guarantees provided to the Uljanik shipyard and to spending on the health sector. Demographic changes coupled with ageing of the population, continued emigration of young educated people and rising labour shortages in crucial sectors such as tourism and construction but also IT will become the major future challenges.

## Table A3 / Croatia: Selected economic indicators

| | 2014 | 2015 | 2016 | 2017 1) | 2017 January-June | 2018 January-June | 2018 Forecast | 2019 Forecast | 2020 Forecast |
|---|---|---|---|---|---|---|---|---|---|
| Population, th pers., average | 4,236 | 4,208 | 4,172 | 4,150 | 4,174 | 4,125 | 4,100 | 4,050 | 4,000 |
| Gross domestic product, HRK bn, nom. | 331.6 | 339.6 | 351.3 | 365.6 | 172.4 | 180.2 | 380.9 | 398.5 | 417.3 |
| annual change in % (real) | -0.1 | 2.4 | 3.5 | 2.9 | 3.0 | 2.7 | 2.5 | 2.6 | 2.7 |
| GDP/capita (EUR at PPP) | 16,300 | 17,200 | 17,600 | 18,400 | . | . | . | . | . |
| Consumption of households, HRK bn, nom. | 191.4 | 192.3 | 196.4 | 205.5 | 100.9 | 105.8 | . | . | . |
| annual change in % (real) | -1.6 | 1.0 | 3.4 | 3.6 | 3.6 | 3.7 | 3.5 | 2.6 | 2.4 |
| Gross fixed capital form., HRK bn, nom. | 63.8 | 66.4 | 70.4 | 73.3 | 36.3 | 37.7 | . | . | . |
| annual change in % (real) | -2.8 | 3.8 | 6.5 | 3.8 | 4.8 | 3.3 | 4.0 | 6.0 | 6.0 |
| Gross industrial production 2) | | | | | | | | | |
| annual change in % (real) | 1.2 | 2.7 | 5.3 | 1.4 | 1.7 | 0.5 | 1.0 | 2.5 | 2.5 |
| Gross agricultural production | | | | | | | | | |
| annual change in % (real) | -6.9 | 2.9 | 6.9 | -6.0 | . | . | . | . | . |
| Construction output 2) | | | | | | | | | |
| annual change in % (real) | -6.9 | -0.5 | 3.3 | 1.7 | 2.2 | 3.0 | . | . | . |
| Employed persons, LFS, th, average | 1,566 | 1,585 | 1,590 | 1,625 | 1,589 | 1,644 | 1,650 | 1,670 | 1,690 |
| annual change in % | 2.7 | 1.3 | 0.3 | 2.2 | 0.8 | 3.4 | 1.5 | 1.0 | 1.0 |
| Unemployed persons, LFS, th, average | 327 | 306 | 240 | 205 | 227 | 161 | 180 | 170 | 160 |
| Unemployment rate, LFS, in %, average | 17.3 | 16.2 | 13.1 | 11.2 | 12.6 | 9.0 | 9.8 | 9.0 | 8.8 |
| Reg. unemployment rate, in %, eop | 19.4 | 17.6 | 14.7 | 12.0 | 10.5 | 8.8 | . | . | . |
| Average monthly gross wages, HRK 3) | 7,953 | 8,055 | 7,752 | 8,055 | 8,014 | 8,441 | 8,470 | 8,880 | 9,300 |
| annual change in % (real, gross) | 0.4 | 1.8 | 3.0 | 2.8 | 2.3 | 3.8 | 3.5 | 2.8 | 2.8 |
| Average monthly net wages, HRK 3) | 5,533 | 5,711 | 5,685 | 5,985 | 5,959 | 6,236 | 6,260 | 6,580 | 6,900 |
| annual change in % (real, net) | 0.5 | 3.7 | 2.7 | 4.1 | 3.9 | 3.2 | 3.0 | 3.0 | 3.0 |
| Consumer prices (HICP), % p.a. | 0.2 | -0.3 | -0.6 | 1.3 | 1.1 | 1.5 | 1.6 | 2.0 | 2.0 |
| Producer prices in industry, % p.a. | -2.7 | -3.8 | -4.3 | 2.0 | 1.9 | 1.8 | 2.0 | 2.0 | 2.0 |
| General governm.budget, EU-def., % of GDP | | | | | | | | | |
| Revenues | 42.9 | 44.8 | 46.0 | 45.7 | . | . | 44.9 | 44.0 | 43.9 |
| Expenditures | 48.1 | 48.3 | 46.9 | 45.0 | . | . | 44.5 | 44.0 | 43.4 |
| Net lending (+) / net borrowing (-) | -5.1 | -3.4 | -0.9 | 0.8 | . | . | 0.4 | 0.0 | 0.5 |
| General gov.gross debt, EU def., % of GDP | 84.0 | 83.7 | 80.2 | 77.5 | . | . | 74.0 | 72.0 | 70.0 |
| Stock of loans of non-fin.private sector, % p.a. | -2.0 | -3.1 | -4.3 | -0.1 | -1.3 | 2.2 | . | . | . |
| Non-performing loans (NPLs), in %, eop | 17.1 | 16.7 | 13.8 | 11.4 | 13.2 | 11.2 | . | . | . |
| Central bank policy rate, % p.a., eop 4) | 7.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Current account, EUR mn | 858 | 2,018 | 1,206 | 1,963 | -1,357 | -1,791 | 1,400 | 800 | 700 |
| Current account, % of GDP | 2.0 | 4.5 | 2.6 | 4.0 | -5.9 | -7.4 | 2.7 | 1.5 | 1.2 |
| Exports of goods, BOP, EUR mn | 9,440 | 10,193 | 10,511 | 11,713 | 5,651 | 5,818 | 12,100 | 12,600 | 13,400 |
| annual change in % | 5.8 | 8.0 | 3.1 | 11.4 | 13.8 | 3.0 | 3.0 | 4.5 | 6.0 |
| Imports of goods, BOP, EUR mn | 15,952 | 17,168 | 17,896 | 19,966 | 10,000 | 10,539 | 21,300 | 23,000 | 24,700 |
| annual change in % | 2.8 | 7.6 | 4.2 | 11.6 | 13.3 | 5.4 | 6.5 | 8.0 | 7.5 |
| Exports of services, BOP, EUR mn | 10,237 | 11,280 | 12,273 | 13,411 | 4,568 | 4,849 | 14,100 | 15,100 | 16,200 |
| annual change in % | 4.0 | 10.2 | 8.8 | 9.3 | 12.8 | 6.2 | 5.0 | 7.0 | 7.0 |
| Imports of services, BOP, EUR mn | 2,900 | 3,274 | 3,561 | 4,093 | 1,828 | 2,104 | 4,600 | 5,000 | 5,400 |
| annual change in % | -6.1 | 12.9 | 8.8 | 14.9 | 14.5 | 15.1 | 14.0 | 8.0 | 7.0 |
| FDI liabilities, EUR mn | 2,298 | 191 | 1,757 | 1,762 | 677 | 868 | 1,300 | . | . |
| FDI assets, EUR mn | 1,608 | -43 | -177 | 582 | 282 | 206 | 300 | . | . |
| Gross reserves of NB excl. gold, EUR mn | 12,688 | 13,707 | 13,514 | 15,706 | 14,028 | 16,694 | . | . | . |
| Gross external debt, EUR mn | 46,416 | 45,384 | 41,668 | 40,069 | 40,260 | 40,142 | 40,400 | 40,400 | 41,200 |
| Gross external debt, % of GDP | 106.9 | 101.7 | 89.3 | 81.8 | 82.2 | 78.0 | 78.5 | 75.0 | 73.0 |
| Average exchange rate HRK/EUR | 7.6344 | 7.6137 | 7.5333 | 7.4637 | 7.4488 | 7.4181 | 7.4 | 7.4 | 7.4 |

1) Preliminary. - 2) Enterprises with 20 and more employees. - 3) From 2016 data are based on tax records (survey JOPPD); prior to that data are based on a monthly survey covering 70% of persons in employment. - 4) Discount rate of NB.

Source: wiiw Databases incorporating national statistics. Forecasts by wiiw.

