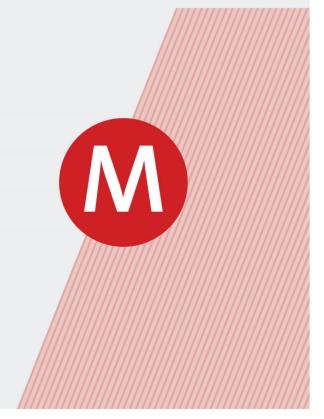


SEPTEMBER 2019

Monthly Report

UK Economy after Brexit: What is the Model? Austria's Evolving Trade and Transport Links with CESEE Austria-Slovakia Cross-border Cooperation



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

UK Economy after Brexit: What is the Model?

Austria's Evolving Trade and Transport Links with CESEE

Austria-Slovakia Cross-border Cooperation

RICHARD GRIEVESON JULIA GRÜBLER DORIS HANZL-WEISS

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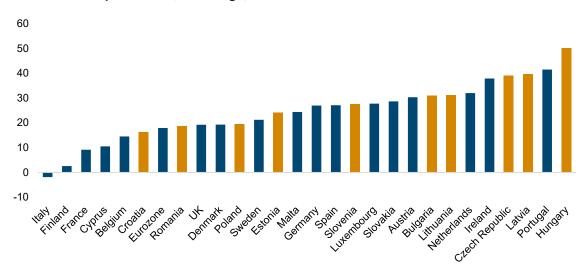
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Chart of the month: EU-CEE well represented in EU property market boom

BY RICHARD GRIEVESON

A decade of ultra-loose and unconventional monetary policy since the global financial crisis has contributed to significant inflation in various asset markets. This is visible in stock and bond markets, and also residential property around the world.

The latest data from Eurostat for the EU show that in most of EU-CEE, house prices have increased quite dramatically over the last five years. Between Q1 2014 and Q1 2019, house prices rose by an average 29.7% in our region. Three of the top four increases in the EU were in EU-CEE, including 50% in Hungary.

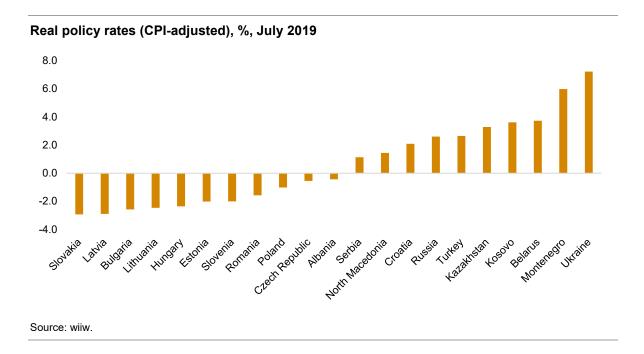


Eurostat house price index, % change, Q1 2015-Q1 2019

Source: Eurostat. EU-CEE countries highlighted in orange.

Although ultra-loose monetary policy is not the only factor driving this, it has clearly had an impact. Interest rate compression (German sovereign bond yields are negative out to a 30-year maturity, and USD16 trn of bonds around the world now have a negative yield) has also filtered through to mortgage rates. House buyers can now borrow at much lower interest rates, and for longer maturities, than was the case in the past.

While much of EU-CEE is not part of the euro zone, in practice its central banks cannot deviate significantly from the line set by the ECB. As of July 2019, all EU-CEE countries except Croatia had negative real policy rates (CPI-adjusted).



Talk in the media and among analysts about the risks of a housing price bubble in the EU are growing louder. On some metrics, valuations are becoming stretched. However, the ECB and other central banks look set to continue on their extremely dovish course, given persistently weak CPI inflation dynamics. Moreover, institutional investors such as insurance companies and pension funds have liabilities to meet and need to put their money somewhere. As a result, the property boom in EU-CEE may still have room to run.

Opinion Corner^{*}: UK economy after Brexit: What is the model?

BY RICHARD GRIEVESON

Thousands of newspaper articles and studies have been written about the political chess of Brexit, but relatively little attention has been paid to an arguably more important question: what will Brexit mean for the UK growth model? For decades, the UK has relied heavily on FDI inflows, much of which probably would not have materialised had the country not been part of the EU. Outside the bloc, the UK's growth model faces a much more uncertain future.

The UK has been stuck in a political crisis for three years. This crisis will probably get worse before it gets better. However, while most attention is fixed on the daily political volatility, a much more important issue has been largely left unaddressed: what the UK's economic model will be after Brexit. Leaving the EU will force policymakers into some difficult choices about the future political economy of the country. Few people seem to be aware of how closely tied up the UK's model is with EU membership. It is not clear that policymakers in particular appreciate the gravity of this situation, even less that they have a plan to tackle it.

THE COLLAPSE OF MANUFACTURING AND MINING

Until the 1950s and 1960s, the UK was still one of the world's most important manufacturing powers, accounting for on quarter of the world's total manufacturing exports, second only to the US. The share of manufacturing workers in total employment actually peaked in these decades.

However, from the 1970s, things changed. The manufacturing industry basically stopped growing at the start of that decade, owing to competition from increasingly sophisticated foreign competitors, the oil shocks, the discovery of North Sea oil (and consequent "Dutch disease" impact on the real exchange rate, which caused a deterioration in external competitiveness), and less trade protectionism (which removed UK firms' dominance of the domestic market). Things got so bad that the UK had to go to the IMF in 1975. The search for a new economic model became quite urgent.

THE NEW MODEL

EU accession in the 1970s was extremely helpful in supplying the new economic model. The UK could now set itself up as an ideal place for foreigners to invest, as a business friendly (i.e. low tax and low regulation) springboard for operating in the huge EU market. The UK's abolition of exchange controls in 1979 accelerated the process, by smoothing the way for foreign investment inflows. This was further catalysed by the Thatcher government's programme of mass privatisations, often to foreigners.

Disclaimer: The views expressed in the Opinion Corner section of the Monthly Report are exclusively those of the authors and do not necessarily represent the official view of wiw.

This was very good timing, thanks to the collapse of the Soviet Union, the rise of emerging markets (and a new wealthy class within them) and the age of "hyper-globalisation" that saw a rapid expansion of cross-border capital flows. Helped by the combination of a sense of political stability, the English language, and EU membership, London became the financial capital of Europe, and the taxes generated from this subsidised most of the rest of the country. Japanese and American investors bought up old British companies and reinvigorated them. Under foreign ownership, the ailing car industry staged a quite improbable turnaround.

The expansion of financial services industry, especially after the 1986 "big bang", changed London, and also the nature of the UK elite and the city in general. London's population rose and became more diverse. The richest people in the UK were increasingly foreign.

HUGE STRUCTURAL CHANGE

This model caused quite a radical change in the structure of the British economy. In 1973, manufacturing still accounted for around one third of UK GDP, but by 2007 this had fallen to 12%. For workers, the collapse was even more dramatic: around 35% of workers were in manufacturing in 1973, compared with 9.5% by 2007.

Having long been a capital exporter, the UK quickly became (and remains) a large net importer of capital. The UK has run big current account deficits during almost all of the time since the mid-1980s, and since 1985 has seen a staggering decline in its net international investment position. From having a net surplus equivalent to 20.5% of GDP in 1985 (meaning considerably more assets abroad than foreigners held in the UK), it now has a deficit of 6.4% of GDP.

Other indicators suggest a seriously unbalanced growth model, which relies heavily on foreign investment and borrowing. UK households are considerably more indebted than their counterparts in Germany, France and Italy. Since 1995, the UK has had the lowest average rate of investment/GDP of any EU member state (17% of GDP, compared with 24% in Austria). Over the same period it has had the close to the highest share of household spending (63% of GDP; Austria: 52%), and the third lowest share of goods exports to GDP (16%, ahead of only Greece and Cyprus). This is an economy that borrows from the future to consume today, and does not produce anywhere near enough to pay for everything that it wants to import.

GROWTH HAS NOT BEEN VERY IMPRESSIVE

Many argue that while the model might be unbalanced, it has worked. Over the last 20 years, among big EU economies only Spain has grown faster. However, this apparently impressive headline growth performance disguises a more mediocre reality. In per capita terms, adjusted for local costs, the UK has performed much worse than Germany since 1999. On this basis, its performance is comparable to France, the country that tends to be the butt of jokes in the UK's right-wing media about the supposedly weak continental economies.

