

# Monthly Report

**What are the Potential Consequences of Decertifying the Nuclear Deal with Iran by US President Trump?**

**Austria's Economic Geography Position in Europe**

**Visit thy Neighbour: Compositional Trends in the Austrian Tourism Sector**

**Economic Relations Between Austria and Slovakia**





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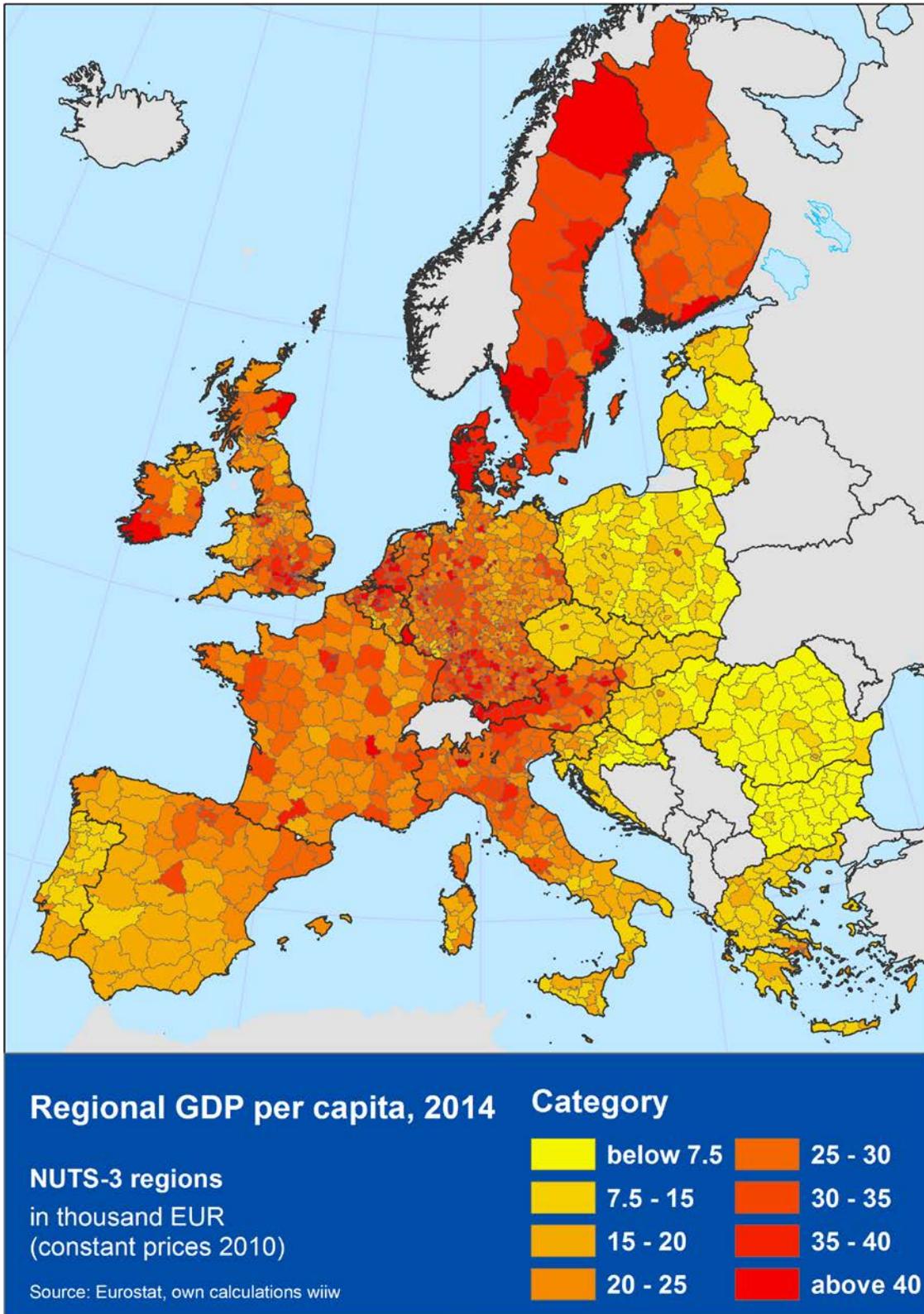


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**Regional GDP per capita in the EU, 2014**



Note: GDP figures are not corrected for differences in price levels across countries. Thus, they express more the 'economic power' rather than the standard of living of/in the regions.

Source: Eurostat, wiiw calculations.

## Opinion Corner: What are the potential consequences of decertifying the nuclear deal with Iran by US President Trump?

ANSWERED BY MAHDI GHODSI

### BACKGROUND

*According to the 2015 Iran Nuclear Agreement Review Act of the US Congress, every 90 days the US president must certify that Iran is complying with the Joint Comprehensive Plan of Action (JCPOA) which was signed on 16 January 2016 by Iran, the P5+1 (five permanent members of the United Nations Security Council – China, France, Russia, United Kingdom, United States – plus Germany) and the European Union. The JCPOA asserts that 'Iran's nuclear program will be exclusively peaceful'.*

*Since his election campaign, Donald Trump has been denouncing the nuclear deal with Iran as a bad deal. In April and July 2017, Mr Trump was unhappy that his administration certified that Iran was not violating its commitments under the watch of the International Atomic Energy Agency (IAEA). Moreover, Nikki Haley, the US ambassador to the UN,<sup>1</sup> and Mr Trump both argue that Iran's ballistic missile test, its activities in the Middle East confronting US allies, and support to the Bashar-al-Assad regime in Syria are not in the spirit of the JCPOA. Besides, not being allowed to inspect the military sites in Iran, Mr Trump was suspecting an underground activity to make a nuclear weapon.*

*According to the deal, judging whether Iran is committed to it must be certified through the regular inspections of the IAEA of the designated nuclear facilities in Iran. While according to international law, the US president cannot withdraw from such an international deal, the Congress Act is a US domestic legal act. Thus, the certification by the US president envisaged by the Congress Act gives the flexibility to the US government to withdraw from the deal whenever freeing Iran to pursue its activities has presumably larger costs than benefits to the US interests, while stepping out of the deal altogether would be considered to be breaching it as clarified by the EU High Representative for Foreign Affairs and Security Policy, Federica Mogherini<sup>2</sup>. However, it seems that Iran has not managed to persuade the new US government of the benefits of staying in the deal, although Iran worked very hard to keep the Europeans staying and abiding by the deal.*

<sup>1</sup> <https://www.cbsnews.com/news/nikki-haley-lays-out-white-houses-argument-to-leave-iran-deal/>

<sup>2</sup> <http://edition.cnn.com/videos/world/2017/09/21/intv-amanpour-federica-mogherini-unga.cnn>

## LOGIC AND CLAIMS

*According to the implementation plan of the JCPOA – Annex V<sup>3</sup>, only sanctions imposed regarding Iran's nuclear activities were to be removed. It is worth noting that in July 2017, some new sanctions were initiated by the US Office of Foreign Assets Control (OFAC) targeting businesses related to Iran's Islamic Revolutionary Guard Corps. These in essence challenge Mr Trump's claims because Iran's other activities are not related to the nuclear deal that is a UN resolution, but they could be separately negotiated.*

*The reasoning that was outlined by the US president and his ambassador to the UN is essentially an expression of the long-standing animosity between Iran and the US since 1979. The Iran hostage crisis, involving American diplomats and citizens that took 444 days to be released, in the early stages of the Islamic Republic, the domestic Green Movement in 2009, and Iran's recent military and advisory support to the Assad regime causing thousands of deaths and the destruction of Syria in addition to the displacement of millions of refugees to Europe and elsewhere were mentioned as key reasons for decertifying the JCPOA deal with Iran. Of course these events were not hidden to the former US Secretary of State John Kerry and the European allies of the US sealing the deal, and also to the Iranians who recently voted for a second term of Mr Rouhani as Iran's president, hoping for better ties with the international community.*

*The strategy to approach Iran at the time of signing the JCPOA was different. On the one side, Iran – fearing a serious economic breakdown – was in pursuit of alleviating sanction pressures, and on the other, the EU and the US were opting for a peaceful but long-term diplomatic solution with Iran. Seemingly, Mr Trump assumes that pressuring Iran and its society more heavily could bring more than negotiations. However, not removing the sanctions appropriately after the deal could easily harm the credibility of US sanctions in general<sup>4</sup> because Iran has not yet violated any clause of the agreement, especially after being inspected by the IAEA.*

*From the Iranian side, especially the hardliners who now have the upper hand, it is perceived that the overall US policy regarding Iran was only a deceptive conspiracy to effectively halt Iran's atomic activity by cementing its sophisticated nuclear facilities and by exporting almost all of its enriched Uranium and heavy water. Thus, the US policy was to postpone and stall Iran's making progress in its nuclear capabilities, which will be rapidly and even more aggressively resumed if JCPOA is breached, as reiterated by the Iranian Foreign Minister and other officials. Interestingly, a similar event occurred in 2002, when George W. Bush accused North Korea of being part of the 'axis of evil'. This was responded by North Korea by ending its suspension of plutonium processing which had been initiated by diplomatic efforts of former US President Jimmy Carter in 1993 and 1994 during the presidency of Bill Clinton. By now North Korea has developed the capabilities of testing even a hydrogen bomb.*