## Table A4 / Croatia: Banking sector overview

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| **Size and growth** | | | | | | | |
| Number of banks | 32 | 31 | 30 | 28 | 28 | 26 | 25 |
| Total assets of banks, EUR mn | 53992 | 52917 | 52169 | 51611 | 51505 | 51420 | 52599 |
| Total assets of banks, % change yoy (EUR based) | 1.9 | -2.0 | -1.4 | -1.1 | -0.2 | -0.2 | 2.3 |
| Total assets of banks, NCU mn | 406938 | 399920 | 397864 | 395238 | 393394 | 388722 | 391338 |
| Total assets of banks, % change yoy (NCU based) | 4.1 | -1.7 | -0.5 | -0.7 | -0.5 | -1.2 | 0.7 |
| Total assets of banking sector (incl. housing savings banks), EUR mn | 55033 | 53904 | 53160 | 52626 | 52522 | 52454 | 53663 |
| Total assets of banking sector (incl. housing savings banks), % change yoy (EUR based) | 2.1 | -2.1 | -1.4 | -1.0 | -0.2 | -0.1 | 2.3 |
| Total assets of banking sector (incl. housing savings banks), NCU mn | 414784 | 407376 | 405428 | 403013 | 401166 | 396533 | 399253 |
| Total assets of banking sector (incl. housing savings banks), % change yoy (NCU based) | 4.2 | -1.8 | -0.5 | -0.6 | -0.5 | -1.2 | 0.7 |
| Banking sector concentration, share of assets of five major banks in % (acc. to 2017 ranking) | . | . | . | 72.4 | 73.0 | 73.7 | 73.5 |
| **Liquidity** | | | | | | | |
| Loans-to-deposit ratio (LTD) for non-financial private sector | 1.2 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 |
| **Loans development** | | | | | | | |
| Stock of loans of non-fin. private sector, EUR mn | 32264 | 29943 | 29240 | 28529 | 27721 | 26807 | 27211 |
| Stock of loans of non-fin. corporations, EUR mn | 14813 | 12780 | 12532 | 12018 | 11421 | 11248 | 11212 |
| Stock of loans of households, EUR mn | 17451 | 17164 | 16708 | 16512 | 16300 | 15558 | 15999 |
| Stock of loans of non-secured retail loans, EUR mn | 8656 | 8464 | 8255 | 8276 | 8226 | 8317 | 8634 |
| Stock of loans of non-fin. private sector, NCU mn | 243171 | 226296 | 223002 | 218479 | 211735 | 202652 | 202450 |
| Stock of loans of non-fin. corporations, NCU mn | 111642 | 96582 | 95577 | 92030 | 87231 | 85035 | 83416 |
| Stock of loans of households, NCU mn | 131529 | 129714 | 127425 | 126449 | 124503 | 117617 | 119034 |
| Stock of loans of non-secured retail loans, NCU mn | 65238 | 63967 | 62957 | 63377 | 62828 | 62871 | 64236 |
| Stock of loans of non-fin. private sector, % of GDP | 72.9 | 68.4 | 67.2 | 65.9 | 62.3 | 57.7 | 55.4 |
| Stock of loans of non-fin. corporations, % of GDP | 33.5 | 29.2 | 28.8 | 27.8 | 25.7 | 24.2 | 22.8 |
| Stock of loans of households, % of GDP | 39.4 | 39.2 | 38.4 | 38.1 | 36.7 | 33.5 | 32.6 |
| Stock of loans of non-secured retail loans, % of GDP | 19.6 | 19.3 | 19.0 | 19.1 | 18.5 | 17.9 | 17.6 |
| Stock of loans of non-fin. private sector, growth rate in % (NCU based) | 4.2 | -6.9 | -1.5 | -2.0 | -3.1 | -4.3 | -0.1 |
| Stock of loans of non-fin. corporations, growth rate in % (NCU based) | 8.2 | -13.5 | -1.0 | -3.7 | -5.2 | -2.5 | -1.9 |
| Stock of loans of households, growth rate in % (NCU based) | 1.0 | -1.4 | -1.8 | -0.8 | -1.5 | -5.5 | 1.2 |
| Stock of loans of non-secured retail loans, growth rate in % (NCU based) | -0.7 | -1.9 | -1.6 | 0.7 | -0.9 | 0.1 | 2.2 |
| Stock of loans of non-fin. private sector, growth rate in % (EUR based) | 2.1 | -7.2 | -2.3 | -2.4 | -2.8 | -3.3 | 1.5 |
| Stock of loans of non-fin. corporations, growth rate in % (EUR based) | 6.0 | -13.7 | -1.9 | -4.1 | -5.0 | -1.5 | -0.3 |
| Stock of loans of households, growth rate in % (EUR based) | -1.0 | -1.6 | -2.7 | -1.2 | -1.3 | -4.6 | 2.8 |
| Stock of loans of non-secured retail loans, growth rate in % (EUR based) | -2.7 | -2.2 | -2.5 | 0.3 | -0.6 | 1.1 | 3.8 |
| **Deposits development** | | | | | | | |
| Stock of deposits of non-fin. private sector, EUR mn | 27794 | 28356 | 29484 | 30055 | 32031 | 33282 | 34622 |
| Stock of deposits of non-fin. private sector, NCU mn | 209480 | 214301 | 224859 | 230159 | 244649 | 251604 | 257585 |
| Stock of deposits of non-fin. private sector, % of GDP | 62.8 | 64.8 | 67.8 | 69.4 | 72.0 | 71.6 | 70.5 |
| Stock of deposits of non-fin. private sector, growth rate in % | 3.2 | 2.3 | 4.9 | 2.4 | 6.3 | 2.8 | 2.4 |
| **Profitability** | | | | | | | |
| Net interest income, EUR mn | 1537 | 1420 | 1331 | 1340 | 1381 | 1432 | 1465 |
| Net interest income, NCU mn | 11584 | 10733 | 10153 | 10259 | 10548 | 10825 | 10900 |
| Net interest margin, % | 2.8 | 2.7 | 2.6 | 2.6 | 2.7 | 2.8 | 2.8 |
| ROE, in % | 6.9 | 4.8 | 1.3 | 3.5 | -8.7 | 9.2 | 6.1 |
| ROA, in % | 1.2 | 0.9 | 0.3 | 0.6 | -1.2 | 1.6 | 1.1 |
| **Capitalisation** | | | | | | | |
| CAR, in % | . | . | . | . | 20.9 | 23.0 | 23.8 |
| **Asset quality** | | | | | | | |
| Non-performing loans (NPLs), in %, eop | 12.4 | 13.9 | 15.7 | 17.1 | 16.7 | 13.8 | 11.4 |
| Non-performing loans (NPLs) of non-fin. corporations, in %, eop | 22.1 | 27.7 | 31.8 | 34.9 | 34.7 | 28.3 | 22.2 |
| Non-performing loans (NPLs) of households, in %, eop | 8.6 | 9.5 | 11.1 | 12.0 | 12.2 | 10.3 | 8.1 |
| **Interest rates development** | | | | | | | |
| Money market rate - 3-month | 3.1 | 3.4 | 1.5 | 1.0 | 1.2 | 0.9 | 0.6 |
| Central bank policy rate (discount rate), % p.a., eop | 7.0 | 7.0 | 7.0 | 7.0 | 3.0 | 3.0 | 3.0 |
| **Exchange rate** | | | | | | | |
| Exchange rate, NCU/EUR eop | 7.5 | 7.6 | 7.6 | 7.7 | 7.6 | 7.6 | 7.4 |

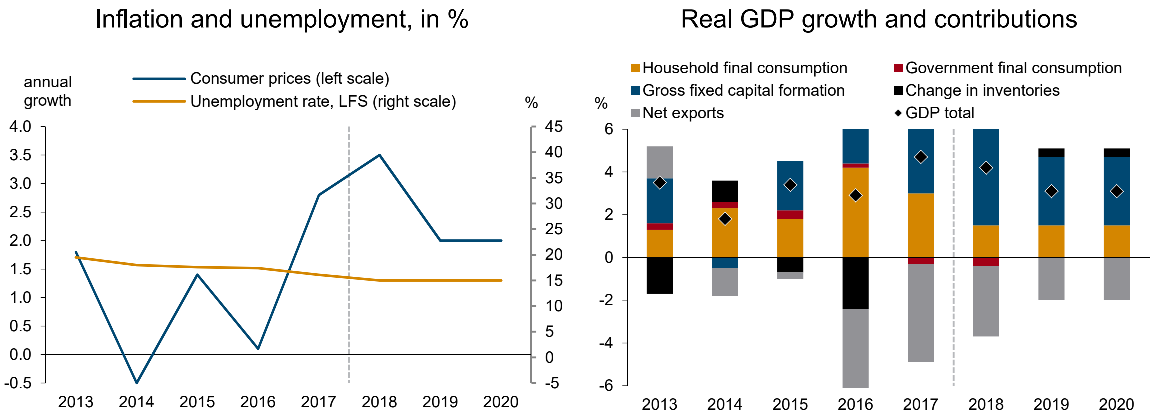
Source: National bank statistics.


# MONTENEGRO: Doing well, but clouds on the horizon

OLGA PINDYUK

**In 2018, GDP will grow by 4.2% – better than previously expected. The main driving forces behind the dynamic growth are fast growing investment and exports. High growth has brought about job creation, but unemployment remains high. The costs of the Bar-Boljare highway project have risen, which exacerbated the government debt burden. During 2019-2020, economic growth will slow down to about 3%.**

**Figure A3 / Montenegro: Main macroeconomic indicators**




Source: wiiw Annual Database incorporating national and Eurostat statistics, own calculation. Forecasts by wiiw.

**Montenegro's economy has kept on growing at a fast pace** – in H1 2018, GDP grew by 4.8% year over year, which is the highest rate since the global financial crisis. The main driving forces behind the dynamic growth are soaring investments, as well as booming exports. We expect that the economy will slowly run out of steam in the next months but will still perform better than we previously expected, and the annual growth rate in 2018 will be at 4.2%.

**Exports of both services and goods grew at double-digit rates in H1 2018**. The Montenegro tourism sector broke a record this year, with the number of tourists increasing by more than 10% as compared with summer 2017. Exports of all the other services sectors – transport, construction, and other business services – rose even faster, with year-over-year growth rates ranging between 25% and 43%. Manufacturing exports, which account for about 20% of total exports, picked up as well primarily on the back of non-ferrous metals, petroleum products, electric current, and chemicals.

**Investment stayed on its growth trajectory of the last two years**, in particular owing to the Bar-Boljare highway project. Gross fixed capital formation increased in H1 2018 by 28% year over year. This was reflected in import dynamics: imports of goods increased during this period by 10% year over year, with imports of machinery and equipment growing much faster than most other sectors.