Moreover, even matching France's per capita growth rate has relied on employees in the UK working a lot more hours than their continental counterparts. A particular UK weakness is productivity. Since the

mid-1970s, UK productivity has rarely been above 90% of the French and German levels, and is currently around 85%. To produce the same amount of GDP, people in the UK need to spend more time at work, and therefore less time with their families or pursuing leisure activities. As the economist Simon Tilford outlined several years ago, when comparing the UK with France and Germany, one notices in particular low skills among a large share of the workforce; weak infrastructure; lack of affordable residential property; and centralisation of everything in London.¹

SO WHAT NOW?

Brexit poses a big threat to the UK's post-1970 growth model. Japanese and American investors didn't put their money into the UK out of charity. The model relied heavily on EU membership, a sense of being open to foreign capital (and foreigners) and the impression of the UK as a stable, rational place. All of these things have been at least put in doubt by the events of the last three years. The collapse in the value of Sterling since the Brexit vote paints a stark picture of how foreign investors see the UK now. The question then is, what is the model for the next decades?

The UK economy will not collapse. It clearly has some strengths. However, even before Brexit it faced enormous challenges, not least persistently weak productivity growth. Addressing these issues outside of the EU will be even harder. The plans announced by Prime Minister Boris Johnson and those around him do not inspire confidence. They have been summarised as "Singapore on Thames", with low tax and regulation, basically a sloppy re-working of Thatcherism. It is also not what people want. Surveys consistently show that a majority in the UK want to pay higher taxes for better public services, for example². Currently, the UK spends much less on healthcare than other rich Western European countries (9.8% of GDP according to the World Bank, compared with 11.1% for Germany and 11.5% for France). Total UK government spending accounts for less than 41% of GDP according to Eurostat, compared with 44% for Germany and 56% in France.

CONCLUSION: THE FUTURE WILL BE WORSE

Brexit is a process, not an event. It may not be resolved—neither within the UK nor in terms of the future UK-EU27 relationship—for another decade or more. This uncertainty alone will act as a long-term drag on economic momentum, and as a distraction from addressing some of the structural issues outlined above. Very few countries in Western Europe are likely to grow very fast in the coming decade, but even within this group it is likely that the UK will be among the slowest.

¹ <u>https://www.cer.eu/publications/archive/policy-brief/2016/brexit-britain-poor-man-western-europe</u>

² <u>https://yougov.co.uk/topics/politics/articles-reports/2018/07/03/majority-brits-now-support-increasing-income-tax-f</u>

Austria's evolving trade and transport links with CESEE

BY JULIA GRÜBLER

This year we celebrate 30 years of the re-integration of the Western and Eastern European economies. Since the fall of the Iron Curtain, EU members of the former 'Eastern Bloc' have become major trading partners for Austria. Today, Austria's surplus in goods trade with the region is compensated by a deficit in transport services trade. The transport sector and the EU's infrastructure continue to expand, but so do related environmental challenges.

This year marks several important anniversaries related to the process of European economic integration. Most importantly, the Iron Curtain separating Western from Eastern Europe fell 30 years ago. Five years later, on 12th June 1994, Austria decided to join the EU via referendum. The 1st May then marks the fifteen-year anniversary of the big Eastern Enlargement of the EU by the addition of ten Member States. These events substantially changed the development and interconnectedness of European economies.

One aspect of international exchange which is of importance to many small, open economies – such as Austria – is international trade. The speed of trade integration of Central, East and Southeast European (CESEE) economies with global markets over the last decades has been impressive, especially for the Visegrád States as well as some Western Balkan economies (Figure 1). Over the period 2000-2018, trade openness towards Austria – defined as the sum of exports to and imports from Austria divided by a country's GDP – showed the strongest increases for Slovakia, Slovenia and Bosnia and Herzegovina¹.

AUSTRIA'S TRADE TIES WITH THE WESTERN AND EASTERN EU DIVERGE...

Since the beginning of the 21st century, the EU single market has always absorbed at least 70% of Austria's goods and services exports and was the source of at least 72% of its imports. Germany continues to be Austria's most important trading partner with a share exceeding 30% of Austria's exports and imports. However, the importance of Western Europe has been diminishing over time, both in goods trade as well as services trade, while Eastern Europe has been gaining shares (Astrov and Grübler, 2019). In terms of Austrian exports, the share of the Western EU declined from 64% to 56% between 2000 and 2018, while the share of the EU-CEE11 increased from 13% to 16%. The shift has been even more pronounced on the import side, where the share of the Western EU decreased by nine percentage points from 65% to 56%, while the EU-CEE11 gained six percentage points from 11% to 17%.

¹ The only country in the sample showing a slight reduction is Hungary which nonetheless remains an important trading partner.

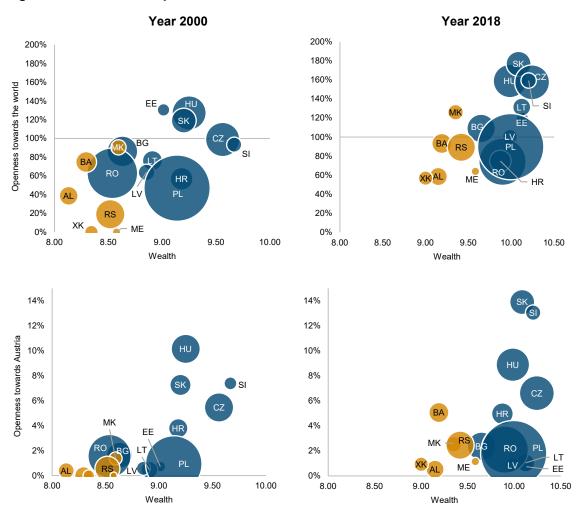


Figure 1 / CESEE trade openness towards Austria and the world

Note: Wealth is proxied as GDP per capita at purchasing power parities (PPP), shown in natural logarithms. Openness is defined as the sum of exports and imports as a share of GDP. The bubble size corresponds to a country's population size. Source: wiiw Annual Database, incorporating national statistics and Eurostat data.

... AND SO DO THE TRADE BALANCES

Austria's overall trade balance with the EU-CEE11 has been positive for the most part over the past two decades; it only turned negative for the last two years, 2017 and 2018 (Figure 2). In 2018, Austria's trade deficit with the EU-CEE11 amounted to EUR 520 million, while its trade surplus with the rest of the EU totalled EUR 2,025 million – the highest level since 2002.

At the same time, there are large differences between goods and services in the size of Austria's trade balance. In goods trade, the balance is negative with the Western EU, but positive for the Eastern EU. The picture reverses for services trade, where Austria has a big surplus with the Western EU, mainly due to travel services, but an increasing trade deficit with the Eastern EU – primarily due to a surge in imports of transport services, but also increasingly through business-related services (Figure 3). This is in pretty stark contrast to earlier studies done prior to and during the early years of transition, which

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predicted that CESEE would specialise in low-tech, less R&D-intensive activities, where they were expected to have a comparative advantage (Landesmann, 2019).

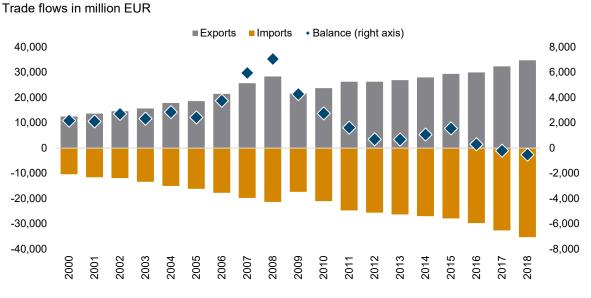
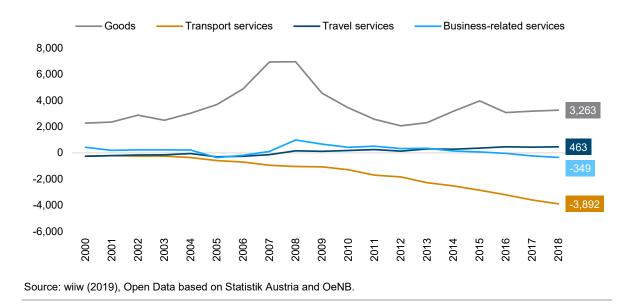


Figure 2 / Austria's trade relations with the EU-CEE11 (goods and services)

Source: wiiw (2019) Open Data based on Statistik Austria.