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<sup>3</sup> <https://www.state.gov/e/eb/tfs/spi/iran/jcpoa/>

<sup>4</sup> <https://www.foreignaffairs.com/articles/venezuela/2017-09-08/when-it-time-end-sanctions-programs>

## ECONOMIC OUTCOMES

*Since the very first stages of negotiations between Iran and the P5+1, international companies have paid careful attention to Iran's potential as a large market of 80 million inhabitants with a substantial level of education and an enormous diversity of natural resources. Not only businesses but also economic experts and international organisations such as the International Monetary Fund and the World Bank have put efforts into producing economic reports on Iran to provide insights into the potentials for Iran's future.*

*Iran's crude oil production increased significantly from 3.3 million barrels per day (mbpd) before the deal to 4.6 mbpd in June 2017, leading to larger government revenues and economic growth. Its crude oil exports reached 2.6 mbpd (mainly to Asia and Europe), and its share in OPEC has expanded thanks to its diplomatic efforts. These achievements could be seemingly facing upcoming obstacles.*

*The moderate government of President Rouhani has been promoting the inflow of foreign direct investment (FDI) by facilitating the legal environment for the investors. The new Iranian Petroleum Contract (IPC) encouraged Total to make an investment worth USD 2 billion<sup>5</sup>, with an own share of 50.1%. This gas extraction investment in Phase 11 of South Pars (in Khuzestan) not only brings new technology to Iran and is expected to produce 2 billion cubic feet of gas per day by 2021, but will also likely benefit Total for the next 20 years. Unit International is another large European company signing a contract worth USD 7 billion on an oil drilling and extraction project in Iran. These (and other) investments were pledged in 2016 and partly realised in 2017.*

*All this happened while Iranian hardliners heavily criticised Mr Rouhani and tried to block the legislation by comparing the IPC with the concessions that the Qajar dynasty gave to the British oil companies in return for their expensive Europe trips. It is worth mentioning here that those concessions were withdrawn after the nationalisation of oil by the first democratically elected Iranian Prime Minister, Mohammad Mosaddegh, who was overthrown in a CIA-orchestrated coup d'état in 1953.*

*According to the fDiMarkets database by the Financial Times, since the JCPOA deal was signed, businesses rushed in to pledge investment in Iran with 67 projects worth USD 16.4 billion in 2016 alone, among which there were no projects by the US companies. However, after Mr Trump was elected, fear of upcoming new sanctions by the incoming US administration led to a sharp decline in pledged foreign investment in Iran. In 2017, only 16 investment projects worth USD 2 billion have been pledged so far, indicating the uncertainty about the stability of the Iranian market in the future. Moreover, instability in the Iranian exchange market and the depreciation of the Iranian currency in the days prior to Mr Trump's announcement to decertify the deal point to the widespread perceptions of instability of the Iranian economy in the future.*

*Indeed, JCPOA is a multilateral deal endorsed by the UN Security Council. Even if it is still enforced by its signatories other than the US, the pressure of penalising the companies doing business with Iran and pushing them away from doing business with the US could easily break their relations with Iran. Decertifying the deal by Mr Trump might potentially halt all the European investments, unless a separate*

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<sup>5</sup> <http://www.total.com/en/media/news/press-releases/iran-total-and-nioc-sign-contract-development-phase-11-giant-south-pars-gas-field>

*strategy by the EU is planned. More importantly, it could easily harm the moderate and reformist political forces in Iran who after a long time managed to improve the economy with their expertise.*

## **CONCLUDING REMARKS**

*The US Congress now has 60 days to examine what Mr Trump did not certify. EU countries, Russia and China have expressed their support for the JCPOA deal. In fact, under the leadership of Ms Mogherini, the signatories of the agreement are expected to find a solution within one month in a political mechanism to counter the breach to it. On their part, Iranians understood the benefits that further international engagements might bring them. Most importantly, engagement with the international community instead of isolation could evolve a society, country, and a government through a reform process. For instance, only membership in the WTO would ensure transparency in the implementation of trade policy measures and reduction of corruption at the border, something that Iran vitally needs. Connection to SWIFT transactions is another example of integration into the global economy, which could extensively reduce the money laundering activities in Iran. Iran accepted international law by signing the JCPOA, a liability which makes Iran more reliable in further engagements. By cancelling and nullifying this deal, Iran would be free to act as it ever desires.*

# Austria's economic geography position in Europe

BY ROMAN RÖMISCH

## INTRODUCTION

It is a casual observation that Austria likes to see itself to be located in the centre of Europe. This is enshrined prominently in the second verse of the Austrian national anthem<sup>1</sup>, where it says '*Liegst dem Erdteil du inmitten*'. Interestingly enough, a literal translation of this line would be '*You lie in the middle of the continent*', while the semantically correct translation should be '*You are (in) the core of the continent*'. For most people this difference is of no importance, for economic geography however it matters a lot.

Here, being in the core means being right at the centre of economic activity, while being in the middle means being somewhere on the way between the centre and the periphery of the area of economic activity (in this context the EU). According to economic theory it makes a huge difference whether or not one is located in the core. Usually core regions are associated with being economically strong regions with high level of economic development, offering favourable conditions for firms (high demand for goods, good supply with labour) as well as people (high wages, high demand for labour). In contrast, more peripheral regions are considered to have economic disadvantages, including low income levels and less attractiveness for both firms and workers. Thus, in a nutshell, it is important to know whether the own region is in the centre, in the periphery or somewhere in the middle of both.

## IS AUSTRIA IN THE ECONOMIC CENTRE OF EUROPE?

To analyse this question for Austria, the article makes use of a novel data set on the accessibility of European NUTS-3 regions. The data source is the ESPON<sup>2</sup> TRACC project<sup>3</sup> that estimated various accessibility indicators for the EU NUTS-3 regions using detailed information on European street networks. Although these indicators only have been estimated for the year 2011, their number as well as their level of detail make them a very interesting source of information for any regional economic analysis.

For our purposes one specific accessibility indicator was chosen, namely, the GDP of the area that is accessible from an EU NUTS-3 region within allowed lorry driving time (13 hours). That is, for every EU NUTS-3 region this indicator sums up the GDP of those NUTS-3 regions that lie within these 13 hours lorry travel time from the region in question. Notably, the respective region's own GDP is not included.

<sup>1</sup> The year 2017 marks the 70<sup>th</sup> birthday of the national anthem. It was formally introduced on 25 February 1947.

<sup>2</sup> European Spatial Observatory Network.

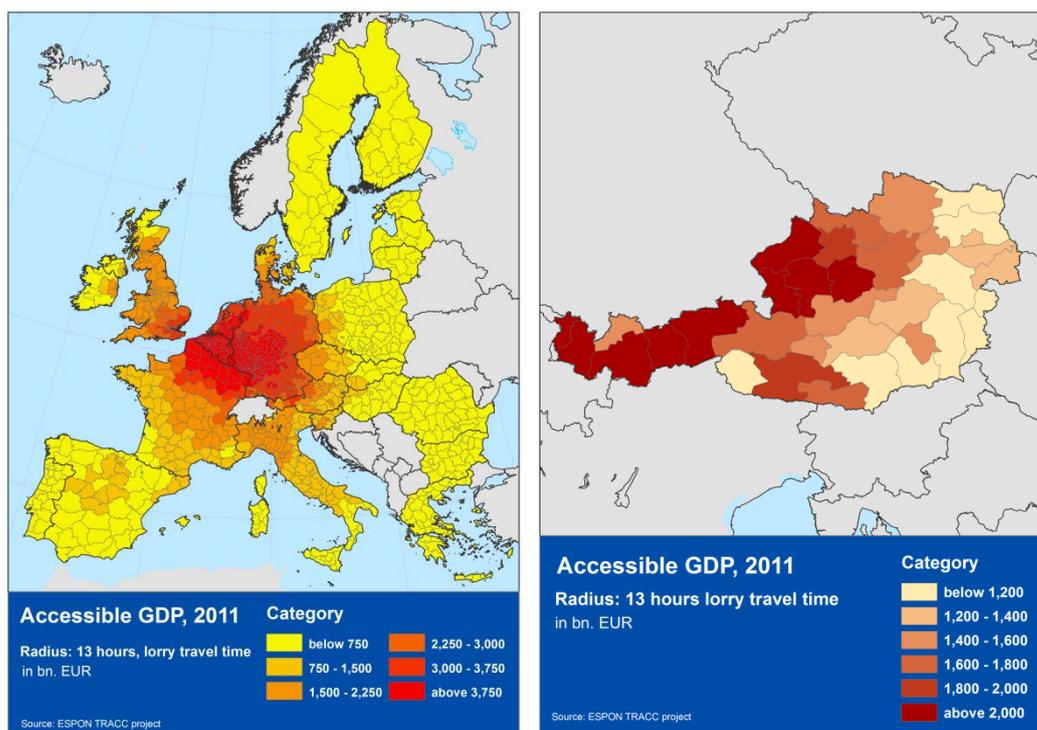
<sup>3</sup> TRACC – TRansport ACCessibility at regional/local scale and patterns in Europe;  
[http://www.espon.eu/main/Menu\\_Projects/Menu\\_ESPON2013Projects/Menu\\_AppliedResearch/tracc.html](http://www.espon.eu/main/Menu_Projects/Menu_ESPON2013Projects/Menu_AppliedResearch/tracc.html)

Thus, it measures not only the accessibility but also the potential market for any NUTS-3 region, with both being assumed to be higher the higher the indicator value is. Based on these properties, the indicator allows identifying those regions and countries being in the economic centre of Europe.