**High growth stimulated job creation in the country** – about 5,000 people were additionally employed during H1 2018 as compared with the same period of the previous year. The unemployment rate fell by 1pp during this period, but still remains quite high at a level of 15.3%. Highway construction has not brought that many jobs, as about two thirds of the about 3,000 workers employed in the project are from the Chinese company China Road and Bridge Corporation.

**The costs of the highway project have increased significantly.** As the government did not hedge against currency swings, the recent dollar appreciation has pushed up the costs of the first phase of the Bar-Bojare highway project by 13% to about EUR 900 million (more than 20% of the country's GDP). The costs of construction of the remaining part of the highway are estimated to be about USD 1.2 billion, and financing it would mean increasing the debt burden for the country. With the tightening of financial conditions for emerging markets, it could become difficult for the government to refinance its debt, which would mean a higher risk of default.

**Soaring government debt due to the loan from China forced the government to resort to fiscal consolidation**. Among the steps undertaken were hikes in the VAT rate and excises, and freezing public sector wages. In this environment, real net wages decreased by 2.1% in H1 2018. Double-digit growth in loans to households allowed for private consumption to grow, albeit at a much more modest rate than investment – by 2% year over year in H1 2018. Contractionary fiscal policies will have a dampening effect on private consumption and will restrain economic growth in the coming years.

**To make matters worse, the benefits of participation in the Belt and Road Initiative might not outweigh the related costs**. The public-private partnership with the China Road and Bridge Corporation envisages that the company will operate the highway for 30 years under a concession from the state to get a return on their investment. Additionally, there are doubts whether the highway will be able to generate a sufficient revenue stream for the project to pay off. To achieve that, according to some estimates, traffic from the capital Podgorica to the port of Bar has to increase from about 6,000 vehicles per day to more than 20,000 vehicles per day.

**During 2019-2020, economic growth will slow down to about 3%.** The ongoing fiscal consolidation and less favourable external conditions are the primary reasons for the growth slowdown. Household consumption will grow at a slow pace, and exports are expected to decelerate. The high import dependency of investment will cause a widening of the current account deficit during the forecast period. It will be partially financed through FDI, as well through external debt, which is set to rise in the next years. Inflation will be at 2.5% in 2018 as numerous tax hikes will push prices upwards. Further on CPI growth will reduce its speed to 2% per annum.

## Table A5 / Montenegro: Selected economic indicators

| | 2014 | 2015 | 2016 | 2017 1) | 2017 January-June | 2018 January-June | 2018 Forecast | 2019 Forecast | 2020 Forecast |
|---|---|---|---|---|---|---|---|---|---|
| Population, th pers., average | 622 | 622 | 622 | 622 | . | . | 625 | 625 | 630 |
| Gross domestic product, EUR mn, nom. | 3,458 | 3,655 | 3,954 | 4,299 | 1,770 | 1,911 | 4,600 | 4,800 | 5,000 |
| annual change in % (real) | 1.8 | 3.4 | 2.9 | 4.7 | 4.1 | 4.8 | 4.2 | 3.1 | 3.1 |
| GDP/capita (EUR at PPP) | 11,300 | 12,300 | 13,000 | 13,900 | . | . | . | . | . |
| Consumption of households, EUR mn, nom. 2) | 2,775 | 2,893 | 3,035 | 3,216 | 1,501 | 1,579 | . | . | . |
| annual change in % (real) | 2.9 | 2.2 | 5.4 | 3.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Gross fixed capital form., EUR mn, nom. | 657 | 736 | 978 | 1,157 | 478 | 625 | . | . | . |
| annual change in % (real) | -2.5 | 11.9 | 38.4 | 18.7 | 5.3 | 28.1 | 20.0 | 12.0 | 12.0 |
| Gross industrial production 3) | | | | | | | | | |
| annual change in % (real) | -11.4 | 7.9 | -2.9 | -4.2 | -9.6 | 31.6 | 15.0 | 4.0 | 4.0 |
| Net agricultural production 4) | | | | | | | | | |
| annual change in % (real) | -6.1 | 9.4 | -8.5 | -3.2 | . | . | . | . | . |
| Construction output 3) | | | | | | | | | |
| annual change in % (real) | 1.9 | 5.8 | 31.5 | 51.5 | 45.3 | 40.4 | . | . | . |
| Employed persons, LFS, th, average | 216.3 | 221.7 | 224.2 | 229.3 | 228 | 233 | 234 | 236 | 238 |
| annual change in % | 7.1 | 2.5 | 1.1 | 2.3 | 3.1 | 2.2 | 2.0 | 1.0 | 1.0 |
| Unemployed persons, LFS, th, average | 47.5 | 47.2 | 48.3 | 43.9 | 44 | 42 | 40 | 40 | 40 |
| Unemployment rate, LFS, in %, average | 18.0 | 17.6 | 17.4 | 16.1 | 16.3 | 15.3 | 15.0 | 15.0 | 15.0 |
| Reg. unemployment rate, %, average | 16.1 | 16.5 | 21.9 | 21.7 | 21.3 | 19.2 | . | . | . |
| Average monthly gross wages, EUR | 723 | 725 | 751 | 765 | 766 | 766 | 770 | 790 | 810 |
| annual change in % (real, gross) | 0.1 | -1.1 | 3.5 | -1.1 | 0.3 | -3.5 | -3.0 | 1.0 | 1.0 |
| Average monthly net wages, EUR | 477 | 480 | 499 | 510 | 511 | 518 | 520 | 540 | 560 |
| annual change in % (real, net) | 0.1 | -0.8 | 3.9 | -0.8 | 0.6 | -2.1 | -2.0 | 1.0 | 1.0 |
| Consumer prices, % p.a. | -0.5 | 1.4 | 0.1 | 2.8 | 2.5 | 3.6 | 3.5 | 2.0 | 2.0 |
| Producer prices in industry, % p.a. 5) | 0.1 | 0.3 | -0.1 | 0.4 | 0.8 | 1.2 | 2.0 | 2.0 | 2.0 |
| General governm.budget, nat.def., % of GDP | | | | | | | | | |
| Revenues | 44.8 | 41.8 | 42.6 | 41.5 | 38.5 | 40.0 | 44.0 | 44.0 | 44.0 |
| Expenditures | 47.7 | 50.0 | 46.2 | 46.8 | 41.9 | 40.4 | 45.0 | 45.0 | 45.0 |
| Deficit (-) / surplus (+) | -2.9 | -8.3 | -3.6 | -5.3 | -3.4 | -0.4 | -1.0 | -1.0 | -1.0 |
| General gov.gross debt, nat.def., % of GDP 6) | 56.2 | 62.3 | 60.8 | 61.1 | 60.2 | 70.1 | 72.0 | 73.0 | 73.0 |
| Stock of loans of non-fin.private sector, % p.a. | -1.1 | 2.5 | 5.4 | 7.7 | 6.8 | 8.5 | . | . | . |
| Non-performing loans (NPLs), in %, eop | 15.9 | 12.6 | 10.3 | 7.3 | 8.8 | 7.0 | . | . | . |
| Central bank policy rate, % p.a., eop 7) | 8.41 | 7.70 | 6.74 | 6.16 | 6.4 | 5.9 | 6.00 | 5.50 | 5.50 |
| Current account, EUR mn | -429 | -402 | -642 | -692 | -566 | -613 | -740 | -820 | -860 |
| Current account, % of GDP | -12.4 | -11.0 | -16.2 | -16.1 | -32.0 | -32.1 | -16.1 | -17.1 | -17.2 |
| Exports of goods, BOP, EUR mn | 357 | 330 | 351 | 382 | 166 | 210 | 450 | 480 | 510 |
| annual change in % | -9.7 | -7.6 | 6.2 | 9.0 | 7.0 | 25.9 | 17.0 | 6.0 | 6.0 |
| Imports of goods, BOP, EUR mn | 1,734 | 1,794 | 2,008 | 2,243 | 1,038 | 1,172 | 2,470 | 2,640 | 2,820 |
| annual change in % | 0.6 | 3.5 | 12.0 | 11.7 | 8.9 | 12.9 | 10.0 | 7.0 | 7.0 |
| Exports of services, BOP, EUR mn | 1,031 | 1,214 | 1,255 | 1,383 | 397 | 475 | 1,530 | 1,680 | 1,830 |
| annual change in % | 3.6 | 17.8 | 3.3 | 10.2 | 27.6 | 19.6 | 11.0 | 10.0 | 9.0 |
| Imports of services, BOP, EUR mn | 340 | 425 | 486 | 530 | 237 | 277 | 580 | 620 | 660 |
| annual change in % | -0.3 | 25.0 | 14.1 | 9.2 | 5.7 | 17.0 | 9.0 | 7.0 | 7.0 |
| FDI liabilities, EUR mn | 375 | 630 | 205 | 494 | 230 | 177 | 450 | . | . |
| FDI assets, EUR mn | 21 | 11 | -167 | 10 | 10 | 23 | 40 | . | . |
| Gross reserves of NB excl. gold, EUR mn 8) | 545 | 674 | 803 | 898 | 702 | 1,020 | . | . | . |
| Gross external public debt, EUR mn | 1,562 | 1,956 | 2,003 | 2,214 | 2,009 | 2,644 | 2,670 | 2,880 | 3,000 |
| Gross external public debt, % of GDP | 45.2 | 53.5 | 50.6 | 51.5 | 46.7 | 57.5 | 58.0 | 60.0 | 60.0 |

1) Preliminary. - 2) Including expenditures of NPISHs. - 3) Enterprises with 5 and more employees. - 4) Based on UN-FAO data, wiiw estimate in 2017. - 5) Domestic output prices. - 6) Half-year data refer to central government budget. - 7) Average weighted lending interest rate of commercial banks (Montenegro uses the euro as national currency). - 8) Data refer to reserve requirements of the Central Bank.