Figure 3 / Austria's trade balance with EU-CEE11, by individual components

in million EUR



THE TRANSPORT SECTOR CONTRIBUTES TO CONNECTIVITY AND GROWTH, BUT ALSO TO CLIMATE CHANGE

Obviously, a crucial precondition for the increase in trade of goods and (transport) services is a functioning transport infrastructure network. For the period 2014-2020, the Connecting Europe Facility (CEF) provided EUR 24.2 billion to the development of the transport network across the EU and some neighbouring countries (European Commission – DG MOVE, 2019). Almost 98% of the funding constitutes grants, primarily targeting the extension and modernisation of railway infrastructure. The EU-CEE11 absorbed about 45% of all of the already allocated grants, with the top recipient countries in the region being Poland (EUR 4.2 billion), Romania (EUR 1.2 billion), the Czech Republic and Hungary (EUR 1.1 billion each). CEF grants directed towards Austria amounted to EUR 884 million (European Commission – INEA, 2019).



Figure 4 / TEN-T network connecting Austria with CESEE

Direct connections:

- The Baltic-Adriatic corridor provides a direct connection between Poland, the Czech Republic, Slovakia, Slovenia and Italy.
- The Rhine-Danube corridor connects Austria with Germany, the Czech Republic, Slovakia, Hungary and Croatia, as well as further to the Southeast with Serbia, Bulgaria and Romania.
- The Orient/East-Med corridor is a transport connection from the harbours in the Northwest of Germany, through the Czech Republic, Austria, Slovakia, Hungary, Romania and Bulgaria to ports in Greece.

Indirect connection:

The North Sea-Baltic corridor indirectly links Austria to the Baltic countries through intersections with the Baltic-Adriatic corridor in Poland (in Warsaw, Lodz and Poznan), as well as with the Orient/East-Med corridor in Germany (in Berlin and Magdeburg).

Source: European Commission - DG MOVE, EC-GISCO, EuroGeographics (2018).

Three out of nine corridors of the Trans-European Transport Network (TEN-T) link Austria directly with CESEEⁱ (Figure 4): the Baltic-Adriatic corridor, the Rhine-Danube corridor and the Orient/East-Med corridor.

An impact assessment for the TEN-T network by Schade et al (2018) expects travel time by rail for passengers to reduce by 11.3% for the Baltic-Adriatic corridor, 13.3% for the Rhine-Danube corridor and 27.2% for the Orient/East-Med corridor upon completion. Predicted time savings for freight transport are even bigger: A reduction by 35.7% is anticipated for the Baltic-Adriatic corridor, 34.6% for the Rhine-Danube corridor and 33.7% for the Orient/East-Med corridor.

The same report concluded that projects to be implemented between 2017 and 2030 amounting to EUR 556 billion (in 2005 prices) will result in 800,000 additional jobs and an increase of GDP by 1.6% in 2030 (0.4% in 2020) relative to the baseline² for the EU28.

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However, major future challenges lie in the optimisation of multi-modal, affordable, safe and, not least, low-emission mobility within the single market. Greenhouse gas emissions of the EU28 attributable to the transport sector increased from 967 million tonnes CO_2 equivalent in 1990 to more than 1,200 million tonnes in 2016. During this period, the transport sector's share in total greenhouse gas emissions climbed from 20% to almost 32%, while the share of the energy industries has fallen from 40% to 35%, and for the manufacturing and construction sectors from 20% to 14% (European Commission, 2018). Given these developments, the EU's transport sector might soon become the largest source of emissions, overtaking the energy sector (European Commission, 2019).

REFERENCES

Astrov, V. and J. Grübler (2019), 'Osteuropa trotzt dem globalen Gegenwind', wiiw Research Report in German Language, No. 14, Vienna, July.

European Commission (DG MOVE) (2018), '3. Energy and environment', Statistical pocketbook 2018 [Data on Greenhouse Gas Emissions as of June 2018 provided by European Environment Agency (EEA)] - https://publication.europa.eu/en/publication-detail/-/publication/52f721ed-c6b8-11e8-9424-01aa75ed71a1.

European Commission (INEA) (2019), 'The Connecting Europe Facility. Five years supporting European infrastructure' July 2019. -

https://ec.europa.eu/inea/sites/inea/files/cefpub/cef implementation brochure web final.pdf.

European Commission (DG MOVE) (2019), 'Transport in the European Union. Current Trends and Issues, March 2019. - <u>https://ec.europa.eu/transport/sites/transport/files/2019-transport-in-the-eu-current-trends-and-issues.pdf</u>

² The baseline scenario assumed zero TEN-T investments after 2016.

European Commission (DG MOVE), EC-GISCO, EuroGeographics (2018), 'TENtec Interactive Map Viewer' https://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/map/maps.html

Landesmann, M. (2019), '30 years of East-West integration in Europe: reflections on what we have learned and on challenges ahead', *Focus on European Economic Integration*, No. Q3/2019, Oesterreichische Nationalbank, pp. 29-40.

Schade, W., J. Hartwig, S. Welter, S. Maffii, C. de Stasio, F. Fermi, L. Zani, and A. Martino (2018), 'The impact of TEN-T completion on growth, jobs and the environment', Synthesis, Final Report, European Commission. - <u>https://ec.europa.eu/transport/sites/transport/files/studies/ten-t-growth-and-jobs-synthesis.pdf</u>.

wiiw (2019), 'Wirtschaftsbeziehungen Österreichs mit den Ländern Mittel-, Ost- und Südosteuropas (MOSOEL)', Statistischer Anhang, Open Data, July 2019. – <u>https://wiiw.ac.at/ds-6.html</u>.

ⁱ (1) Austria within the Baltic-Adriatic corridor:

Katowice – Ostrava – Brno – **Wien**; Katowice – Žilina – Bratislava – **Wien**; **Wien – Graz – Villach** – Udine – Trieste; **Graz** – Maribor – Ljubljana – Koper/Trieste.

⁽²⁾ Austria within the Rhine-Danube-corridor: Strasbourg – Stuttgart – München – Wels/Linz; Strasbourg – Mannheim – Frankfurt – Würzburg – Nürnberg – Regensburg – Passau – Wels/Linz; Wels/Linz – Wien – Bratislava – Budapest – Vukovar; Wien/Bratislava – Budapest – Arad – Braşov/Craiova – Bucureşti – Constanţa – Sulina.

⁽³⁾ Austria within the Orient/East-Med corridor: Dresden – Ústí nad Labem – Mělník/Praha – Kolín; Kolín – Pardubice – Brno – Wien/Bratislava – Budapest – Arad – Timişoara – Craiova – Calafat – Vidin – Sofia.

Austria-Slovakia cross-border cooperation

BY DORIS HANZL-WEISS

Since 1989, diverse economic, cultural and social links have developed between Austria and Slovakia. These links have been supported and strengthened by EU-sponsored cross-border cooperation projects, as well as the close proximity of the two countries' capital cities, Vienna and Bratislava.

INTRODUCTION

Austria and Slovakia share a common border of 91 kilometres. While divided by the iron curtain for more than 40 years, diverse economic, cultural and social links have developed since 1989. Today, Austria is one of the main foreign investors in Slovakia and trade between the two countries has grown swiftly over the years (see Hanzl-Weiss, 2017).

Overall, EU-sponsored territorial cooperation between Austria and Slovakia – known as 'Interreg'¹ – takes place under three different strands: (A) cross-border cooperation, (B) transnational cooperation such as Interreg Central Europe and the Interreg Danube Transnational Programme and (C) interregional cooperation (all EU member states). This article provides an overview of cross-border regional cooperation between Austria and Slovakia during the most recent programming period 2014-2020 (short 'Interreg V-A SK-AT').²

The programme area for the Interreg V-A Slovakia-Austria programme consists of Vienna, Lower Austria, North and Middle Burgenland on the Austrian side and Bratislava and Trnava on the Slovak side. The programme area shows strong contrasting parts: there are the two capital cities, Vienna and Bratislava, with strong urban sprawl – the so called 'Twin Cities'³, smaller cities like Trnava, St. Pölten and Eisenstadt, rural areas as well as nature protection areas along the rivers Danube and March/Morava, Neusiedl Lake and the Little Carpathians (see EU, 2015).