To illustrate Austria's accessibility in comparison with other EU countries and also to show the differences in accessibility of Austrian NUTS-3 regions, Figure 1 shows the indicator both at the European level (left map) and specifically at the Austrian level (right map). For the EU, a strong core-periphery pattern of accessibility or market potential is evident. On the one side there are Germany, Belgium, the Netherlands, Luxembourg, North-Eastern regions of France as well as the South East of England that form the economic core of Europe, based on their strong economies, geographic proximity and their well-developed infrastructure. On the other side there are the more peripheral countries and regions of Southern and Eastern Europe, which, on the basis of their comparatively weaker economies, less developed infrastructure (especially in Eastern Europe) and geographically peripheral location, show a much lower economic accessibility and market potential than the European core.

In the European comparison, Austria is situated somewhere in the middle of the European countries, with a lower accessibility than the core countries but a higher one if compared to the more Eastern or Southern countries. Regarding differences in accessibility within Austria, the map shows a distinct West-East pattern. The Western NUTS-3 regions in Austria have, due to their geographical proximity and good transport links to Germany, Switzerland and Northern Italy, a much higher accessibility and market potential than their Eastern and South-Eastern counterparts, which geographically are much closer to Eastern and South-Eastern Europe.

**Figure 1 / Accessibility of European and Austrian NUTS-3 regions, 2011**

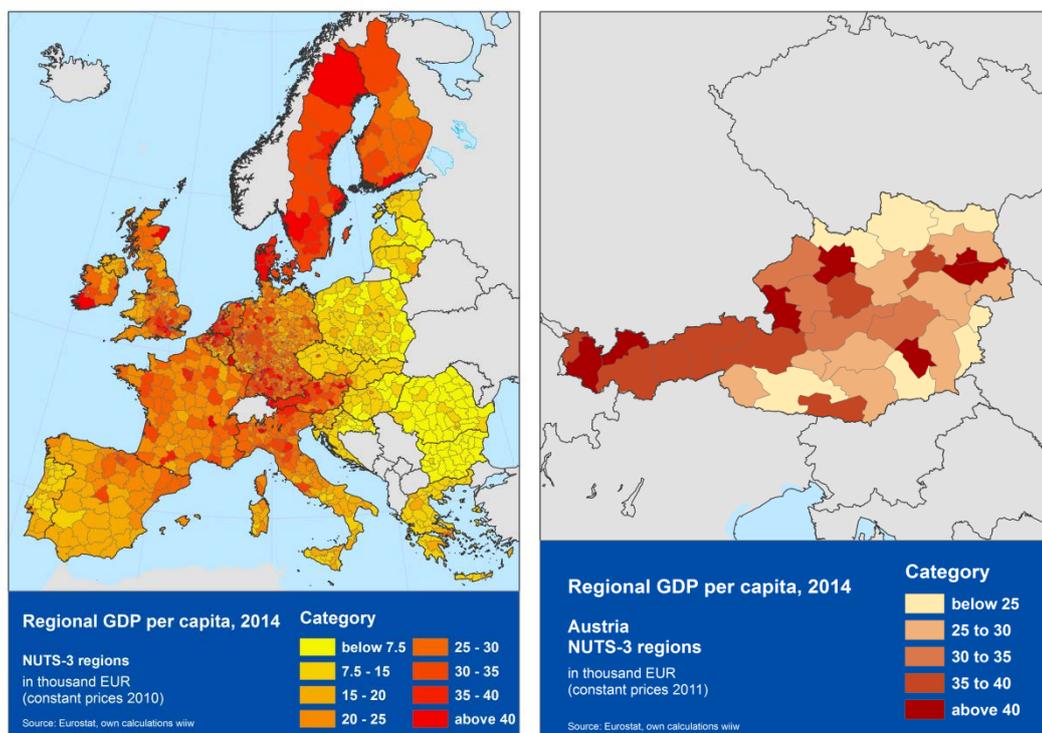


Source: ESPON TRACC project.

## ACCESSIBILITY AND INCOME LEVEL

Thus, the response to the question above is that, overall, Austria's economic location within Europe is not necessarily in the core but instead somewhere in the middle. One follow-up question that arises thereof is whether the accessibility of Austrian (and other) regions is an important factor determining their income level and growth rate. To give a quick answer to this, the relationship between the above accessibility indicator and the NUTS-3 regions' income level (in 2014) and growth of GDP per capita (in the period 2000-2014) is analysed. Starting with the income level, Figure 2 shows the NUTS-3 regions' GDP per capita in the year 2014, both at the European and the Austrian scale<sup>4</sup>.

**Figure 2 / Regional GDP per capita, 2014**



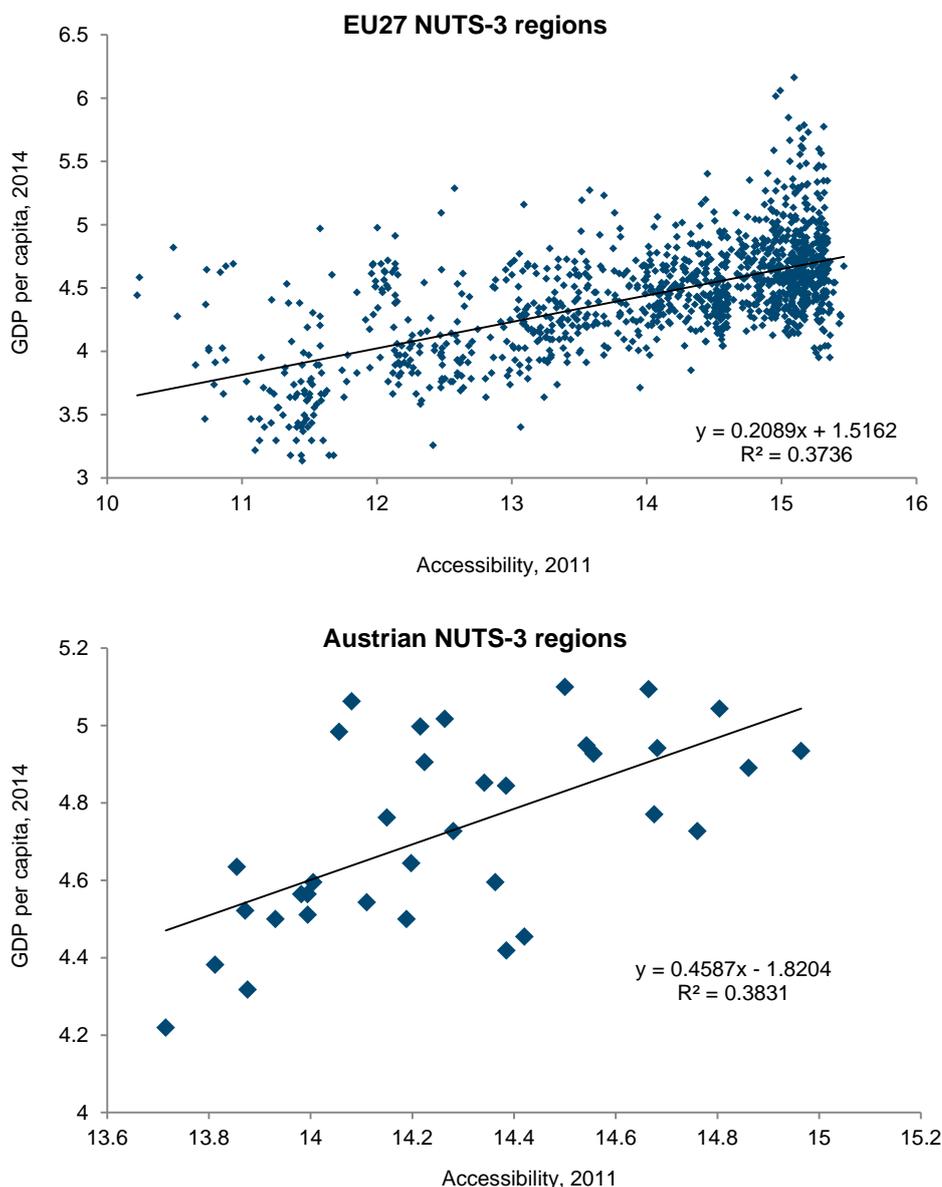
Source: Eurostat, own calculations.

Comparing the geographic distribution of regional GDP at the European level (left map in Figure 2) with the regional accessibility pattern (left map in Figure 1), similarities between them, such as the strong core-periphery pattern, are immediately evident. A notable difference between the patterns in the two maps exists for the Scandinavian countries, which have high GDP per capita levels but low levels of accessibility. Overall, however, the correlation between accessibility and GDP level seems to be high for European regions. A similar picture emerges for Austrian regions when the respective maps (right maps in Figures 1 and 2) are compared. They show a quite distinct West-East pattern, with the Western Austrian regions generally having higher GDP per capita levels and higher accessibility than the Eastern Austrian regions (Vienna is an obvious exception). The correlation between accessibility and GDP level

<sup>4</sup> GDP figures are not corrected for differences in price levels across countries. Thus, they express more the 'economic power' rather than the standard of living of/in the regions.