Source: wiiw Databases incorporating national statistics. Forecasts by wiiw.

## Table A6 / Montenegro: Banking sector overview

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| **Size and growth** | | | | | | | |
| Number of banks | . | . | . | . | . | . | 15 |
| Total assets of banks, EUR mn | . | . | . | 3136 | 3472 | 3790 | 4182 |
| Total assets of banks, % change yoy | . | . | . | . | 10.7 | 9.2 | 10.3 |
| Banking sector concentration, share of assets of five major banks in % (acc. to 2017 ranking) | . | . | . | 68.2 | 65.9 | 63.3 | 60.8 |
| **Liquidity** | | | | | | | |
| Loans-to-deposit ratio (LTD) for non-financial private sector | 1.4 | 1.2 | 1.2 | 1.1 | 1.0 | 0.9 | 0.9 |
| **Loans development** | | | | | | | |
| Stock of loans of non-fin. private sector, EUR mn | 1803 | 1728 | 1818 | 1798 | 1842 | 1942 | 2091 |
| Stock of loans of non-fin. corporations, EUR mn | 974 | 926 | 945 | 912 | 930 | 931 | 974 |
| Stock of loans of households, EUR mn | 830 | 802 | 872 | 886 | 912 | 1011 | 1117 |
| Stock of loans of non-secured retail loans, EUR mn | 525 | 500 | 561 | 580 | 604 | 682 | 787 |
| Stock of loans of non-fin. private sector, % of GDP | 55.2 | 54.3 | 54.1 | 52.0 | 50.4 | 49.1 | 48.6 |
| Stock of loans of non-fin.corporations, % of GDP | 29.8 | 29.1 | 28.1 | 26.4 | 25.5 | 23.6 | 22.7 |
| Stock of loans of households, % of GDP | 25.4 | 25.2 | 25.9 | 25.6 | 24.9 | 25.6 | 26.0 |
| Stock of loans of non-secured retail loans, % of GDP | 16.1 | 15.7 | 16.7 | 16.8 | 16.5 | 17.3 | 18.3 |
| Stock of loans of non-fin. private sector, growth rate in % | -13.4 | -4.2 | 5.2 | -1.1 | 2.5 | 5.4 | 7.7 |
| Stock of loans of non-fin. corporations, growth rate in % | -20.3 | -4.9 | 2.1 | -3.5 | 2.0 | 0.1 | 4.6 |
| Stock of loans of households, growth rate in % | -3.5 | -3.4 | 8.8 | 1.5 | 3.0 | 10.9 | 10.5 |
| Stock of loans of non-secured retail loans, growth rate in % | -1.9 | -4.9 | 12.2 | 3.5 | 4.1 | 12.9 | 15.4 |
| **Deposits development** | | | | | | | |
| Stock of deposits of non-fin. private sector, EUR mn | 1325 | 1442 | 1478 | 1624 | 1824 | 2066 | 2351 |
| Stock of deposits of non-fin. private sector, % of GDP | 40.6 | 45.3 | 44.0 | 47.0 | 49.9 | 52.3 | 54.7 |
| Stock of deposits of non-fin. private sector, growth rate in % | 6.1 | 8.8 | 2.5 | 9.9 | 12.3 | 13.3 | 13.8 |
| **Profitability** | | | | | | | |
| Net interest income, EUR mn | . | . | . | . | . | . | . |
| Net interest margin, % | . | . | . | . | . | . | . |
| ROE, in % | . | . | . | . | . | . | . |
| ROA, in % | . | . | . | . | . | . | . |
| **Capitalisation** | | | | | | | |
| CAR, in % | . | . | . | . | 13.3 | 12.9 | 12.3 |
| **Asset quality** | | | | | | | |
| Non-performing loans (NPLs), in %, eop | 12.9 | 14.0 | 17.5 | 15.9 | 12.6 | 10.3 | 7.3 |
| Non-performing loans (NPLs) of non-fin. corporations, in %, eop | 23.1 | 34.5 | 34.2 | 30.7 | 22.3 | 19.8 | 14.5 |
| Non-performing loans (NPLs) of households, in %, eop | 15.7 | 14.6 | 11.9 | 10.7 | 8.3 | 6.9 | 5.5 |
| **Interest rates development** | | | | | | | |
| Money market rate - 3-month | 1.4 | 0.6 | 0.2 | 0.2 | 0.0 | -0.3 | -0.3 |
| Average weighted lending interest rate of com. banks, % p.a., eop | 9.1 | 8.8 | 8.7 | 8.4 | 7.7 | 6.7 | 6.2 |

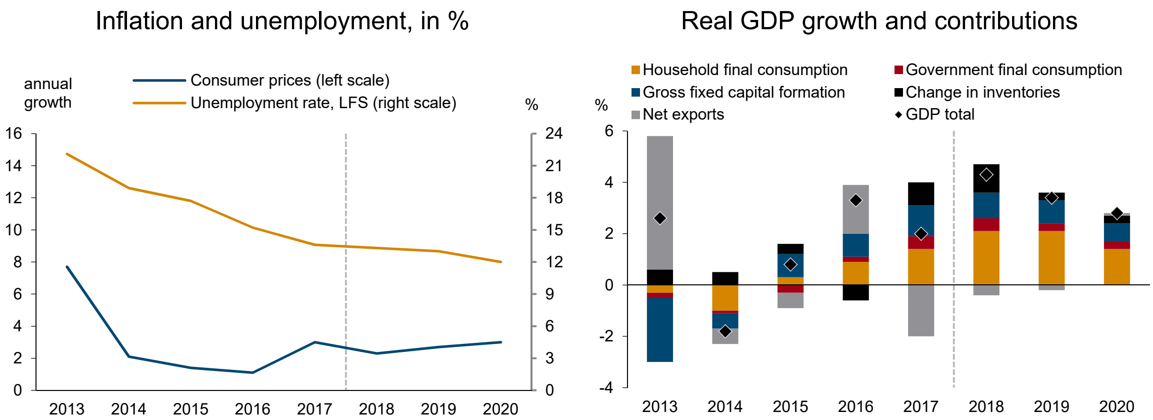
Source: National bank statistics.


# SERBIA: On the crest of a wave

RICHARD GRIEVESON

**Current economic growth and the near-term outlook are as good as has been the case at any time since the global financial crisis a decade ago. A combination of FDI inflows and private consumption are likely to remain the key growth drivers. The economy continues to face challenges, although efforts to bring down public debt and clean up the banking sector have been partly successful. Over the medium term, growth will trend down towards 3%, implying very slow convergence with Western Europe.**

**Figure A4 / Serbia: Main macroeconomic indicators**




Source: wiiw Annual Database incorporating national and Eurostat statistics, own calculation. Forecasts by wiiw.

**Growth has picked up strongly this year, after a very weak 2017, and the near-term outlook remains positive.** The economy had expanded by just 2% last year, in part owing to a drought, but posted real GDP growth of almost 5% year on year in both Q1 and Q2, the fastest rates recorded in Serbia since before the global financial crisis. Household consumption rose by around 3% in both quarters, while government spending increased by over 5% in Q2. The most significant uptick however came from investment, which increased by 15% year on year in Q1 and 12% in Q2. Net exports made a negative contribution to growth in the first half of the year, despite robust export growth. Imports grew even more quickly on the back of rising domestic demand, and are much bigger in absolute terms. There are also signs that external demand may have slowed somewhat relative to 2017 levels, reflecting weaker momentum in the EU.

**The near-term outlook is positive, with high-frequency indicators at the start of the third quarter mostly suggesting that momentum may even have increased.** Retail sales growth in Q3 looks on course to surpass the rates of 3-3.5% year on year posted in H1, while euro-denominated merchandise export growth picked up in July-August compared with the first half of the year. Monthly employment growth remained steady at just over 3% year on year in July-August, similar to the level in the first half of the year. However, latest industrial output data suggest some reason for concern. Production excluding construction fell by almost 5% year on year in August, its first decline for over a year.

**Private consumption still accounts for over 70% of GDP, one of the highest levels in the region, and as such will remain the key determinant of growth trends in Serbia.** We expect real private consumption growth to maintain its growth rate of around 3% in real terms in the rest of 2018 and into 2019, driven by rising wages and pensions. Domestic investment should also contribute significantly to growth during the forecast period, helped by improvements in banking sector asset quality and consequently rising credit growth. The government has been focused strongly on attracting foreign direct investment (FDI) inflows to stimulate growth, and data for the first half of 2018 indicate that FDI inflows remained strong.

**The policy stance is likely to remain focused on attracting FDI inflows, which will mean that the government will continue reforms to improve the business environment.** This impression has been strengthened by the signing of a 30-month Policy Coordination Instrument (PCI) with the IMF. The PCI involves no disbursements, but is rather a signal for foreign investors that Serbia is committed to further investor-friendly reforms, with a particular focus on institutional upgrading and improvement of economic competitiveness. Meanwhile, in the background the anchor of potential EU accession is likely to remain a strong incentive to reform. We have already expressed our scepticism about the targeted 2025 EU accession date for Serbia, but our caution is chiefly owing to political factors: otherwise, momentum towards accession is solid, and new chapters continue to be opened.