The programme encompasses four priority axes:

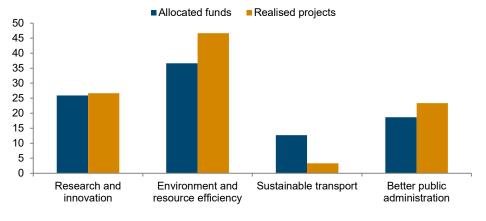
- > Contribution to a smart cross-border region (i.e. research and innovation)
- > Protection of natural and cultural heritage and biodiversity (i.e. environment and resource efficiency)
- Support for sustainable transport solutions
- > Strengthening of cross-border administration and institutional cooperation

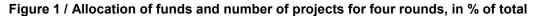
¹ See <u>https://interreg.eu</u>

² 2014-2020 is the fifth period of Interreg and thus it is called Interreg V. As such the legally binding name of the programme in focus is '2014 - 2020 INTERREG V-A Slovakia – Austria'. Information is provided under <u>https://www.skat.eu</u> in German and Slovak language.

³ For a more detailed comparison of Vienna and Bratislava see Hanzl-Weiss, Holzner and Römisch (2018).

Up until now (as the programme is still running), a total of 30 projects have been selected and funded in four rounds and another call is open until end of November.⁴ Most projects were selected in the first round with 18 projects, 8 projects were selected in the second round and less in the most recent rounds (4 in the third one and 3 in the fourth round). EU financial support for the programme amounts to EUR 75.9 million EUR. Most projects (14) have been funded under the priority axis supporting natural and cultural heritage and biodiversity, 8 projects contributed to a smart cross border region, 7 projects were selected for cross-border administration targets and 1 project for sustainable transport solutions. Figure 1 depicts the allocation of funds and the projects which have been implemented so far for the four priority axes. As a next step the projects for the four priority axes are described in more detail.





RESEARCH AND INNOVATION

Cooperation between Austria and Slovakia in the priority axes of smart cross-border regions centres on research and innovation which can be divided into two sub-targets: (1) to strengthen collaboration in the innovation system and (2) to improve higher education and lifelong learning to provide competent and skilled work forces. There were altogether five projects registered under the former target and three under the latter.

Projects that aim to strengthen the collaboration in innovation systems include the 'Dream SK-AT' project which puts the River Danube at the centre of its research, e.g. through establishing and modernising labs. The 'Nareg' project supports waste disposal and separation in border regions while the 'Nutiraging' project carries out research on nutrition and healthy ageing. 'IDARBO' looks at the geographical origin of apricots while 'StruBioMol' seeks to establish a joint research centre for bio-medicine and biotechnology in the border region.

Cooperation projects in higher education include 'CAPSIDE' which helps science capacity building in biomedical research or 'RoboCoop' which aims to arouse interest in MINT subjects⁵ e.g. through

Source: EU (2015), page 79 and https://www.sk-at.eu.

⁴ <u>https://www.sk-at.eu/de/news/aktuelles/332-open-days-beratungstage-6-runde</u> (published August 8, 2019)

⁵ Mathematics, Information technology, Natural sciences and Technology

excursions to automotive companies in the border region. The most recent project 'IFIT 4.0 – Fit for Industry 4.0' promotes skills in the border region.

Cooperation in research and innovation as well as higher education is strongly shaped by the available players and universities in the capital cities. Hence, we look in more detail at R&D patterns in the NUTS2 regions Vienna and Bratislava. Figure 2 shows clear differences between both regions related to R&D. Total R&D expenditure in 2015 in percent of GDP (R&D intensity) was about 3.6% in Vienna and thus at a very high level while it stood at only 1.8% in the Bratislava Region. While the R&D intensity was rather constant in Vienna, R&D intensity in the Bratislava region increased between 2011 and 2015 and declined again in 2016. The peak in 2015 can be explained by the end of the EU-financing period 2007-2013 (with two years extension). Looking at R&D expenditures by sectors (see Figure 2, right panel), the business enterprise sector spends most on R&D in Vienna followed by the higher education sector. In the Bratislava Region, expenditures by the government sector were the highest and peaked in that year while those of the business sector and education sector were nearly the same.

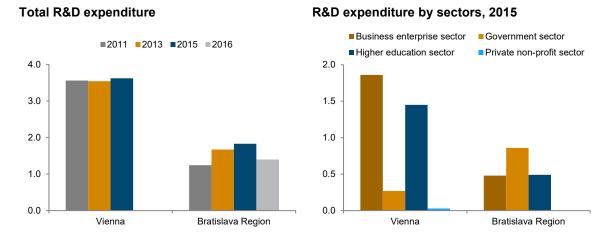
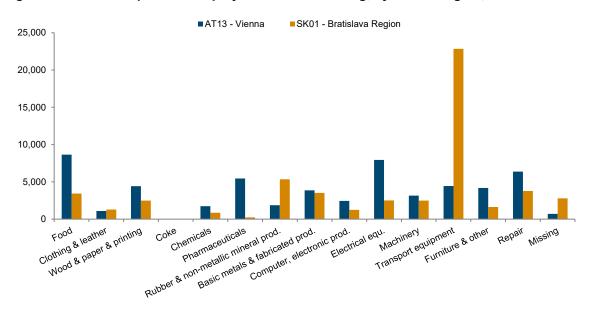


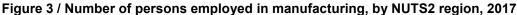
Figure 2 / R&D expenditure in % of GDP and by sectors, by NUTS2 region

Notes: NUTS 2 Region: AT13 – Vienna; SK01 – Bratislava Region. No data available for 2016 for Vienna. Source: Eurostat.

As R&D expenditures were mostly done by the business sector in Vienna (only data for 2015 available) and also in Bratislava in 2016, Figure 3 takes a closer look at the main manufacturing sectors in the two regions by means of employment data. Interestingly, about the same numbers of people are employed in both regions: 56,300 in Vienna compared to 54,500 in the Bratislava Region (year 2017). In Vienna, the sectors with the largest number of people employed are the food sector, the electrical equipment sector, the repair sector and the pharmaceutical sector. Together these four sectors account for 50% of all people employed. In the Bratislava Region, employment is concentrated in the automotive industry with almost 20,800 people working in this segment. This is no surprise as the large Volkswagen Bratislava company is located in this area, right at the Austrian border (Devínska Nová Ves, close to Marchegg), as well as a range of automotive suppliers.⁶

⁶ However, Volkswagen Bratislava is not responsible for business R&D in the region as it does not perform any R&D itself. See Volkswagen Slovakia (2018), Jahresbericht 2017. Available at: https://de.volkswagen.sk/de/unternehmen/fakten.html





Note: Missing data for Vienna (NACE C19, C24) and Bratislava Region (NACE C12, C15, C19, C24, C30). Source: Eurostat.

ENVIRONMENT AND RESOURCE EFFICIENCY

The environment and resource efficiency priority goal can be divided into two sub-targets: (1) to foster natural and cultural heritage valorisation and (2) to foster restoration and management of ecological corridors. Both topics have raised a large number of projects until now: eight projects were selected under the first one and six under the second.

Various natural and cultural heritage valorisation projects support eco-tourism and the building of cycle paths in the programme area ('NemoNet', 'Kultur und Natur am Grünen Band', 'NatureTourNet' and the most recent project 'Auf den Spuren der Legionäre'). Diverse other projects were selected: one project is focused on winegrowing ('Heritage'), one targets the renovation of castles ('Treasures'), another one supports the cooperation between specific villages ('VISIO SK-AT' establishes a joint tourism concept for Hollabrunn and Holič) while another supports cross-border TV-magazines for the Croatian minority population in the region ('DiviTV).

In order to foster restoration and management of ecological corridors, a number of projects are focussed on topics connected to the main rivers in the region: '3EMorava Nature' seeks to strengthen biodiversity and the ecological network in the River Morava region. 'AKK Rivers' sets out to protect and develop river habitats interconnected within the Alpine-Carpathian Corridor. 'PlasticFreeDanube' does research on macro-plastic-waste in and along the River Danube. Biodiversity is also strengthened for butterflies ('Blühlinge') and in the cities ('CITY NATURE'). A most recent project, 'CLIM VINO', aims to reduce chemicals used in wine growing.