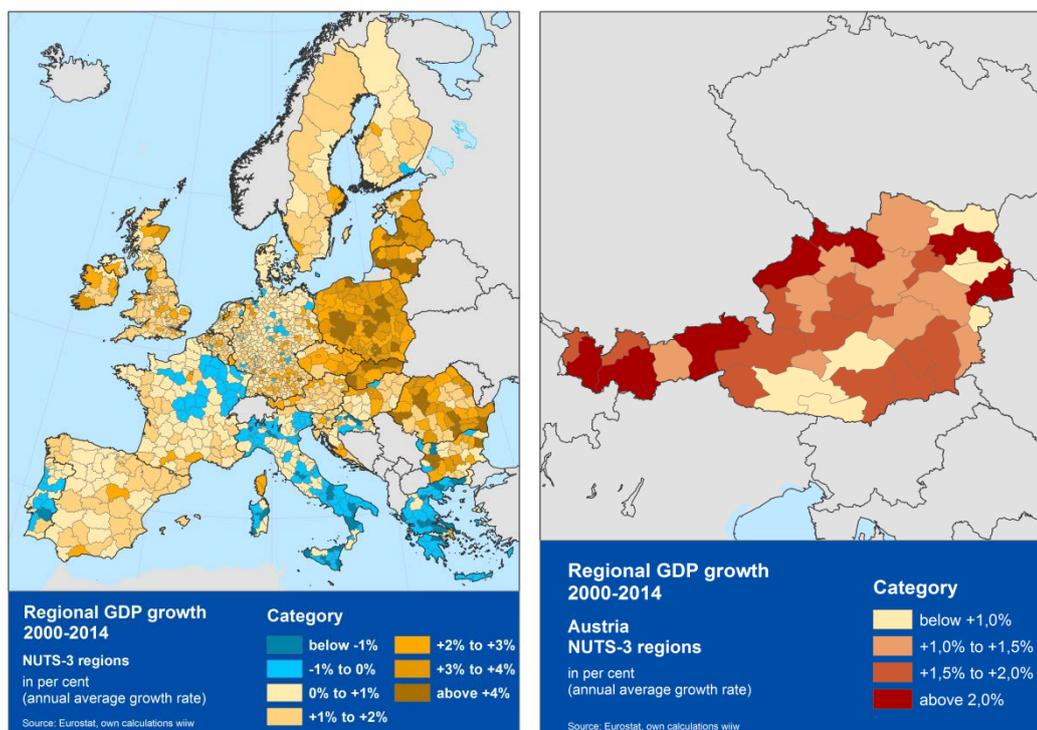
is further illustrated in Figure 3, showing the respective scatter plots for the European NUTS-3 regions in general and the Austrian regions in specific.

**Figure 3 / Correlation between GDP per capita and accessibility level**



Source: ESPON TRACC project, Eurostat, own calculations.

Given the theoretical considerations above, not only a relatively strong correlation but also some form of causality can be assumed to be present between the regions' accessibility and GDP per capita levels. Thus, being located in the core, having access to a large market as well as benefiting from spillovers of high-income neighbouring regions makes it more likely for a region to show a high level of economic development compared to more peripheral regions. At the same time though, the example of the Scandinavian regions indicates that accessibility is just one of the factors determining the regions' level of economic development and that a disadvantaged geographic location can be offset by factors such as high levels of technology and education, good governance and institutions etc.

**Figure 4 / Regional GDP per capita growth, 2000-2014**

Source: Eurostat, own calculations.

## ACCESSIBILITY AND ECONOMIC GROWTH

To analyse the relationship between the NUTS-3 regions' accessibility and GDP per capita growth, a more rigorous spatial econometric approach is applied<sup>5</sup>. For this the regions' annual average GDP per capita growth rate is regressed against a number of variables that potentially (based on economic theory) may explain the regions' growth. Besides the accessibility indicator these variables are: a) the initial level of GDP per capita (in the year 2000), to account for convergence effects; b) the initial production structure, i.e. the shares of agriculture, industry and services in the regions' gross value added; c) the changes in production structure; d) population growth; and e) the level of technology (represented by the number of patent application per capita).<sup>6</sup>

The estimations are done for all EU NUTS-3 regions<sup>7</sup> as well as for the Austrian regions separately. Furthermore, to analyse whether the economic and financial crisis in 2008/09 did affect regional growth patterns, the estimations cover the full period 2000-2014, but also the sub-periods 2000-2008 and 2008-2014. The results of the analysis are shown in Table 1.

<sup>5</sup> For the estimation a spatial autoregressive model of the form:  $y = \rho W y + X \beta + \varepsilon$  is applied. In this model  $y$  represents regional growth of GDP per capita;  $W$  is a row-normalised spatial weighting matrix, and  $W y$  is the spatially weighted GDP growth of all neighbouring regions to account for regional spillovers;  $X$  is a matrix of explanatory variables.

<sup>6</sup> All variables, except the change in shares, are in logarithmic form.

<sup>7</sup> Excluding island regions as well as Croatian regions, as for the latter time series were too short.

**Table 1 / Explaining the growth in regional GDP per capita**

	All EU NUTS-3 regions			Austrian NUTS-3 regions		
	2000-2008	2008-2014	2000-2014	2000-2008	2008-2014	2000-2014
Initial GDP	<b>-0.917<sup>***</sup></b> (0.1)	<b>-0.433<sup>***</sup></b> (0.099)	<b>-0.665<sup>***</sup></b> (0.067)	<b>-2.093<sup>**</sup></b> (1.064)	-0.232 (1.198)	-1.282 (0.819)
Population growth	<b>-0.160<sup>***</sup></b> (0.052)	<b>-0.173<sup>***</sup></b> (0.053)	<b>-0.126<sup>***</sup></b> (0.039)	-0.327 (0.4)	0.073 (0.583)	-0.078 (0.322)
Agricultural share	<b>-0.117<sup>***</sup></b> (0.025)	<b>-0.082<sup>***</sup></b> (0.024)	<b>-0.090<sup>***</sup></b> (0.016)	-0.122 (0.366)	0.268 (0.411)	0.083 (0.303)
Industry share	<b>0.395<sup>***</sup></b> (0.072)	<b>0.117<sup>*</sup></b> (0.064)	<b>0.226<sup>***</sup></b> (0.048)	1.032 (0.837)	0.136 (0.918)	0.597 (0.677)
Services share	<b>0.903<sup>***</sup></b> (0.158)	-0.077 (0.146)	<b>0.326<sup>***</sup></b> (0.107)	<b>2.523<sup>*</sup></b> (1.351)	0.433 (1.09)	1.523 (0.931)
Agricultural share – change	0.008 (0.019)	<b>-0.158<sup>***</sup></b> (0.031)	<b>0.039<sup>***</sup></b> (0.012)	-0.187 (0.436)	0.232 (0.276)	0.083 (0.179)
Industry share – change	<b>0.084<sup>***</sup></b> (0.009)	<b>0.154<sup>***</sup></b> (0.011)	<b>0.069<sup>***</sup></b> (0.005)	<b>0.083<sup>***</sup></b> (0.009)	<b>0.153<sup>***</sup></b> (0.011)	<b>0.068<sup>***</sup></b> (0.005)
Services share – change	0.006 (0.014)	0.011 (0.015)	0.033 <sup>***</sup> (0.008)	-0.003 (0.108)	-0.033 (0.163)	0.018 (0.064)
<b>Accessibility</b>	<b>-0.175<sup>***</sup></b> (0.047)	<b>0.168<sup>***</sup></b> (0.038)	0.008 (0.029)	0.017 (0.781)	0.026 (0.844)	0.073 (0.572)
Technology	<b>0.077<sup>**</sup></b> (0.036)	0.033 (0.035)	<b>0.051<sup>**</sup></b> (0.024)	0.501 (0.587)	-0.348 (0.563)	0.11 (0.406)
Constant	8.289 <sup>***</sup> (1.333)	1.723 (1.182)	5.072 <sup>***</sup> (0.863)	8.397 <sup>***</sup> (1.346)	2.129 <sup>*</sup> (1.2)	5.270 <sup>***</sup> (0.877)
Observations	1,249	1,253	1,249	1,249	1,253	1,249
Log Likelihood	-1,899.14	-1,908.82	-1,412.64	-1,897.26	-1,904.36	-1,409.97
sigma <sup>2</sup>	1.188	1.142	0.532	1.184	1.134	0.53
Akaike Inf. Crit.	3,824.29	3,843.63	2,851.27	3,840.52	3,854.71	2,865.95

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Source: Own estimations.

For all EU NUTS-3 regions, the results suggest a quite particular relationship between regional accessibility and regional GDP per capita growth. Over the boom period 2000-2008 the econometric analysis gave a negative relationship between regional accessibility and growth. Thus, ceteris paribus, EU NUTS-3 regions with lower accessibility tended to grow faster than regions with higher accessibility. To some extent this may reflect the catching-up process of the regions in the Central and Eastern European (CEE) countries, as, in general, they grew strongly ahead of all other regions of the EU in the period 2000-2008. An additional explanation can be found taking into consideration that the catching-up process of the CEE NUTS-3 regions should already be captured by the initial level of GDP per capita in the regressions. From this, the negative relation between accessibility and growth could indicate that during boom periods economic growth tends to spread out more easily from the core to the periphery (e.g. through a better investment climate and higher marginal returns on investment in more peripheral areas, or through building up production capacities in more remote regions, making use of generally lower wages and other costs), thus supporting the convergence of EU regions.