**Macroeconomic stability is gradually improving, but the post-crisis clean-up in Serbia has been one of the slowest in the region, reflecting a particularly weak growth performance over the past decade.** Two things stand out: the high public debt load, and vulnerabilities in the banking sector. However, in line with stronger economic growth, both are now improving. The public debt/GDP ratio fell to 58% in 2017, down from 70% in 2014-15, which has significantly eased fiscal pressures and the negative fiscal impact on growth. Meanwhile the non-performing loan (NPL) ratio – which has been one of the region's highest for much of the post-crisis period – dropped to 7.8% at end-June 2018, significantly below many regional peers. Serbia's long-term sovereign credit rating was upgraded by S&P and Fitch in December 2017, and Moody's in March 2018, reflecting positive momentum towards greater macroeconomic stability. A key risk that the agencies continue to identify are contingent liabilities from struggling state-owned Enterprises (SOEs). In August the Chinese firm Zijin bought 63% of one of these SOEs, the copper producer RTB Bor, although several others remain in state hands (and consequently a source of fiscal risk).

**Inflation is likely to rise gradually over the forecast period, although much of the current upward pressure on prices is coming from higher global energy costs.** After bottoming at 1.1% in April 2018, headline consumer price inflation increased by 2.6% in August. This is still below the midpoint of the central bank's 1.5%-4.5% target range. We expect full-year average inflation of 2.3% this year, rising to 2.7% in 2019 and 3% in 2020. Monetary policy is likely to remain fairly loose until greater signs of demand-pull inflationary pressures emerge, although the central bank will continue to intervene in the currency market to stabilise the dinar. Serbia has been relatively unaffected by the volatility in global markets caused by Fed tightening, and we expect this to remain the case. Stronger or quicker-than-expected monetary tightening by the ECB would have more material consequences for Serbia, but we view this is a very unlikely scenario. Our forecast is that the dinar will weaken slightly against the euro during the forecast period.

**The labour market is performing well, although employment growth is significantly lower than GDP growth, indicating improving productivity (in contrast to last year).** Relatively meagre employment growth in the first half of 2018 contributed to a rise in the unemployment rate, to 13.4% on the LFS measure (from 13.2% in the same period of 2017). However, the wage response to higher growth has been more significant, with real gross wages rising by 3.7% year on year in H1 2018, up from 1.1% in the same period of 2017. The fact that wages are increasing much more strongly than employment could indicate the emergence of labour shortages, or at least skills shortages in particular areas. Many Serbs have emigrated to other parts of EU-CEE (especially Slovakia) in response to labour shortages (and higher wages) there, which could now be having an impact on the Serbian labour market. Particularly in the construction sector, anecdotal evidence suggests that Serbia is now itself importing workers from Macedonia to fill the gap.

**There were indications over the summer that Serbia and Kosovo were moving towards a land swap deal, which would lead to a normalisation of relations and give Serbia in particular a major boost on its path towards EU accession.** We think that Serbia is capable of fulfilling the economic criteria for EU accession in the coming years, meaning that a deal with Kosovo is the main stumbling block. However, despite widespread optimism, talks appear to have broken down, in line with our expectations. We think that the chances of a workable deal involving a land swap are quite low, reflecting major domestic political impediments to making the necessary concessions on both sides. Many outside actors are also highly wary, although probably would not stand in the way if a genuine deal is arrived at between Belgrade and Pristina.

**In summary, current trends and the near-term outlook for the economy are probably as positive as they have been for a decade, justifying our optimism expressed in previous reports.** We expect real GDP growth of 4.3% this year, which would be Serbia's best performance since 2008, and make it one of the fastest growing economies in CESEE. However, we view the upswing as cyclical rather than structural at this stage, and see growth trending down to around 3% by the end of the forecast period, which will mean only very slow convergence with Western Europe (and no convergence with the wealthier parts of CESEE).

## Table A7 / Serbia: Selected economic indicators

| | 2014 | 2015 | 2016 | 2017 1) | 2017 | 2018 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | January-June | | | Forecast | |
| Population, th. pers., mid-year | 7,132 | 7,095 | 7,058 | 7,021 | . | . | 6,986 | 6,951 | 6,916 |
| Gross domestic product, RSD bn, nom. 2) | 3,908 | 4,312 | 4,521 | 4,754 | 2,082 | 2,214 | 5,100 | 5,400 | 5,700 |
| annual change in % (real) | -1.8 | 0.8 | 3.3 | 2.0 | 1.4 | 4.9 | 4.3 | 3.4 | 2.8 |
| GDP/capita (EUR at PPP) | 10,100 | 11,200 | 11,300 | 11,700 | . | . | . | . | . |
| Consumption of households, RSD bn, nom. 2) | 2,922 | 3,052 | 3,152 | 3,311 | 1,539 | 1,604 | . | . | . |
| annual change in % (real) | -1.3 | 0.4 | 1.3 | 2.0 | 1.8 | 3.1 | 3.0 | 3.0 | 2.0 |
| Gross fixed capital form., RSD bn, nom. 2) | 652 | 723 | 766 | 844 | 371 | 426 | . | . | . |
| annual change in % (real) | -3.6 | 5.6 | 5.4 | 7.3 | 2.5 | 13.5 | 5.5 | 5.0 | 4.0 |
| Gross industrial production 3) | | | | | | | | | |
| annual change in % (real) | -7.3 | 7.3 | 5.2 | 3.9 | 2.3 | 4.4 | 4.2 | 3.5 | 2.8 |
| Gross agricultural production | | | | | | | | | |
| annual change in % (real) | 2.4 | -8.4 | 8.3 | -11.8 | . | . | . | . | . |
| Construction output | | | | | | | | | |
| annual change in % (real) | 2.5 | 20.7 | 7.2 | 8.5 | 1.1 | 26.8 | . | . | . |
| Employed persons, LFS, th, average 4) | 2,421 | 2,574 | 2,719 | 2,795 | 2,767 | 2,793 | 2,880 | 2,940 | 2,970 |
| annual change in % | 4.8 | 0.6 | 5.6 | 2.8 | 3.8 | 0.9 | 3.0 | 2.0 | 1.0 |
| Unemployed persons, LFS, th, average 4) | 563 | 552 | 489 | 435 | 418 | 430 | 440 | 440 | 410 |
| Unemployment rate, LFS, in %, average 4) | 18.9 | 17.7 | 15.2 | 13.6 | 13.2 | 13.4 | 13.3 | 13.0 | 12.0 |
| Reg. unemployment rate, in %, eop 5) | 28.4 | 26.8 | 25.7 | 22.9 | 23.8 | 21.3 | . | . | . |
| Average monthly gross wages, RSD | 61,426 | 61,145 | 63,474 | 65,976 | 64,789 | 68,198 | 70,200 | 74,300 | 78,100 |
| annual change in % (real, gross) | -1.7 | -2.4 | 2.6 | 0.9 | 1.1 | 3.7 | 4.0 | 3.0 | 2.0 |
| Average monthly net wages, RSD | 44,530 | 44,432 | 46,097 | 47,893 | 47,054 | 49,331 | 51,300 | 54,300 | 57,000 |
| annual change in % (real, net) | -1.5 | -2.1 | 2.5 | 0.9 | 1.0 | 4.2 | 3.7 | 3.0 | 2.0 |
| Consumer prices, % p.a. | 2.1 | 1.4 | 1.1 | 3.0 | 3.4 | 1.7 | 2.3 | 2.7 | 3.0 |
| Producer prices in industry, % p.a. | 1.3 | 1.0 | 0.0 | 2.3 | 3.0 | -0.2 | 2.5 | 2.9 | 3.3 |
| General governm.budget, nat.def., % of GDP | | | | | | | | | |
| Revenues | 41.5 | 39.3 | 40.8 | 41.5 | 45.8 | 45.1 | 44.0 | 44.0 | 43.0 |
| Expenditures | 48.1 | 42.8 | 41.9 | 40.4 | 43.7 | 44.8 | 44.5 | 45.0 | 45.0 |
| Deficit (-) / surplus (+) | -6.6 | -3.5 | -1.2 | 1.1 | 2.1 | 0.4 | -0.5 | -1.0 | -2.0 |
| General gov.gross debt, nat.def., % of GDP | 70.4 | 70.0 | 67.8 | 57.9 | . | . | 68.0 | 68.0 | 67.0 |
| Stock of loans of non-fin.private sector, % p.a. | 4.5 | 3.0 | 2.3 | 2.1 | 2.2 | 4.4 | . | . | . |
| Non-performing loans (NPLs), in %, eop | 21.5 | 21.5 | 17.0 | 9.9 | 15.6 | 9.2 | . | . | . |
| Central bank policy rate, % p.a., eop 6) | 8.00 | 4.50 | 4.00 | 3.50 | 4.0 | 3.0 | 3.00 | 3.25 | 4.00 |
| Current account, EUR mn | -1,985 | -1,234 | -1,075 | -2,090 | -1,027 | -1,014 | -2,200 | -2,200 | -2,200 |
| Current account, % of GDP | -6.0 | -3.5 | -2.9 | -5.3 | -6.1 | -5.4 | -5.1 | -4.8 | -4.6 |
| Exports of goods, BOP, EUR mn | 10,641 | 11,454 | 12,814 | 14,090 | 6,970 | 7,504 | 16,600 | 17,800 | 19,200 |
| annual change in % | 1.2 | 7.6 | 11.9 | 10.0 | 10.9 | 7.7 | 18.0 | 7.0 | 8.0 |
| Imports of goods, BOP, EUR mn | 14,752 | 15,099 | 15,933 | 18,076 | 8,781 | 9,796 | 21,800 | 23,200 | 24,800 |
| annual change in % | 0.5 | 2.4 | 5.5 | 13.4 | 12.6 | 11.6 | 20.5 | 6.5 | 7.0 |
| Exports of services, BOP, EUR mn | 3,810 | 4,273 | 4,571 | 5,240 | 2,346 | 2,683 | 5,800 | 6,200 | 6,700 |
| annual change in % | 11.3 | 12.2 | 7.0 | 14.6 | 13.9 | 14.4 | 10.0 | 7.0 | 8.0 |
| Imports of services, BOP, EUR mn | 3,344 | 3,544 | 3,664 | 4,289 | 1,958 | 2,211 | 4,800 | 5,100 | 5,500 |
| annual change in % | 7.6 | 6.0 | 3.4 | 17.1 | 16.6 | 12.9 | 11.0 | 7.0 | 7.0 |
| FDI liabilities, EUR mn | 1,500 | 2,114 | 2,127 | 2,545 | 1,216 | 1,406 | 2,800 | . | . |
| FDI assets, EUR mn | 264 | 310 | 228 | 130 | 31.0 | 78.0 | 190 | . | . |
| Gross reserves of NB, excl. gold, EUR mn | 9,351 | 9,812 | 9,543 | 9,287 | 9,006 | 10,421 | . | . | . |
| Gross external debt, EUR mn 7) | 25,679 | 26,234 | 26,494 | 25,630 | 25,416 | 26,108 | 25,553 | 25,681 | 25,809 |
| Gross external debt, % of GDP 7) | 77.1 | 73.5 | 72.1 | 65.4 | 65.0 | 60.0 | 59.0 | 57.0 | 54.0 |
| Average exchange rate RSD/EUR | 117.31 | 120.76 | 123.12 | 121.34 | 123.39 | 118.30 | 118 | 119 | 120 |