As wine growing is targeted in two projects and is generally very important for the programme area, Table 1 presents an overview of main characteristics of vineyards. Overall, 41,000 ha of vineyards are located in the Austrian programme area and 9,790 ha in the Slovak programme area. In both countries, the programme area covers a large share of the country area. The average area per holding is somewhat larger in the Austrian areas compared to Slovak ones and lower in city areas.

			Number of vineyard	Average area per
	Area (in ha)	in % of total area	holdings	holding (in ha)
AT11 - Burgenland	12,311	27.0	3325	3.7
AT12 – Lower Austria	28,212	61.9	8247	3.4
AT13 - Vienna	581	1.3	273	2.1
SK01 - Bratislava Region	2,259	18.7	1753	1.3
SK02 - Western Slovakia	7,531	62.5	3320	2.3

SUSTAINABLE TRANSPORT AND BETTER PUBLIC ADMINISTRATION

Transport infrastructure is quite different along the border and strongly shaped by natural conditions. While Vienna and Bratislava, as well as the Austrian/Slovak/Hungarian border region, are connected by roads and railways on the one hand; there is a lack of border-crossings in the north along the river March/Morava on the other. Only one border crossing for cars is available in the north (Hohenau-Moravský Svätý Ján) (see ÖIR, 2007). Until now, only one project has recently been selected under the priority axes of sustainable transport ('Vysomach').

The priority axes for a better public administration can also be divided into 2 sub-targets: (1) to strengthen the institutional cooperation and (2) to strengthen the cooperation between educational institutions. Six projects were selected under the first topic and just one under the second.

Institutional cooperation is strengthened in a number of projects ('BAUM2020', 'ConnReg SK-AT'). Flood management along the Danube and Morava should be optimised in one project ('ProDaM), health services for new-borns in the border-region improved ('B4B') and healthy and active ageing promoted ('CAA'). Finally, one project establishes research and a museum cooperation on design and innovation ('Design & Innovation')

Cooperation between educational institutions is strengthened through one project: 'BIG SK-AT'. Here, cooperation between education facilities in the SK-AT border region, e.g. for language learning, is strengthened.

CONCLUSIONS

The Interreg V-A Slovakia-Austria programme is still running and has funded 30 projects so far. The programme aims to strengthen regional cross-border cooperation in a number of important fields. Cultural and environmental cooperation, institutional cooperation and innovation cooperation (biomedicine) have received the most support so far while sustainable transport support has lagged behind. Overall, geographical conditions shape the focus of the projects such as the main rivers and the cities in the programme area. In rural areas, tourism projects, cycling paths or winegrowing are

promoted. Main demographic aspects like the ageing of society are targeted as well. The different languages were mentioned in a previous Eurobarometer-survey (see Eurobarometer, 2005, 72% of respondents) as a main obstacle for cross-border cooperation; however, support for language programmes has remained small so far.

REFERENCES

Eurobarometer (2015), Eurobarometer Results: Programme SLOVAKIA-AUSTRIA, December.

EU (2015), Interregy V-A Slovakia-Austria, Description of Cooperation Programme, Draft Final Report, Version 11th June 2015 (PG 26) available at homepage: <u>https://www.sk-at.eu/files/676/Programmdokumente/1860/Programmdokument-Interreg-V-A-Slowakei-Oesterreich-2014-2020.pdf</u>

Hanzl-Weiss, D. (2017), 'Economic Relations Between Austria and Slovakia', *wiiw Monthly Report*, No. 10, October.

Hanzl-Weiss, D., Holzner, M. and R. Römisch (2018), 'Bratislava and Vienna: Twin Cities with big Potentials?', *wiiw Policy Notes and Reports*, September.

ÖIR (2007), Cross-Border Cooperation Programme, Slovakia-Austria 2007-2013, Vienna-Bratislava, November.

Monthly and quarterly statistics for Central, East and Southeast Europe

The monthly and quarterly statistics cover **22 countries** of the CESEE region. The graphical form of presenting statistical data is intended to facilitate the **analysis of short-term macroeconomic developments**. The set of indicators captures trends in the real and monetary sectors of the economy, in the labour market, as well as in the financial and external sectors.

Baseline data and a variety of other monthly and quarterly statistics, **country-specific** definitions of indicators and **methodological information** on particular time series are **available in the wiiw Monthly Database** under: <u>https://data.wiiw.ac.at/monthly-database.html</u>. Users regularly interested in a certain set of indicators may create a personalised query which can then be quickly downloaded for updates each month.

Conventional signs and abbreviations used

%	per cent
ER	exchange rate
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices (for new EU Member States)
LFS	Labour Force Survey
NPISHs	Non-profit institutions serving households
p.a.	per annum
PPI	Producer Price Index
reg.	registered

The following national currencies are used:

ALL	Albanian lek	HRK	Croatian kuna	RON	Romanian leu
BAM	Bosnian convertible mark	HUF	Hungarian forint	RSD	Serbian dinar
BGN	Bulgarian lev	KZT	Kazakh tenge	RUB	Russian rouble
BYN	Belarusian rouble	MKD	Macedonian denar	TRY	Turkish lira
CZK	Czech koruna	PLN	Polish zloty	UAH	Ukrainian hryvnia

EUR euro – national currency for Montenegro, Kosovo and for the euro-area countries Estonia (from January 2011, euro-fixed before), Latvia (from January 2014, euro-fixed before), Lithuania (from January 2015, euro-fixed before), Slovakia (from January 2009, euro-fixed before) and Slovenia (from January 2007, euro-fixed before).

Sources of statistical data: Eurostat, National Statistical Offices, Central Banks and Public Employment Services; wiiw estimates.

Online database access





wiiw Monthly Database



wiiw Annual Database

wiiw FDI Database

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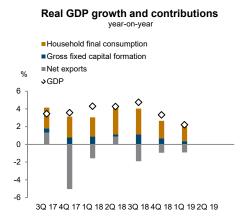
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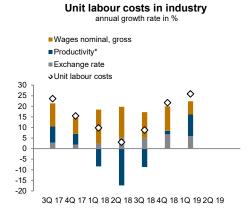
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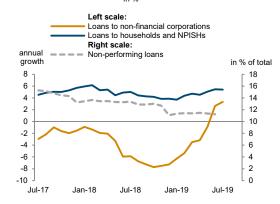
For more information on database access for Members and on Membership conditions, please contact Ms. Barbara Pill (pill@wiiw.ac.at), phone: (+43-1) 533 66 10.

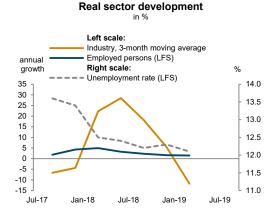
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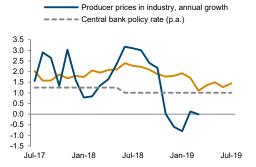
Financial indicators



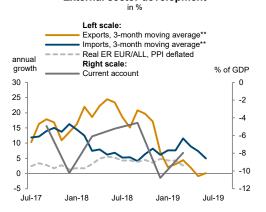


Inflation and policy rate

Consumer prices (HICP), annual growth



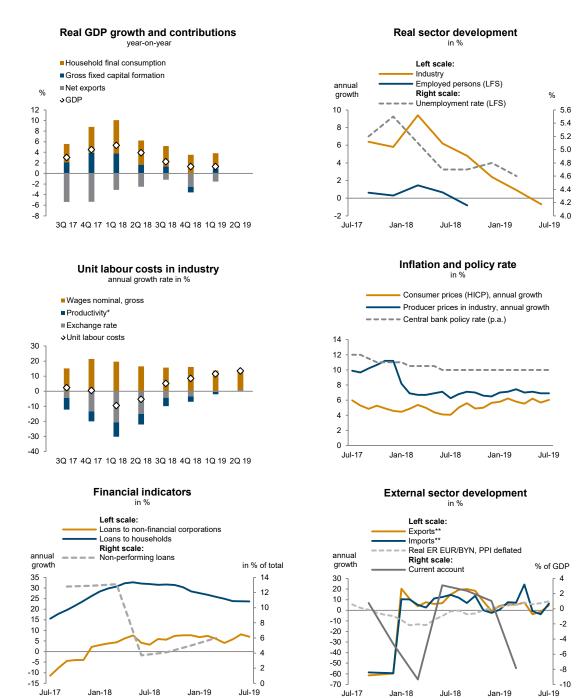
External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