In contrast, the results for the period after the economic crisis (2008-2014) show exactly the opposite, i.e. a positive relationship between accessibility and regional growth. Thus, during the phase of economic decline or stagnation, ceteris paribus, the regions closer to the European economic core grew

by more (shrank by less) than comparable but more peripheral regions. This indicates that more central regions could be more resilient to shocks than other regions. Assumably, being surrounded by economically strong regions has stabilising effects on the own economy, e.g. through relatively stable supply and demand patterns.

As a result of these two opposite trends over the two sub-periods 2000-2008 and 2008-2014, no clear relationship between accessibility and regions' growth is found for the full period 2000-2014. As far as the other explanatory variables are concerned, one result worth noting is the strong positive correlation between the share of industry in the regions' production structure and economic growth. The same holds for the change in the economic structure, i.e. an increase in the share of industry in total regional production. Both results show the importance of a solid industrial base for the economic development of the EU regions. Other results indicate inter alia a convergence process within the EU NUTS-3 regions in terms of economic development, with this process being much more pronounced before the crisis than thereafter. Additionally, the results also point towards a dampening effect of a high share of agriculture on regional growth, while technology seems to have weak but positive effects.

As far as Austria is concerned, the analysis shows no systematic relationship between economic growth and the level of accessibility of Austrian NUTS-3 regions. More generally, the results for Austria point towards highly region-specific factors of growth. Except for the positive relation between the change in industry share and economic growth, no other variable shows any effect on regional growth. With respect to accessibility, this means e.g. that in Austria both, regions with low accessibility and high growth (such as Northern Burgenland) as well as regions with low accessibility and low growth (like Weinviertel) are found.

## CONCLUSIONS

Coming back to the initial question, the answer is that Austria is in the middle but not in the centre of Europe. This is well demonstrated by the West-East pattern of regional GDP per capita, where the regions being closer to Germany have much higher income levels than those Austrian regions being closer to Eastern Europe. Interestingly, the analysis showed that the EU regions' geographic position has ambiguous effects on their economic growth depending on the business cycle. While remoteness did not matter in times of an upswing, being closer to the centre provided some resilience during the crisis years. Even though no systematic short-run relationship was observed between accessibility and growth in the Austrian regions, a long-run relationship cannot be excluded given the positive relation between income levels and accessibility. One immediate conclusion is that neighbours matter. Thus, while the Western regions in Austria can rely on economically strong regions in Italy, Switzerland and Germany, rapid economic growth in the Eastern neighbours is of high interest to the Eastern regions of Austria, as they are likely to benefit from the economic development of the Czech, Slovak, Hungarian and Slovenian regions. This is a point that should not be forgotten when it comes to negotiating the post-2020 EU budget.

# Visit thy neighbour: Compositional trends in the Austrian tourism sector

BY JULIA GRÜBLER

The tourism sector constitutes a core industry of the Austrian economy.<sup>1</sup> Austria's trade surplus for tourism services climbed to a high of EUR 8.8 billion in 2016. Germans continue to be the most important group of foreign tourists; yet, their importance is decreasing while positive trends are observable for tourists from countries in Central, East and Southeast Europe (CESEE), in particular from Austria's immediate neighbours.

## OVERNIGHT STAYS PEAKING IN 2017

This year's summer season concluded with a record high of 56 million overnight stays in Austria during the period May to August 2017 (Statistik Austria, 2017), with more than 70% accounted for by non-resident tourists. Compared to the same period of last year, this constitutes an increase of overnight stays of 3.2%, driven primarily by foreign tourists.

This is good news for one of the most important sectors of the economy, contributing roughly 16% to Austria's GDP (Table 1) and providing 337 thousand<sup>2</sup> jobs (Figure 1). Thereof, about one third can be attributed to hotels and other accommodations, amounting to 20,619 in Austria in 2016 (Eurostat, 2017).

**Table 1 / Economic importance of the Austrian tourism and leisure sector**

Value added in million EUR	2000	2005	2010	2015 <sup>1)</sup>	2016 <sup>2)</sup>
Tourism <sup>3)</sup>	17,980	22,070	26,210	29,703	30,911
Leisure activities <sup>4)</sup>	15,237	17,821	21,109	24,732	25,549
<b>Total</b>	<b>33,217</b>	<b>39,892</b>	<b>47,319</b>	<b>54,436</b>	<b>56,459</b>

Contribution to GDP in %	2000	2005	2010	2015 <sup>1)</sup>	2016 <sup>2)</sup>
Tourism <sup>3)</sup>	8.4	8.7	8.9	8.7	8.8
Leisure activities <sup>4)</sup>	7.1	7.0	7.2	7.3	7.3
<b>Total</b>	<b>15.6</b>	<b>15.8</b>	<b>16.1</b>	<b>16.0</b>	<b>16.1</b>

Notes: 1) Preliminary. – 2) Estimate. – 3) Without business travel, direct and indirect effects. – 4) Leisure activities of residents in the surroundings of their home.

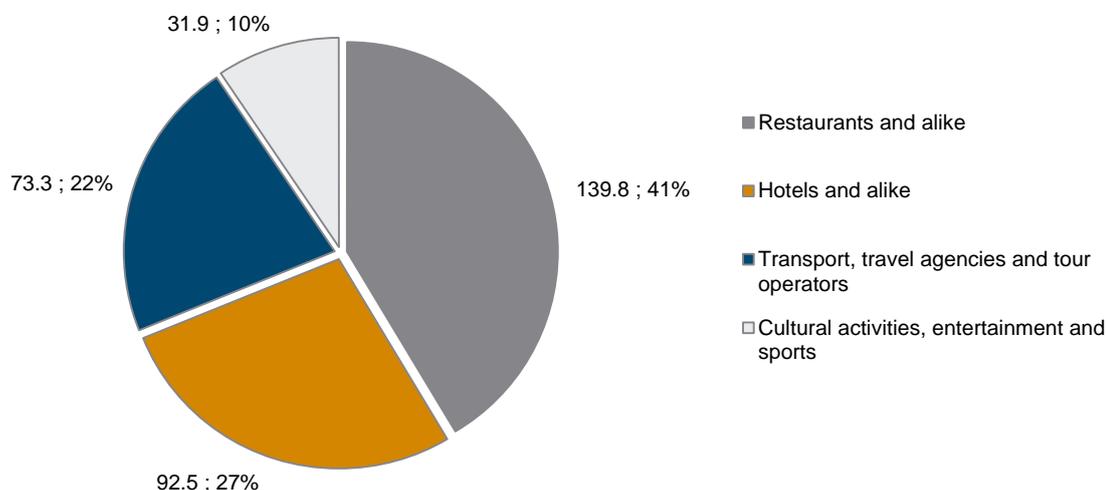
Source: Statistik Austria.

<sup>1</sup> This article is based on data prepared for the wiiw Summer Forecast Report (Grübler, 2017), which analysed economic relations between Austria and countries in Central, East and Southeast Europe. The data is freely available via the wiiw Open Data Platform: <https://wiiw.ac.at/at-cesee-data-ds-6.html>

<sup>2</sup> Equivalent to 293 thousand full-time jobs.

### Figure 1 / Employment by tourism industries in Austria

in thousand persons, 2015; share in %



Notes: Employment relationships in thousands. Shares within the tourism sector.

Source: Statistik Austria, Tourismus-Satellitenkonto für Österreich; WIFO (03 May 2017).

## NET TOURISM EXPORTS ON THE RISE

Tourism<sup>3</sup>, net of passenger transportation, is the section in Austria's services sector generating the highest trade surplus. With the exception of a small slump after the onset of the global financial and economic crisis in 2008, net tourism exports increased continuously from EUR 4.3 bn in 2003 to EUR 8.8 bn in 2016 (Figure 2).

Austria's neighbours continue to play a pivotal role for the tourism sector. With the exception of Italy (with which Austria has a trade deficit in tourism services of EUR 0.7 bn), all neighbouring countries are contributing to Austria's net tourism exports. Germany contributed EUR 6.0 bn, followed by Switzerland (EUR 1.0 bn), Hungary (EUR 0.4 bn), the Czech Republic (EUR 0.2 bn), Slovakia (EUR 0.2 bn) and Slovenia (EUR 0.2 bn). At the same time, Austria records the highest trade deficits in tourism services with Croatia (EUR 0.7 bn), Italy (EUR 0.7 bn) and Turkey (EUR 0.02 bn).

Figures for Turkey for the year 2016 are exceptionally low due to the prevalent political turmoil in this country (Grieverson, 2017). Over the period 2000 to 2015, Austria's net imports of tourism services from Turkey averaged EUR 148 mn and dropped to EUR 25 mn only in 2016. This year, arrivals from Austria to Turkey further dropped by 20% year-on-year for the period January to July<sup>4</sup> (TMB, 2017).