1) Preliminary . - 2) From 2015 major GDP revisions by incorporating new data sources. Half-year data unrevised. - 3) Excluding arms industry. - 4) From 2015 adjustments according to ILO and Eurostat. - 5) From 2015 new source for labour force potential. - 6) Two-week repo rate. – 7) BOP 5th Edition.

Source: wiiw Databases incorporating national statistics. Forecasts by wiiw.

## Table A8 / Serbia: Banking sector overview

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| **Size and growth** | | | | | | | |
| Number of banks | . | . | . | . | . | . | 28 |
| Total assets of banks, EUR mn | . | . | . | 24545 | 25059 | 26253 | 28440 |
| Total assets of banks, NCU mn | . | . | . | 2968901 | 3047825 | 3241505 | 3369392 |
| Total assets of banks, % change yoy (NCU based) | . | . | . | . | 2.7 | 6.4 | 3.9 |
| Banking sector concentration, share of assets of five major banks in % (acc. to 2017 ranking) | . | . | . | 53.6 | 54.2 | 54.7 | 54.9 |
| **Liquidity** | | | | | | | |
| Loans-to-deposit ratio (LTD) for non-financial private sector | 1.3 | 1.3 | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 |
| **Loans development** | | | | | | | |
| Stock of loans of non-fin. private sector, EUR mn | 16395 | 16502 | 15559 | 15405 | 15783 | 15912 | 16936 |
| Stock of loans of non-fin. corporations, EUR mn | 10644 | 10762 | 9683 | 9414 | 9542 | 9120 | 9304 |
| Stock of loans of households, EUR mn | 5751 | 5739 | 5876 | 5991 | 6241 | 6792 | 7632 |
| Stock of loans of non-secured retail loans, EUR mn | 2949 | 2849 | 2951 | 3121 | 3310 | 3812 | 4583 |
| Stock of loans of non-fin. private sector, NCU mn | 1715581 | 1876555 | 1783711 | 1863324 | 1919626 | 1964728 | 2006480 |
| Stock of loans of non-fin. corporations, NCU mn | 1113838 | 1223869 | 1110046 | 1138710 | 1160576 | 1126108 | 1102288 |
| Stock of loans of households, NCU mn | 601743 | 652686 | 673665 | 724614 | 759050 | 838621 | 904192 |
| Stock of loans of non-secured retail loans, NCU mn | 308625 | 324017 | 338352 | 377554 | 402603 | 470694 | 542947 |
| Stock of loans of non-fin. private sector, % of GDP | 50.3 | 52.4 | 46.0 | 47.7 | 44.5 | 43.5 | 42.2 |
| Stock of loans of non-fin. corporations, % of GDP | 32.7 | 34.1 | 28.6 | 29.1 | 26.9 | 24.9 | 23.2 |
| Stock of loans of households, % of GDP | 17.7 | 18.2 | 17.4 | 18.5 | 17.6 | 18.5 | 19.0 |
| Stock of loans of non-secured retail loans, % of GDP | 9.1 | 9.0 | 8.7 | 9.7 | 9.3 | 10.4 | 11.4 |
| Stock of loans of non-fin. private sector, growth rate in % (NCU based) | 7.3 | 9.4 | -4.9 | 4.5 | 3.0 | 2.3 | 2.1 |
| Stock of loans of non-fin. corporations, growth rate in % (NCU based) | 8.3 | 9.9 | -9.3 | 2.6 | 1.9 | -3.0 | -2.1 |
| Stock of loans of households, growth rate in % (NCU based) | 5.3 | 8.5 | 3.2 | 7.6 | 4.8 | 10.5 | 7.8 |
| Stock of loans of non-secured retail loans, growth rate in % (NCU based) | 3.9 | 5.0 | 4.4 | 11.6 | 6.6 | 16.9 | 15.4 |
| Stock of loans of non-fin. private sector, growth rate in % (EUR based) | 8.1 | 0.7 | -5.7 | -1.0 | 2.5 | 0.8 | 6.4 |
| Stock of loans of non-fin. corporations, growth rate in % (EUR based) | 9.2 | 1.1 | -10.0 | -2.8 | 1.4 | -4.4 | 2.0 |
| Stock of loans of households, growth rate in % (EUR based) | 6.2 | -0.2 | 2.4 | 1.9 | 4.2 | 8.8 | 12.4 |
| Stock of loans of non-secured retail loans, growth rate in % (EUR based) | 4.8 | -3.4 | 3.6 | 5.8 | 6.0 | 15.2 | 20.2 |
| **Deposits development** | | | | | | | |
| Stock of deposits of non-fin. private sector, EUR mn | 12218 | 12492 | 12795 | 13305 | 14164 | 15556 | 16717 |
| Stock of deposits of non-fin. private sector, NCU mn | 1278468 | 1420566 | 1466833 | 1609310 | 1722771 | 1920733 | 1980531 |
| Stock of deposits of non-fin. private sector, % of GDP | 35.4 | 37.3 | 35.6 | 41.2 | 40.0 | 42.5 | 41.7 |
| Stock of deposits of non-fin. private sector, growth rate in % | 10.8 | 11.1 | 3.3 | 9.7 | 7.1 | 11.5 | 3.1 |
| **Profitability** | | | | | | | |
| Net interest income, EUR mn | . | . | . | . | 1047 | 1003 | 1020 |
| Net interest income, NCU mn | . | . | . | . | 127400 | 123847 | 120900 |
| Net interest margin, % | . | . | . | . | . | . | . |
| ROE, in % | . | . | . | . | 1.5 | 3.3 | 10.5 |
| ROA, in % | . | . | . | . | 0.3 | 0.7 | 2.1 |
| **Capitalisation** | | | | | | | |
| CAR, in % | . | . | . | . | 20.0 | 18.6 | 19.7 |
| **Asset quality** | | | | | | | |
| Non-performing loans (NPLs), in %, eop | 19.0 | 18.6 | 21.4 | 21.5 | 21.5 | 17.0 | 9.9 |
| Non-performing loans (NPLs) of non-fin. corporations, in %, eop | 20.0 | 16.7 | 20.7 | 21.8 | 18.7 | 15.4 | 9.9 |
| Non-performing loans (NPLs) of households, in %, eop | 6.8 | 7.3 | 8.2 | 9.3 | 9.5 | 8.2 | 5.0 |
| **Interest rates development** | | | | | | | |
| Money market rate - 3-month | 12.9 | 11.6 | 10.2 | 8.3 | 6.2 | 3.4 | 3.4 |
| Central bank policy rate (two-week repo rate), % p.a., eop | 9.8 | 11.3 | 9.5 | 8.0 | 4.5 | 4.0 | 3.5 |
| **Exchange rate** | | | | | | | |
| Exchange rate, NCU/EUR eop | 104.6 | 113.7 | 114.6 | 121.0 | 121.6 | 123.5 | 118.5 |

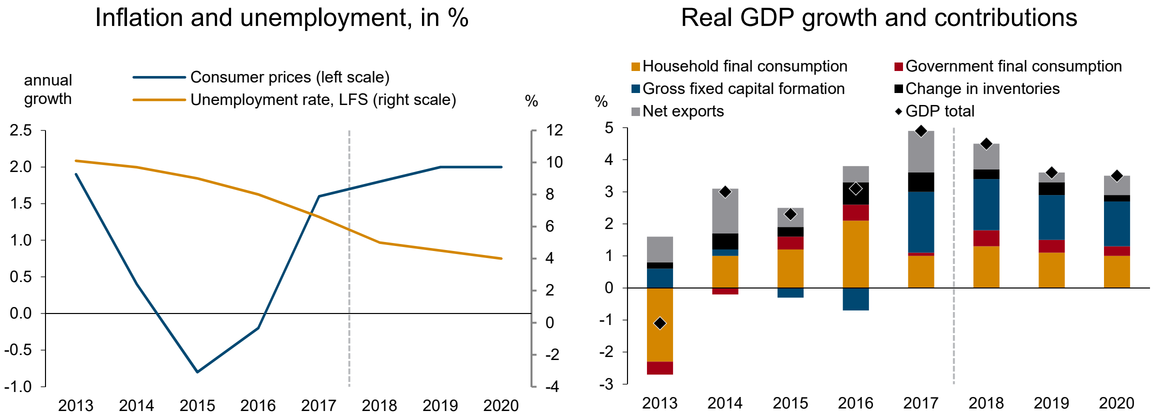
Source: National bank statistics.