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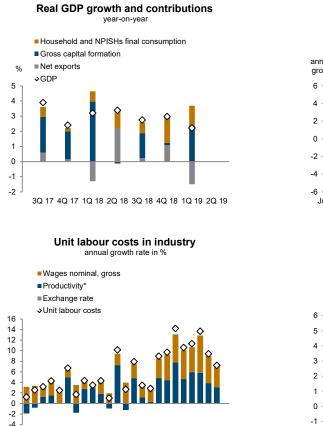
Belarus



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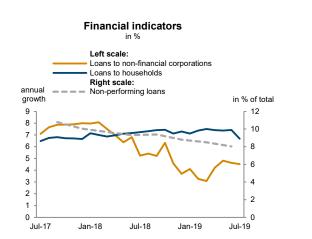
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Bosnia and Herzegovina



Jan-19

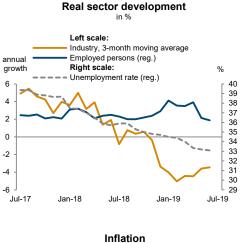
Jul-19



Jul-18

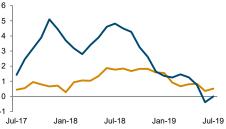
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Jan-18

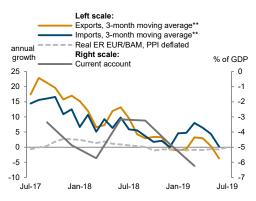




in %



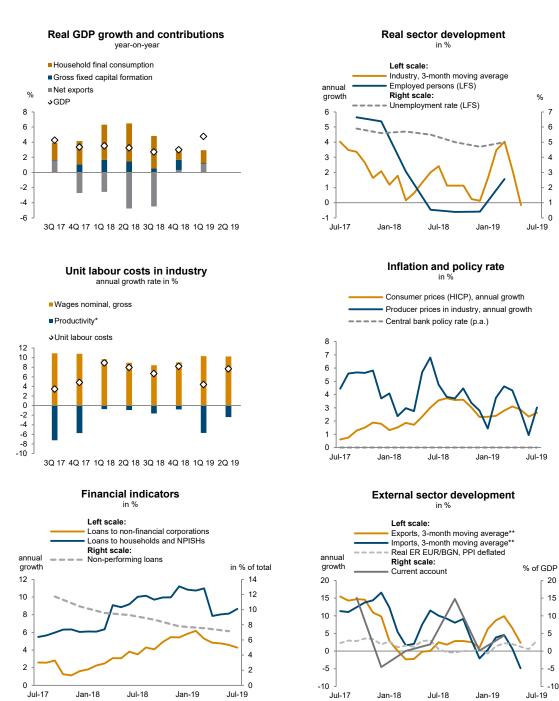
External sector development



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Bulgaria

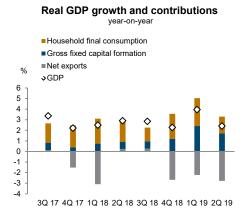


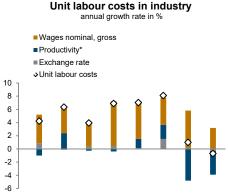
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Jan-18

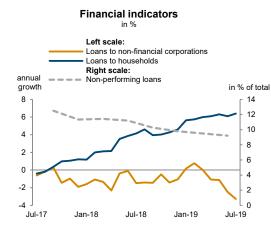
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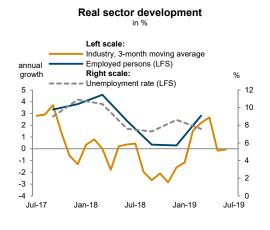
Croatia



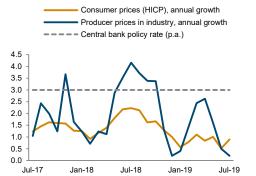




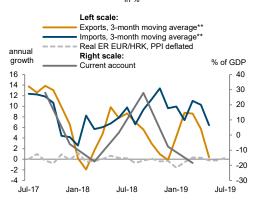




Inflation and policy rate



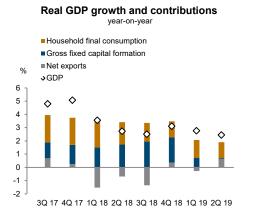
External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

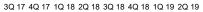
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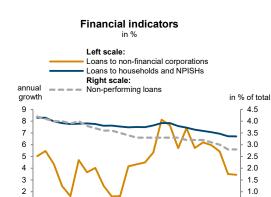
Czech Republic



Unit labour costs in industry annual growth rate in %







Jul-18

Jan-19

1

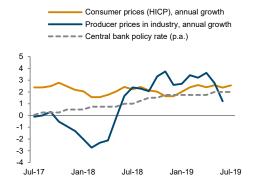
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Jul-17

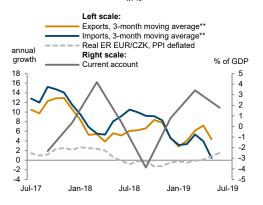
Jan-18



Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Jul-19

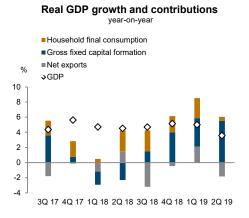
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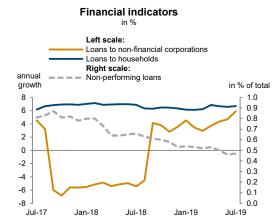
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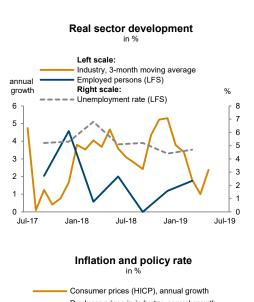
Estonia

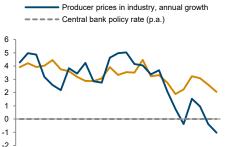
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Jul-18

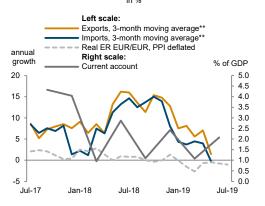
Jul-17

Jan-18

External sector development

Jan-19

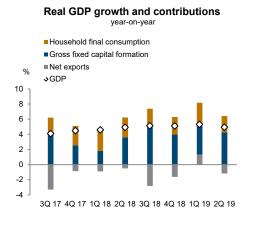
Jul-19



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

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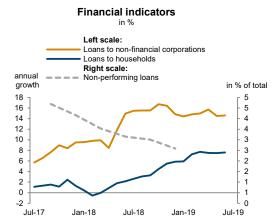
Hungary

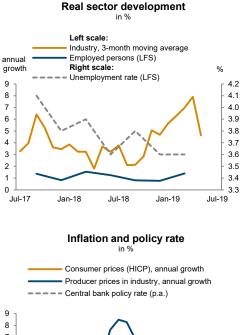


Unit labour costs in industry annual growth rate in %



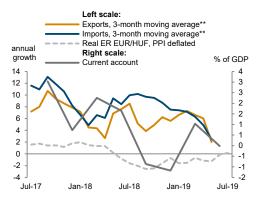
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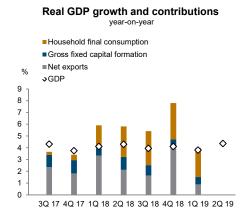
External sector development in %

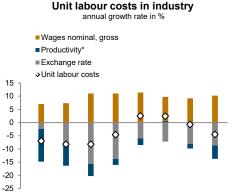


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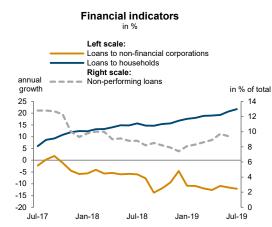
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Kazakhstan

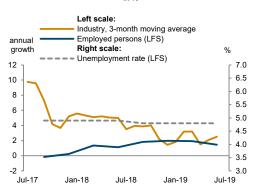




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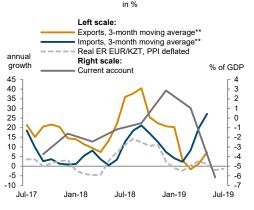
Inflation and policy rate