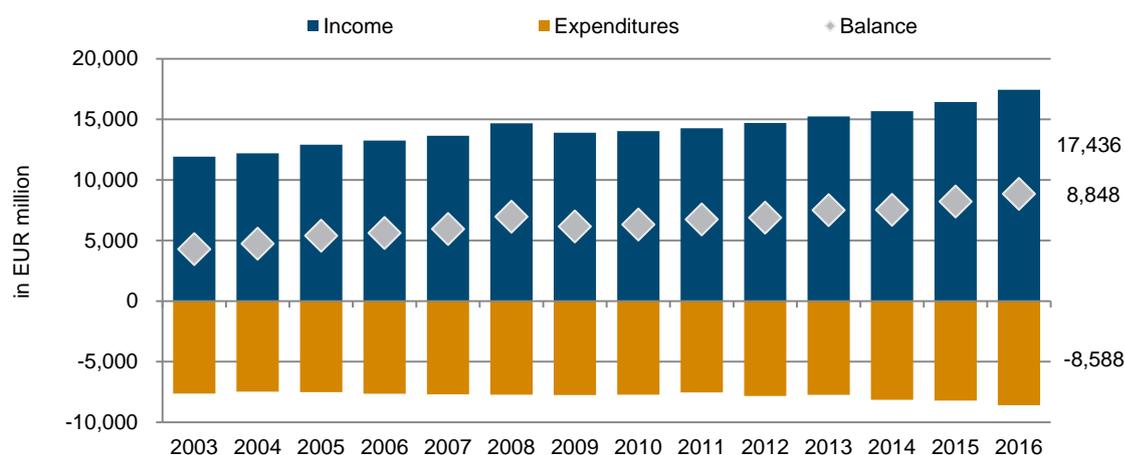
<sup>3</sup> BPM6 methodology: 'Travel credits cover goods and services for own use or to give away acquired from an economy by nonresidents during visits to that economy. Travel debits cover goods and services for own use or to give away acquired from other economies by residents during visits to these other economies.' (IMF, 2009, p. 166)

<sup>4</sup> The number of arrivals in 2016 dropped for all tourists from Europe. However, arrivals from Germany, Austria and many Western European countries continued to fall during the first half of 2017, while arrivals from Bulgaria, Hungary, Poland, Romania and other CESEE countries are already recovering again. (TMB, 2017)

Another event worth mentioning is the sharp influx of Russian tourists to Austria. It partly reflects base effects, as the number of tourists from Russia fell heavily in previous years during which the Russian economy suffered from the low oil prices and – relating thereto – from the weak rouble (Havlik, 2017).

Aggregated over all CESEE countries, the Austrian trade balance in tourism services has been positive since 2008, with a growing trend.

**Figure 2 / Austria's external balances in international travel**



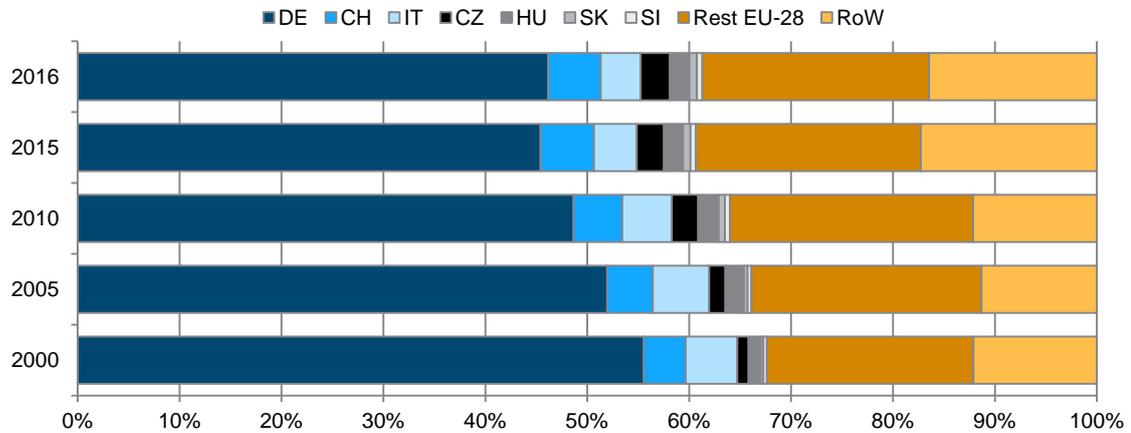
Source: Statistik Austria; Grübler (2017).

## DIVERGING TRENDS FOR TOURISTS FROM WESTERN AND EASTERN EUROPE

In 2016, Austria recorded 28.7 million arrivals of foreign visitors. Compared to the year 2000, this figure corresponds to 10 million additional arrivals or an increase of 56%. German visitors accounted for more than 46% of total arrivals of foreign guests in Austria in 2016, followed by visitors from the Netherlands (6.6%), Switzerland (5.1%) and Italy (3.9%). The Czech Republic and Hungary also feature among the top 10 tourist origin countries. Austria's neighbours represented in total 61.3% of all arrivals.

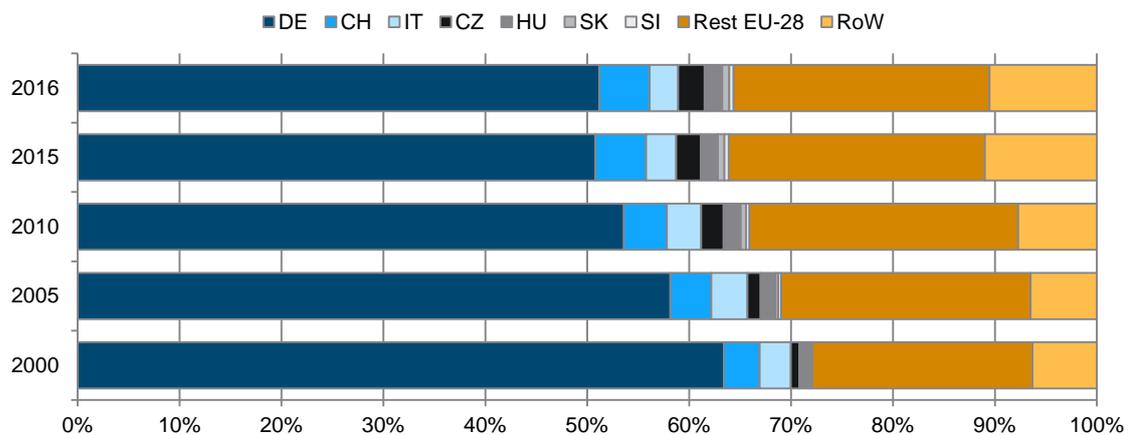
Despite still representing the by far biggest group of tourists in Austria, the share of Germans has decreased by 9.4 percentage points over the past 16 years (Figure 3). However, the absolute number of arrivals of German guests rose by nearly 3 million. By contrast, the share of Austria's eastern neighbours is continuously increasing. Extending the view to 22 CESEE countries<sup>5</sup>, their share more than doubled between 2000 and 2016, from 5% to 12% of total arrivals, of which half are accounted for by Austria's immediate neighbours.

<sup>5</sup> 22 CESEE countries for which wiiw publishes forecast reports: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kazakhstan, Kosovo, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, and Ukraine.

**Figure 3 / Arrivals to Austria, by country of origin**

Source: Statistik Austria; Grübler (2017).

While the number of total arrivals rose by 56% between 2000 and 2016, the number of overnight stays increased by 'only' 25%, indicating that tourists stay for shorter periods. The trend for overnight stays illustrated in Figure 4 resembles the developments of arrivals, though it is more pronounced, particularly for Germany. During the period 2000 to 2016, the number of German arrivals to Austria rose by roughly 3 million to 12.9 million (+30%), while the number of overnights increased by 320 thousand to 52.6 million (+0.6%) such that the average number of nights per arrival decreased from 5.2 to 4.1. At the same time, for the aggregate of the remaining neighbouring countries, the average number of nights per stay decreased only marginally from 3.3 to 3.2, and for Slovakia and Slovenia, overnights increased even faster than arrivals.

**Figure 4 / Overnight stays in Austria, by country of origin**

Source: Statistik Austria; Grübler (2017).

## CONCLUSION

Tourists from Germany continue to dominate the Austrian tourism sector. Especially the increase (of 4%) in the number of overnight stays of Germans tourists during the summer months compared to last year contributed to a record high of 55.9 million overnights between May and August 2017. However, their importance is slowly decreasing, as German guests tend to visit Austria for shorter periods than in the past. By contrast, the number of tourists coming from Central, East and Southeast Europe in general and eastern neighbouring countries of Austria in particular is growing constantly, and favourable economic developments in the region (Grübler, 2017) might even accelerate this trend.