# SLOVENIA: Another successful year

HERMINE VIDOVIC

**GDP growth is expected to reach 4.5% in 2018, but will slow due to lower export growth in the forecast period. Domestic demand, investments fuelled by EU funding and steady consumption growth will remain the main drivers of GDP growth. The shrinking of the working-age population and increasing labour shortages will put an upward pressure on wages.**

**Figure A5 / Slovenia: Main macroeconomic indicators**




Source: wiiw Annual Database incorporating national and Eurostat statistics, own calculation. Forecasts by wiiw.

**Slovenia's GDP increased by 4.2% year on year in the first half of 2018 driven by strong domestic demand.** Private consumption growth has been formidable, supported by further improvements in labour market conditions and rising household loans. Thanks to EU co-financing also gross fixed capital formation remained on its growth path, translating into a further increase in construction activities, non-residential building in particular. Noticeable investment growth was also reported in machinery and equipment, especially in transport equipment. Changes in inventories as well as net exports contributed positively to the GDP expansion. Industrial output grew by close to 6% in the first half of the year, with the highest growth rates reported for the manufacturing of computers and optical equipment and car production.

**Labour Force Survey data indicate an employment increase of 3% in the first half of 2018 and a fall of the unemployment rate to 5.6%**, the lowest rate since 2008, when it amounted to only 4.4%. Average real net wages rose only moderately, by 1.5% in the first six months of the year. Taking into account that the working-age population will decline and labour shortages will become more severe, an upward wage pressure can be expected in the coming years. The July 2018 business tendency survey among manufacturing, retail trade and construction companies reported that the share of enterprises listing shortages of skilled labour as a factor limiting production was 38%, the highest listed so far. This is also confirmed by the evolution of job vacancy rates, increasing from 2.3% in the second quarter of 2017 to 2.6% in the same period of 2018. Wage increases in the public sector are to be expected due to the relaxation of the remaining austerity measures introduced during the financial crisis.

**External trade expansion was less dynamic than a year earlier, but still at high levels.** Goods exports and imports rose by about 12% each, year on year, in the first seven months of 2018 with the trade surplus somewhat higher than a year earlier. In services trade the surplus widened even faster owing to exports – transport, travel in particular – rising ahead of lower import growth. The deficits both in the primary income and in the secondary income balance have been narrowing as compared to the first seven months of 2017. Hence, the current account surplus increased compared with 2017 and amounted to an estimated 8% of GDP on the back of deleveraging and strong private savings. Foreign direct investment inflows were higher than a year earlier, amounting to EUR 730 million in the first seven months of 2018.

**The general government budget closed with a surplus in the first half of 2018 (1% of GDP) compared to a small deficit in 2017 and is likely to remain in positive territory in the year as whole.** The turnaround was mainly made possible through a marked increase in total tax revenues and social contributions, while on the expenditure side fewer funds are earmarked for interest payments. Thus, the expectation of the Ministry of Finance ending up 2018 with a 0.4% surplus of the general government as a share of GDP, and a fall of public debt to below 70% seems to be feasible. As regards 2019, the new government has announced to adjust the budget to the commitments set out in the coalition agreement, but has also emphasised its commitment to fiscal sustainability and fiscal rule of a balanced budget.

**In August the European Commission approved a new Slovenian commitment package for Nova Ljubljanska Banka (NLB).** Accordingly Slovenia commits itself to sell a first tranche of at least 50% plus one share by the end of 2018 and the Slovenian government will reduce its share in the bank to 25% plus one share by the end of 2019. If Slovenia does not respect the deadlines, a divestiture trustee will be appointed to take over the sales process in order to prevent further delays in the restructuring process. The sale of NLB was a crucial element which allowed the Commission to approve a EUR 2.3 billion in state aid to the bank in 2013.

**Following the early parliamentary elections in June a new government came into office in mid-September, consisting of five parties, ranging from centre to left**. The coalition is headed by Marjan Šarec, leader of the same name list (LMS) and is formed by the Social Democrats (SD), the party of the previous prime minister Miro Cerar (SMC), the pensioners' party (DeSUS), and the party of Alenka Bratušek, also a former prime minister. Since the coalition does not have a majority in the parliament it has to rely on the support of the Left. Considering the large number of parties and the expectations of the respective electorate it is questionable whether the government will be in a position to implement the necessary reforms e.g. regarding the health sector and the pension system. One of the first tasks of the new government – appointing a new governor of the Bank of Slovenia – failed, since the parliament rejected Primož Dolenc, the vice governor and candidate suggested by President Pahor.

Already in April Slovenia lost its vote on the European Central Bank's governing council, when former governor Boštjan Jazbec resigned.

**Fairly solid economic growth is expected in the period up to 2020.** wiiw expects GDP to grow at 3.5% annually backed by domestic demand and, to a lower extent, by net exports. Investments are expected to remain high, co-funded by EU transfers under the current (2014-2020) financial perspective. Household consumption will also remain an important driver, boosted by rising wages and pensions in particular. Unemployment is expected to continue its downward path, not least because of the shrinking working-age population. Given the weak stance of the new government coalition, political uncertainties remain. Similar to other EU countries, ageing of the population and a shrinking workforce coupled with rising labour shortages will become major future challenges.

## Table A9 / Slovenia: Selected economic indicators

| | 2014 | 2015 | 2016 | 2017 1) | 2017 | 2018 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | January-June | | | Forecast | |
| Population, th pers., average | 2,062 | 2,064 | 2,065 | 2,066 | 2,065 | 2,067 | 2,066 | 2,066 | 2,066 |
| Gross domestic product, EUR mn, nom. | 37,603 | 38,863 | 40,357 | 43,000 | 20,804 | 22,206 | 45,800 | 48,400 | 51,100 |
| annual change in % (real) | 3.0 | 2.3 | 3.1 | 4.9 | 4.5 | 4.2 | 4.5 | 3.6 | 3.5 |
| GDP/capita (EUR at PPP) | 22,700 | 23,800 | 24,100 | 25,200 | . | . | . | . | . |
| Consumption of households, EUR mn, nom. | 20,137 | 20,482 | 21,187 | 21,963 | 10,357 | 10,833 | . | . | . |
| annual change in % (real) | 1.9 | 2.3 | 4.0 | 1.9 | 1.4 | 2.2 | 2.5 | 2.2 | 2.0 |
| Gross fixed capital form., EUR mn, nom. | 7,287 | 7,313 | 7,082 | 7,962 | 3,868 | 4,298 | . | . | . |
| annual change in % (real) | 1.0 | -1.6 | -3.7 | 10.7 | 11.8 | 9.1 | 8.5 | 7.5 | 7.5 |
| Gross industrial production | | | | | | | | | |
| annual change in % (real) | 2.3 | 5.6 | 7.1 | 7.7 | 6.6 | 6.5 | 6.5 | 5.5 | 5.0 |
| Gross agricultural production | | | | | | | | | |
| annual change in % (real) | 11.1 | 6.3 | -2.9 | -9.4 | . | . | . | . | . |
| Construction industry | | | | | | | | | |
| annual change in % (real) | 19.5 | -8.2 | -17.7 | 17.7 | 18.3 | 17.3 | . | . | . |
| Employed persons, LFS, th, average | 916.7 | 917.4 | 915.0 | 959.1 | 945.2 | 974.0 | 980 | 1,000 | 1,020 |
| annual change in % | 1.2 | 0.1 | -0.3 | 4.8 | 4.2 | 3.0 | 2.5 | 2.0 | 1.5 |
| Unemployed persons, LFS, th, average | 98.1 | 90.3 | 79.6 | 67.4 | 72.3 | 57.4 | 52 | 47 | 43 |
| Unemployment rate, LFS, in %, average | 9.7 | 9.0 | 8.0 | 6.6 | 7.1 | 5.6 | 5.0 | 4.5 | 4.0 |
| Reg. unemployment rate, in %, eop | 13.0 | 12.3 | 10.8 | 9.0 | 9.1 | 7.9 | . | . | . |
| Average monthly gross wages, EUR 2) | 1,540 | 1,556 | 1,584 | 1,626 | 1,601 | 1,658 | 1,690 | 1,760 | 1,830 |
| annual change in % (real, gross) | 0.9 | 1.2 | 1.9 | 1.3 | 0.3 | 2.0 | 2.0 | 2.0 | 2.0 |
| Average monthly net wages, EUR 2) | 1,005 | 1,013 | 1,030 | 1,062 | 1,044 | 1,076 | 1,100 | 1,140 | 1,190 |
| annual change in % (real, net) | 0.6 | 0.9 | 1.8 | 1.7 | 0.6 | 1.5 | 1.5 | 2.0 | 2.0 |
| Consumer prices (HICP), % p.a. | 0.4 | -0.8 | -0.2 | 1.6 | 1.7 | 1.8 | 1.8 | 2.0 | 2.0 |
| Producer prices in industry, % p.a. | -0.7 | -0.2 | -1.4 | 2.2 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 |
| General governm.budget, EU-def., % of GDP | | | | | | | | | |
| Revenues | 44.4 | 44.9 | 43.4 | 43.4 | . | . | 42.5 | 42.2 | 42.0 |
| Expenditures | 49.9 | 47.7 | 45.3 | 43.4 | . | . | 42.1 | 41.8 | 42.0 |
| Net lending (+) / net borrowing (-) | -5.5 | -2.9 | -1.9 | 0.0 | . | . | 0.4 | 0.4 | 0.0 |
| General gov.gross debt, EU def., % of GDP | 80.4 | 82.6 | 78.7 | 74.1 | . | . | 70.0 | 68.0 | 65.0 |
| Stock of loans of non-fin.private sector, % p.a. | -13.4 | -6.4 | -3.9 | 1.9 | 2.0 | 1.8 | . | . | . |
| Non-performing loans (NPLs), in %, eop 3) | 11.9 | 16.3 | 11.6 | 8.4 | 10.8 | 6.9 | . | . | . |
| Central bank policy rate, % p.a., eop 4) | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | . | . | . |
| Current account, EUR mn | 2,179 | 1,760 | 2,224 | 3,077 | 1,417 | 1,674 | 3,330 | 2,920 | 2,620 |
| Current account, % of GDP | 5.8 | 4.5 | 5.5 | 7.2 | 6.8 | 7.5 | 7.3 | 6.0 | 5.1 |
| Exports of goods, BOP, EUR mn | 22,961 | 24,039 | 24,991 | 28,462 | 14,000 | 15,477 | 31,310 | 33,810 | 36,350 |
| annual change in % | 5.9 | 4.7 | 4.0 | 13.9 | 12.3 | 10.6 | 10.0 | 8.0 | 7.5 |
| Imports of goods, BOP, EUR mn | 21,780 | 22,563 | 23,454 | 26,901 | 13,217 | 14,692 | 29,590 | 32,250 | 34,990 |
| annual change in % | 3.8 | 3.6 | 3.9 | 14.7 | 14.6 | 11.2 | 10.0 | 9.0 | 8.5 |
| Exports of services, BOP, EUR mn | 5,558 | 5,936 | 6,487 | 7,275 | 3,318 | 3,612 | 7,890 | 8,480 | 8,990 |
| annual change in % | 4.5 | 6.8 | 9.3 | 12.1 | 12.9 | 8.8 | 8.5 | 7.5 | 6.0 |
| Imports of services, BOP, EUR mn | 3,862 | 4,007 | 4,236 | 4,556 | 2,031 | 2,215 | 4,880 | 5,200 | 5,510 |
| annual change in % | 7.7 | 3.8 | 5.7 | 7.6 | 6.6 | 9.1 | 7.0 | 6.5 | 6.0 |
| FDI liabilities, EUR mn | 739 | 1,560 | 1,298 | 966 | 543 | 438 | 800 | . | . |
| FDI assets, EUR mn | 155 | 292 | 434 | 551 | 440 | 153 | 350 | . | . |
| Gross reserves of NB excl. gold, EUR mn | 736 | 687 | 593 | 632 | 639 | 605 | . | . | . |
| Gross external debt, EUR mn | 47,287 | 46,627 | 44,810 | 43,813 | 44,570 | 43,535 | 43,500 | 45,000 | 47,000 |
| Gross external debt, % of GDP | 125.75 | 119.98 | 111.03 | 101.89 | 103.7 | 95.1 | 95.0 | 93.0 | 92.0 |