30

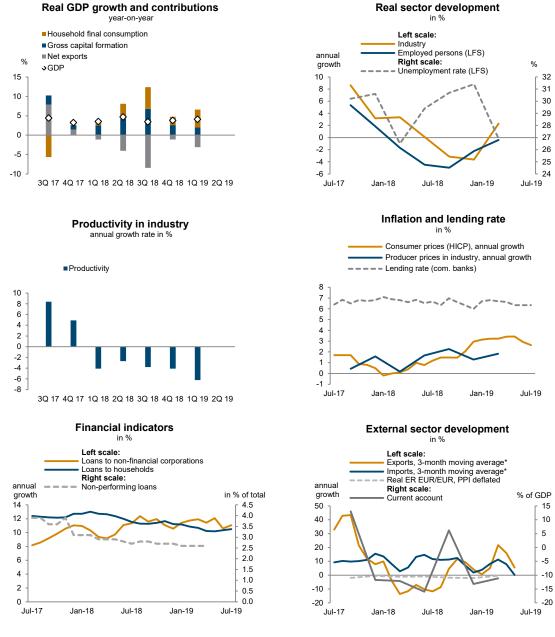


External sector development



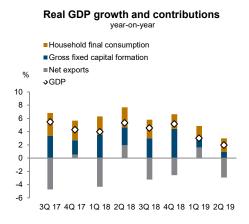
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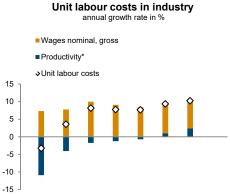
Kosovo



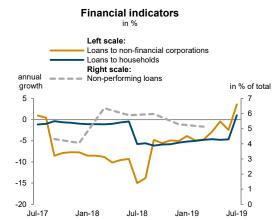
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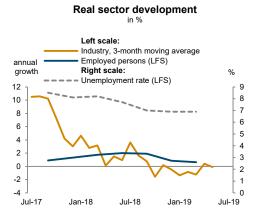
Latvia





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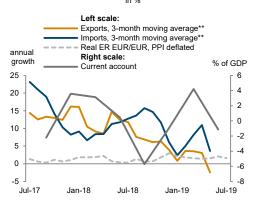


Inflation and policy rate



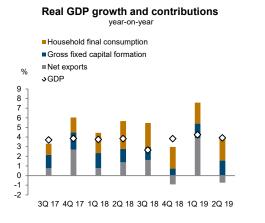


External sector development

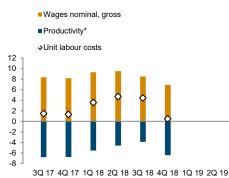


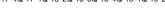
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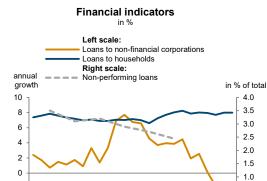
Lithuania



Unit labour costs in industry annual growth rate in %







Jul-18

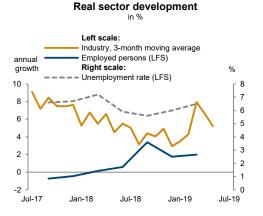
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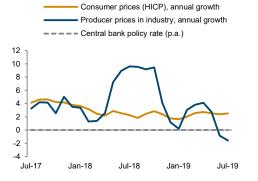
**EUR based.

Jul-17

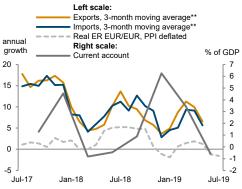
Jan-18



Inflation and policy rate







*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

Jul-19

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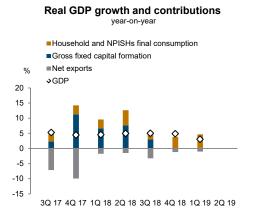
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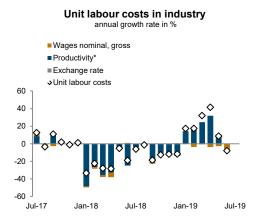
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Jan-19

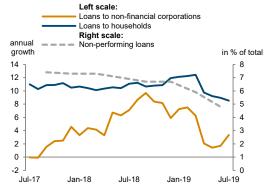
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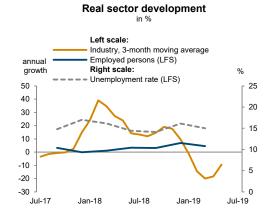
Montenegro



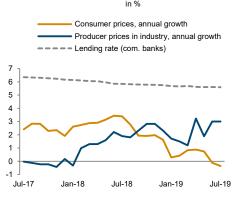




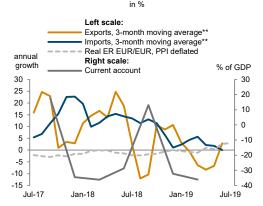




Inflation and lending rate

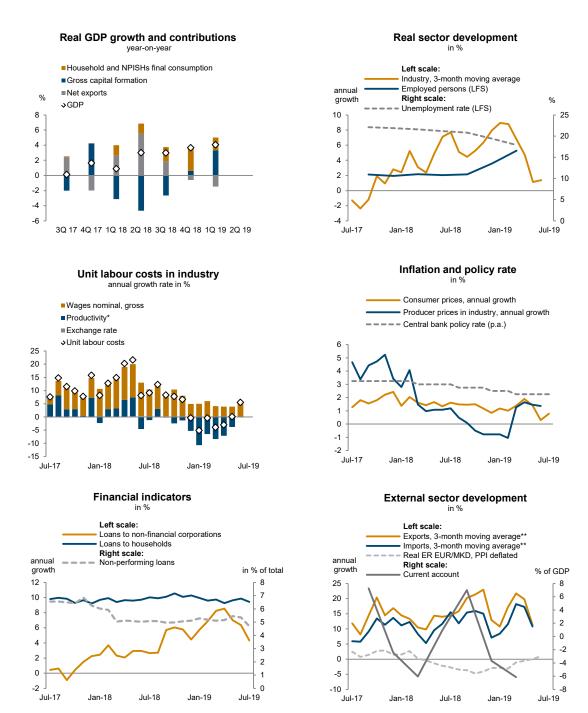


External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

North Macedonia

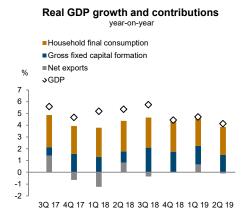


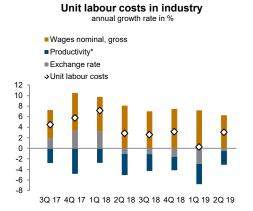
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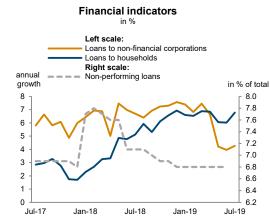
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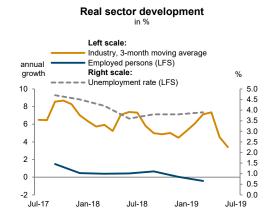
Poland

34

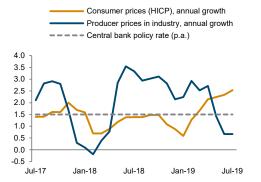




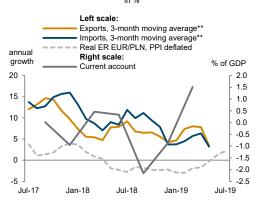




Inflation and policy rate

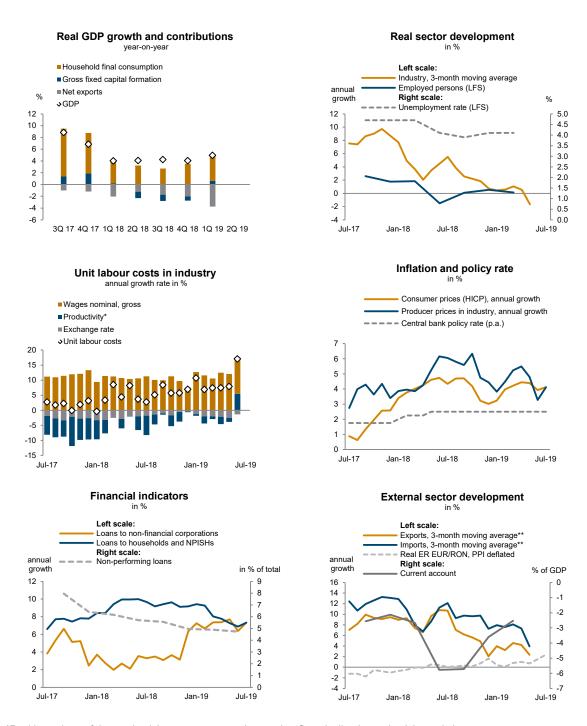


External sector development



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Romania

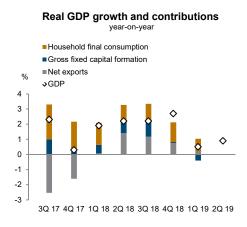


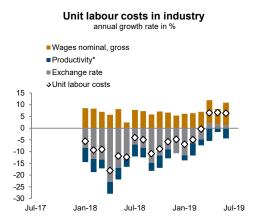
*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