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# Economic relations between Austria and Slovakia

BY DORIS HANZL-WEISS

## INTRODUCTION

The two capital cities of Austria and Slovakia – Vienna and Bratislava – are only 55 kilometres apart, with about one hour's travelling time. In the future, this might even be reduced to 10 minutes only, in case the two cities are connected by a hyperloop system. Both countries use the euro, Austria since 1 January 2002 and Slovakia since 1 January 2009. Cross-border cooperation is fostered by joint activities supporting tourism and culture. Being that close in multiple sense, we will take a deeper look at the economic relationships of the two countries, focusing on trade ties, trends in foreign direct investment as well as backward and forward linkages in trade with intermediate products.<sup>1</sup>

## TRADE RELATIONSHIPS

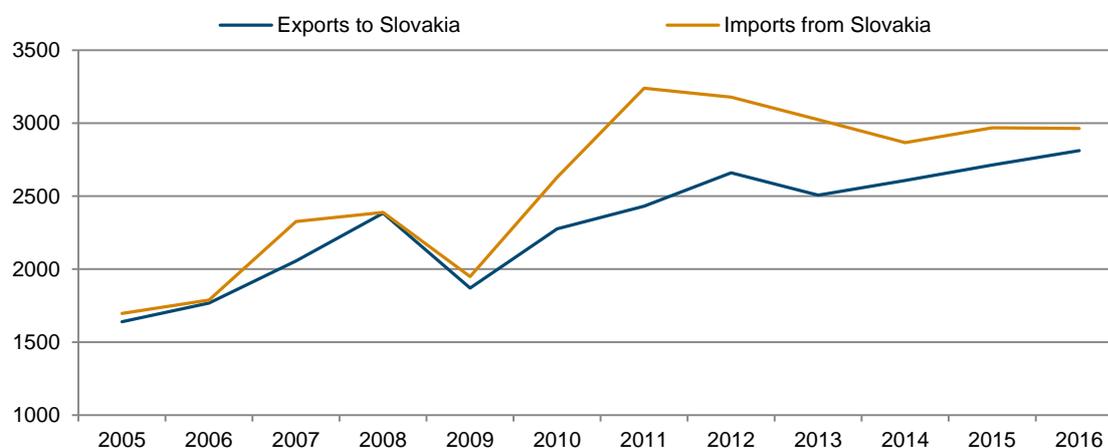
Both Austria and Slovakia are small open economies for whom trade plays a major role. Exports of goods and services account for 52% of GDP in Austria and are even more important in Slovakia with 94% of GDP (balance-of-payments data for the year 2016). This is due to the outstanding role of goods exports in the Slovak economy, which make up 84% of GDP compared to 36% in Austria. Services exports are slightly higher in Austria (16% of GDP) as compared to Slovakia (9%). For both countries, Germany is the main trading partner both on the export and import side.

From the Austrian perspective<sup>2</sup>, Austria's goods trade is heavily dependent on trade with Germany, with 31% of exports heading to Germany and 37% of imports coming from Germany. By contrast, trade with Slovakia accounts for just about 2% of Austrian exports and imports. For both trade directions – Austrian goods exports going to Slovakia as well as Austrian goods imports coming from there – Slovakia ranks on eleventh place. Trade volumes have doubled between 2005 and 2016, with a slump occurring during the economic crisis in 2009 (see Figure 1). Austria's trade balance with Slovakia has been in deficit during the last ten years; it widened, starting from the 2008-2009 crisis, up until 2011, but has again narrowed since then.

Austria's main export items to Slovakia are machinery and transport equipment (43% of total exports), manufactured goods classified by material, chemicals and miscellaneous manufacture articles (see Table 1). These four groups make up 83% of Austrian exports to Slovakia. Main import items from Slovakia include machinery & transport equipment, manufactured goods classified by material as well as mineral fuels. These three groups account for 77% of all Austrian imports from Slovakia.

<sup>1</sup> Statistical data on business relations between Austria and other CESEE countries can be found in Grüber (2017).

<sup>2</sup> Based on data from Statistics Austria.

**Figure 1 / Austria: Goods exports and imports with Slovakia, in EUR million**

Source: Statistics Austria.

**Table 1 / Austria: Detailed trade structure with Slovakia, 2016, in %, SITC**

SITC	Exports	Imports	
0	Food and live animals	5.1	5.0
1	Beverages and tobacco	1.1	0.1
2	Crude materials, inedible, except fuels	2.4	7.7
3	Mineral fuels, lubricants and related materials	7.1	10.2
4	Animal and vegetable oils, fats and waxes	0.5	0.0
5	Chemicals and related products, n.e.s.	11.1	3.4
6	Manufactured goods classified chiefly by material	20.1	31.1
7	Machinery and transport equipment	42.7	35.6
8	Miscellaneous manufactured articles	9.2	6.6
9	Commodities and transactions not classified elsewhere in the sitc	0.6	0.2
	<b>100.0</b>	<b>100.0</b>	

Source: Statistics Austria.

From the Slovak perspective<sup>3</sup>, Germany is also Slovakia's main trading partner, with 22% of goods exports going to Germany and 17% of imports coming from there. Trade with the Czech Republic is traditionally important and ranks on second place (with a share of more than 10% of both exports and imports). Exports to Austria account for 6% and rank sixth, while imports from Austria account for 3% and rank tenth. Slovakia thus registers a trade surplus with Austria.

Looking again at the trade structure between Slovakia and Austria but at a more detailed level provides interesting insights (see Table 2). Slovakia's main export items to Austria are motor cars and telephone sets as well as petroleum oils. These three goods make up one third of all Slovak exports to Austria. The most important imports from Austria are parts and accessories for motor vehicles, petroleum oils, and electrical lighting and signalling equipment for motor vehicles. These three items again constitute one third of imports.

<sup>3</sup> Based on data from the Statistical Office of the Slovak Republic. Export and import figures differ from Austrian figures (as well as from Eurostat Comext data) due to differences in statistical recording (CIF/FOB, different reporting thresholds, Rotterdam effect).

The main items traded between Slovakia and Austria (cars versus car parts) reflect the specialisation of both economies in the automotive industry, but with a different focus: in Slovakia there are three large original equipment manufacturers – VW Bratislava (located right on the border with Austria at Marchegg), KIA Motors and PSA Peugeot-Citroën – assembling motor cars, while Austria has a large and important car parts industry. In Austria, only a small number of cars is built at Magna Steyr, Graz, on a contract basis (see also Hanzl-Weiss, 2016). For example, Magna is going to build for Jaguar Land Rover the new I-Pace vehicle from early 2018 (on a small scale). It will be Jaguar Land Rover's (JLR) first battery electric vehicle. On the other hand, JLR is currently building a new factory in Slovakia, where the production of initially 150,000 cars will start in late 2018. JLR will manufacture the Land Rover Discovery at its new plant located in Nitra. It is remarkable, however, that the value added of the Slovak automotive sector is still lower than that in Austria (about EUR 3 billion in Slovakia compared to 4 billion in Austria in 2016), reflecting the focus on high value added products and R&D in Austria.

**Table 2 / Slovakia: Ten most important items in trade with Austria, 2016, in EUR FOB and in %, Harmonised System (HS4) classification**

<b>IMPORTS from Austria</b>		<b>EUR</b>	<b>Share in total</b>
8708	Parts and accessories of the motor vehicles of headings 8701 to 8705	279,681,875	14.3
2710	Petroleum oils and oils obtained from bituminous minerals other than crude, ...	183,971,401	9.4
8512	Electrical lighting or signalling equipment (excl. articles of heading 8539) ...	123,104,352	6.3
8517	Electrical apparatus for line telephony or line telegraphy, incl. line telephone sets ...	78,281,223	4.0
7210	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, clad ...	43,413,579	2.2
3004	Medicaments (excl. goods of heading 3002, 3005 or 3006) consisting of mixed ...	43,402,745	2.2
8431	Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	39,216,003	2.0
8507	Electric accumulators, incl. separators therefor, whether or not square or rectangular ...	33,344,070	1.7
8544	Insulated (incl. enamelled or anodised) wire, cable (incl. coaxial cable) ...	24,787,640	1.3
4802	Uncoated paper and paperboard, of a kind used for writing, printing or other graphic ...	23,459,638	1.2

<b>EXPORTS to Austria</b>		<b>EUR</b>	<b>Share in total</b>
8703	Motor cars and other motor vehicles principally designed for the transport of persons	516,675,763	12.9
8517	Electrical apparatus for line telephony or line telegraphy, incl. line telephone sets ...	447,024,558	11.2
2710	Petroleum oils and oils obtained from bituminous minerals other than crude, ...	299,658,131	7.5
7402	Unrefined copper; copper anodes for electrolytic refining	202,193,778	5.0
8528	Reception apparatus for television, whether or not incorporating radio-broadcast ...	166,424,374	4.2
7207	Semi-finished products of iron or non-alloy steel	145,930,881	3.6
8708	Parts and accessories of the motor vehicles of headings 8701 to 8705	116,011,983	2.9
7208	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot-rolled ...	80,030,339	2.0
4011	New pneumatic tyres, of rubber	61,293,962	1.5
1001	Wheat and meslin	57,967,504	1.4

Source: Statistical Office of the Slovak Republic.