1) Preliminary. - 2) From 2015 new data sources in public sector. - 3) For Slovenia NPLs defined as non-performing exposure including forborne exposure. 4) Official refinancing operation rates for euro area (ECB).

Source: wiiw Databases incorporating Eurostat and national statistics. Forecasts by wiiw.

## Table A10 / Slovenia: Banking sector overview

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|
| **Size and growth** | | | | | | | |
| Number of banks | . | . | . | . | . | . | 15 |
| Total assets of banks, EUR mn | . | . | . | 38714 | 37411 | 37050 | 37946.3 |
| Total assets of banks, % change yoy | . | . | . | | -3.4 | -1.0 | 2.4 |
| Banking sector concentration, share of assets of five major banks in % (acc. to 2017 ranking) | . | . | . | 56.7 | 56.7 | 61.0 | 60.6 |
| **Liquidity** | | | | | | | |
| Loans-to-deposit ratio (LTD) for non-financial private sector | 1.6 | 1.5 | 1.3 | 1.1 | 0.9 | 0.8 | 0.8 |
| **Loans development** | | | | | | | |
| Stock of loans of non-fin. private sector, EUR mn | 31480 | 29833 | 24914 | 21574 | 20192 | 19403 | 19763 |
| Stock of loans of non-fin. corporations, EUR mn | 21999 | 20535 | 15967 | 12779 | 11308 | 10221 | 9991 |
| Stock of loans of households, EUR mn | 9482 | 9299 | 8948 | 8794 | 8884 | 9182 | 9773 |
| Stock of loans of non-secured retail loans, EUR mn | 4290 | 4008 | 3610 | 3414 | 3331 | 3437 | 3759 |
| Stock of loans of non-fin. private sector, % of GDP | 85.3 | 82.7 | 68.7 | 57.4 | 52.0 | 48.1 | 46.0 |
| Stock of loans of non-fin. corporations, % of GDP | 59.6 | 56.9 | 44.1 | 34.0 | 29.1 | 25.3 | 23.2 |
| Stock of loans of households, % of GDP | 25.7 | 25.8 | 24.7 | 23.4 | 22.9 | 22.8 | 22.7 |
| Stock of loans of non-secured retail loans, % of GDP | 11.6 | 11.1 | 10.0 | 9.1 | 8.6 | 8.5 | 8.7 |
| Stock of loans of non-fin. private sector, growth rate in % | -2.3 | -5.2 | -16.5 | -13.4 | -6.4 | -3.9 | 1.9 |
| Stock of loans of non-fin. corporations, growth rate in % | -4.0 | -6.7 | -22.2 | -20.0 | -11.5 | -9.6 | -2.3 |
| Stock of loans of households, growth rate in % | 1.8 | -1.9 | -3.8 | -1.7 | 1.0 | 3.4 | 6.4 |
| Stock of loans of non-secured retail loans, growth rate in % | -3.5 | -6.6 | -9.9 | -5.4 | -2.4 | 3.2 | 9.4 |
| **Deposits development** | | | | | | | |
| Stock of deposits of non-fin. private sector, EUR mn | 19699 | 19445 | 19256 | 20525 | 21664 | 23144 | 24756 |
| Stock of deposits of non-fin. private sector, % of GDP | 53.4 | 53.9 | 53.1 | 54.6 | 55.7 | 57.3 | 57.6 |
| Stock of deposits of non-fin. private sector, growth rate in % | 1.0 | -1.3 | -1.0 | 6.6 | 5.5 | 6.8 | 7.0 |
| **Profitability** | | | | | | | |
| Net interest income, EUR mn | . | . | . | 832 | 746 | 670 | 652 |
| Net interest margin, % | . | . | . | . | . | . | . |
| ROE, in % | . | . | . | . | 3.6 | 8.0 | 9.6 |
| ROA, in % | . | . | . | . | 0.4 | 1.0 | 1.2 |
| **Capitalisation** | | | | | | | |
| CAR, in % | . | . | . | . | 18.7 | 19.2 | 18.2 |
| **Asset quality** | | | | | | | |
| Non-performing loans (NPLs), in %, eop | 11.3 | 14.5 | 13.4 | 11.9 | 16.3 | 11.6 | 8.4 |
| Non-performing loans (NPLs) of non-fin. corporations, in %, eop | 18.5 | 24.0 | 20.4 | 17.7 | 34.0 | 25.9 | 19.9 |
| Non-performing loans (NPLs) of households, in %, eop | 3.5 | 3.8 | 4.1 | 4.4 | 5.1 | 1.5 | 1.1 |
| **Interest rates development** | | | | | | | |
| Money market rate - 3-month | 1.4 | 0.6 | 0.2 | 0.2 | 0.0 | -0.3 | -0.3 |
| Official refinancing operations rate for EA, ECB, % p.a., eop | 1.00 | 0.75 | 0.25 | 0.05 | 0.05 | 0.00 | 0.00 |

Note: NPLs from 2015 defined as non-performing exposure including forborne exposure (estimates for households).
Source: National bank statistics.

## Table A11 / Selected indicators for 2018

| | Household debt in % of GDP | Stock of loans to households, annual growth, NCU based, in % | Stock of unsecured loans, EUR based, CAGR 2015-2018 |
|---|---|---|---|
| Croatia | 32.7 | 4.0 | 4.6 |
| Slovenia | 22.7 | 7.5 | 6.5 |
| Bosnia and Herzegowina | 28.3 | 6.6 | 7.3 |
| Serbia | 19.9 | 17.1 | 12.5 |
| Montenegro | 27.2 | 13.8 | 12.0 |
| **REGION** | **25.9** | **7.9** | **.** |
| **EA-19** | **49.4** | **0.7** | **2.6** |

Note: CAGR - compound annual growth rate.
Sources: ECB, National banks statistics, wiiw calculations.

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Wien 6, Rahlgasse 3

ZVR-Zahl: 329995655

Postanschrift: A 1060 Wien, Rahlgasse 3, Tel: [+431] 533 66 10, Telefax: [+431] 533 66 10 50
Internet Homepage: www.wiiw.ac.at



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