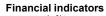
Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

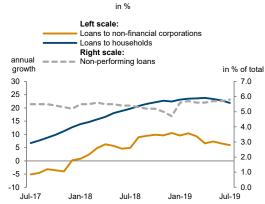
Russia

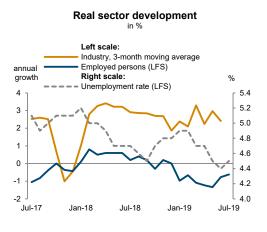
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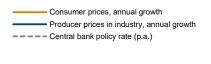








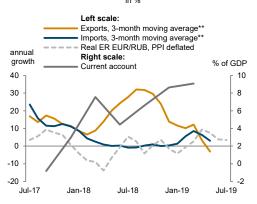
Inflation and policy rate



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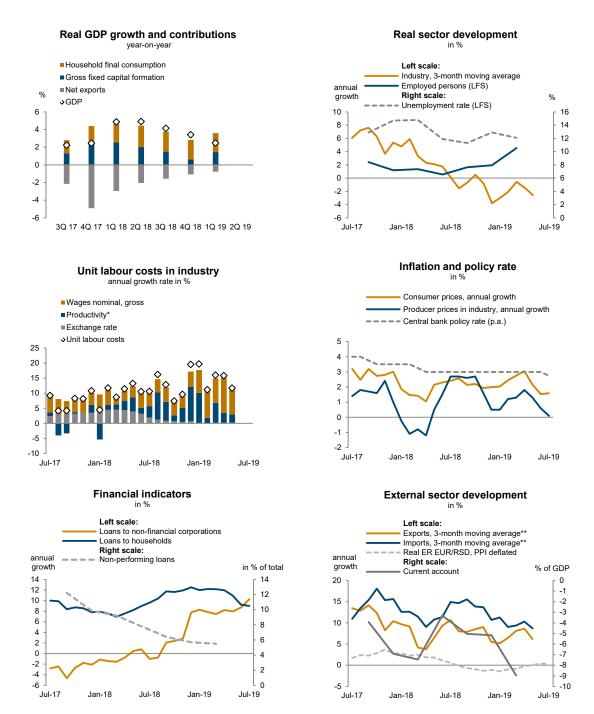


External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

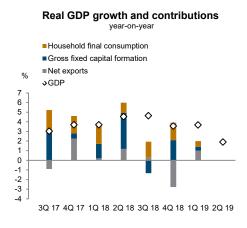
Serbia

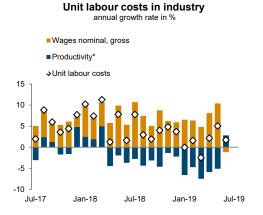


*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

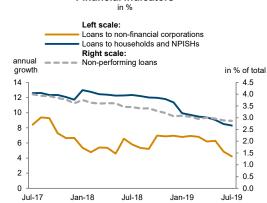
Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

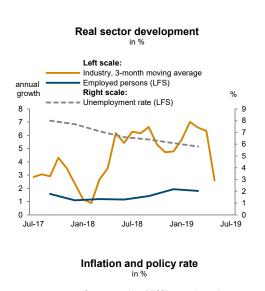
Slovakia

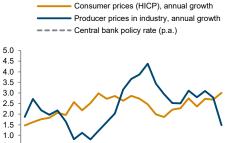






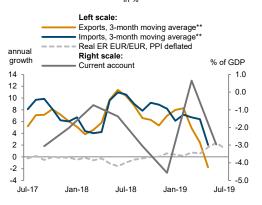








External sector development

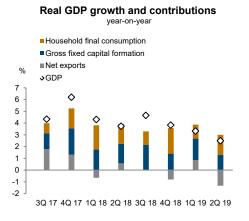


*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

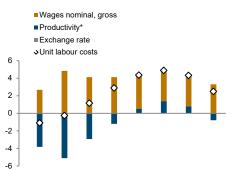
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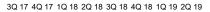
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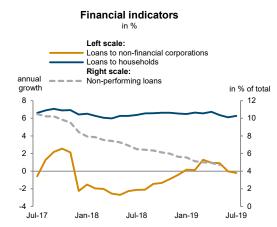
Slovenia

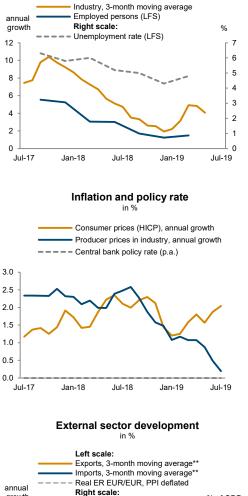












Real sector development

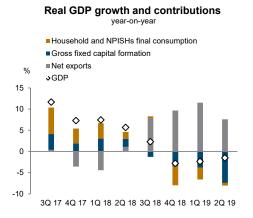
in %

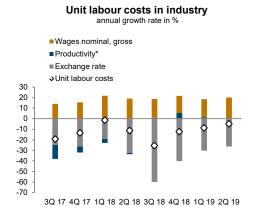
Left scale:



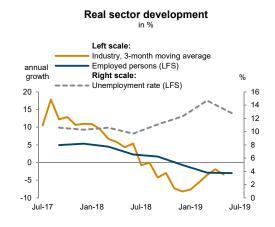
*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Turkey

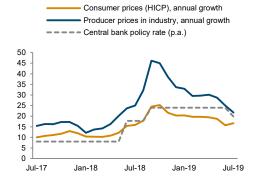




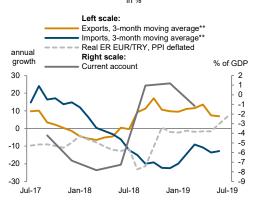
Financial indicators in % Left scale: Loans to non-financial corporations Loans to households Right scale: annual Non-performing loans growth in % of total 45 5.0 40 4.5 35 4.0 30 25 3.5 3.0 20 2.5 15 2.0 10 1.5 5 1.0 0 0.5 -5 0.0 Jul-17 Jan-18 Jul-18 Jan-19 Jul-19



Inflation and policy rate

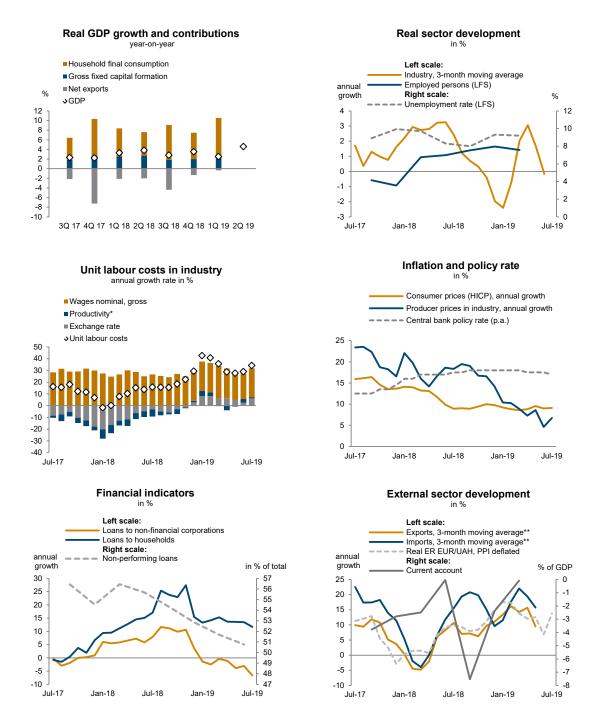


External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Ukraine



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

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