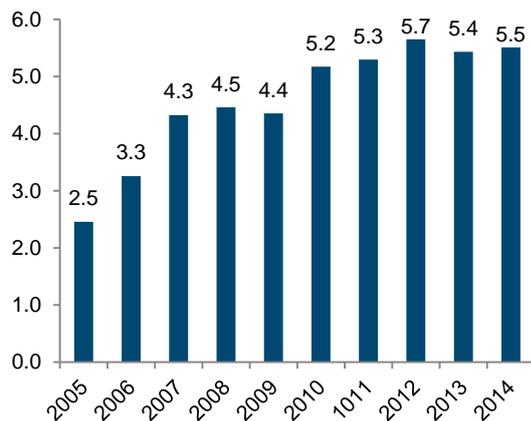
## TRENDS IN FOREIGN DIRECT INVESTMENT

For Austrian investment activities, the region of Central, East and Southeast Europe (CESEE), including Austria's eastern neighbours, has been a main target since the beginning of the 1990s (see OeNB, 2016). Austria has also invested strongly in Slovakia: its foreign direct investment stock more than doubled between 2005 and 2014, from EUR 2.5 billion to 5.5 billion (see Figure 2), with only a small

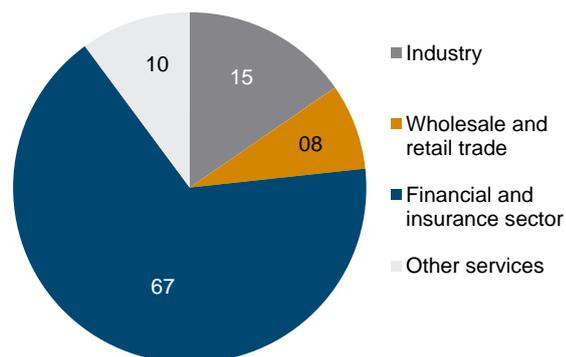
decline during the crisis. Overall, Slovakia ranked on place eight and accounted for 3% of total Austrian outward FDI stock in 2014.

**Figure 2 / Austrian FDI stock in Slovakia**

EUR billion



Shares of total, end of 2014, in %



Source: Austrian National Bank.

For Slovakia Austria is the second largest foreign investor, after the Netherlands ranking first and before the Czech Republic ranking third. Austria accounted for about 16% of total Slovak inward FDI stock in 2015, reaching EUR 6.2 billion (wiiw FDI Database). Looking at the distribution by branches (see Figure 2, right-hand side), Austrian FDI was mainly flowing into the financial sector. In the banking sector, Austria is the main investor, with Erste Bank controlling the biggest Slovak bank Slovenská Sporiteľňa, and Raiffeisenbank the third largest Slovak bank Tatra Banka. In the insurance sector, the Vienna Insurance Group plays a major role. About 15% of Austrian FDI went into industry: the automotive industry, machinery, production of metal products and the electrotechnical industry. About 8% of the FDI stock was invested in the wholesale and retail trade sector (e.g. Billa, Kika), and about 10% in other services. Overall, there were about 281 Austrian affiliates in Slovakia at the end of 2015.

## VALUE CHAIN LINKAGES

Finally, we look at the participation of Austria and Slovakia in global value chains and their interdependence, capturing both backward and forward linkages of the economies in intermediates (and leaving aside final products). Backward linkages are linkages to upstream sectors, which supply inputs to the respective sector. Forward linkages are linkages to downstream sectors, which use products from the respective sector. Backward linkages are calculated by dividing the foreign value added content of exports by gross exports, forward linkages by dividing the domestic value added embodied as intermediate inputs in third countries' exports by gross exports. Both components summed up yield the total global value chain participation index. The data used are taken from the wiiw European Integration Input-Output Database (wiiw EUI-IOD).

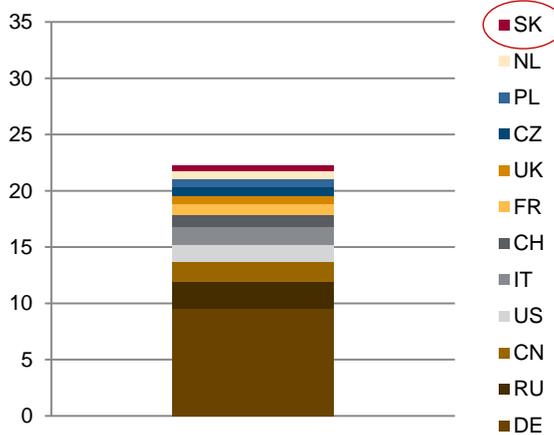
Figure 3 shows the main partners for both the backward and forward component and for both Austria and Slovakia and provides some interesting details. First, looking at the relative size only, for both

countries the forward component is smaller than the backward component. Looking at the latter, we see a decisively larger backward component in Slovakia, hinting at the larger importance of intermediate inputs and lower value added in this country compared to Austria. Second, the main partners for backward linkages for both Austria and Slovakia are typically Germany, Russia and China, while the role of neighbours is smaller. Third, in the case of forward linkages, the main partners of Austria and Slovakia differ – apart from Germany, which is the most important partner for both countries. Austria supplies its intermediates to Switzerland and Italy, whereas Slovakia to the Czech Republic and Hungary. While Slovakia ranks only on eleventh place for Austria, Austria as a destination for Slovak intermediates ranks fourth.

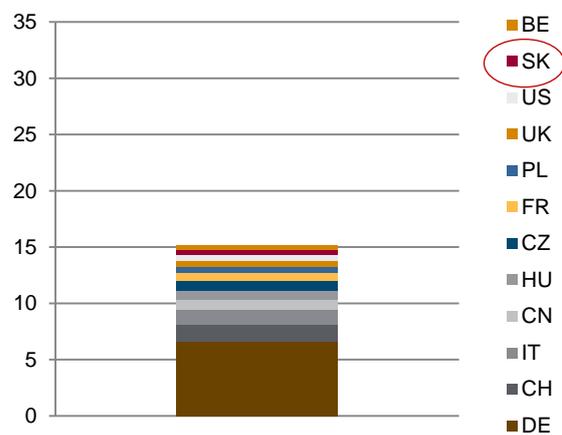
**Figure 3 / Global value chain participation index: 12 main partners, 2014**

in % of gross exports

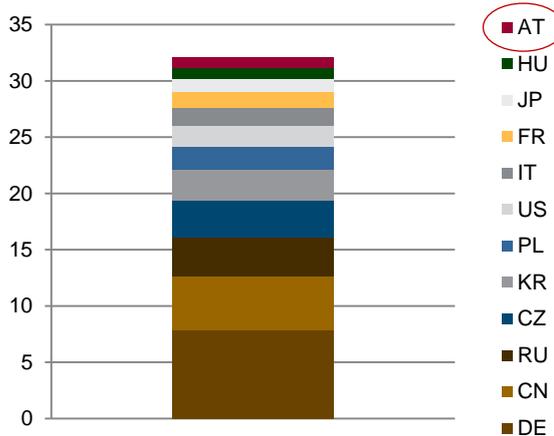
**Austria: backward component**



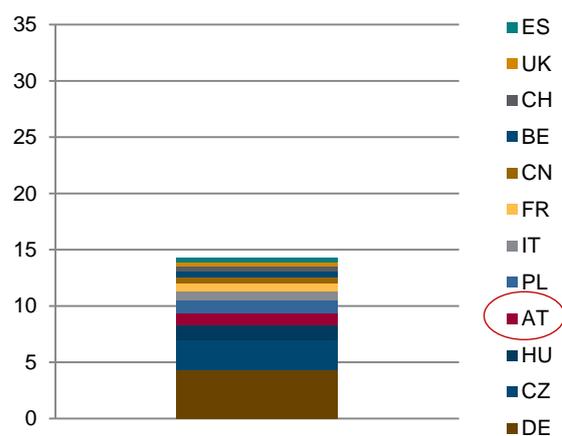
**Austria: forward component**



**Slovakia: backward component**



**Slovakia: forward component**



Note: Category rest of the world omitted.

Source: wiiw European Integration Input-Output Database (wiiw EUI-IOD).

## SUMMARY

Both Austria and Slovakia are strongly dependent on trade with Germany. For Austria, goods trade with Slovakia is much smaller and not as important. For Slovakia, exports to Austria are of significance in terms of both final products and intermediates. Overall, both countries can benefit from the success of one of Slovakia's main sectors – the automotive sector – as there is a strong interdependence between the two countries, with Austria supplying car parts to Slovakia and Slovakia motor cars to Austria. Finally, Austrian foreign direct investment has played a major role in Slovakia, especially in the banking sector.

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## The editors recommend for further reading\*

### Europe

Overcoming eurozone wage inertia: <http://voxeu.org/article/overcoming-eurozone-wage-inertia>

Euro and the business cycle: <http://voxeu.org/article/effects-euro-synchronisation-business-cycles>

Economic crisis and EU regions: <http://www.euractiv.com/section/economy-jobs/news/the-economic-crisis-has-exacerbated-the-eus-regional-differences/>

On the future of EU enlargement:

<http://www.cer.eu/insights/eu-enlargement-door-half-open-or-door-half-shut>

### Brexit

Impact of Brexit on UK firms: <http://voxeu.org/article/new-survey-evidence-impact-brexit-uk-firms>

The Irish border issue: <https://mainlymacro.blogspot.co.at/2017/09/the-real-obstacle-for-brexit.html>

### Central Europe

On political divergence of Central Europe: <https://www.bloomberg.com/news/articles/2017-10-05/europe-could-see-another-brexit-like-rupture-beyond-spain>

Hungary and the euro: <https://www.bloomberg.com/news/articles/2017-10-05/skeptic-hungary-can-t-resist-euro-pull-forever-top-banker-says>

### Miscellaneous

The transfer problem and tax incidence: <https://krugman.blogs.nytimes.com/2017/10/05/the-transfer-problem-and-tax-incidence-insanely-wonkish/?smid=tw-share>

Why don't tax cuts boost growth? <https://growthecon.com/blog/Taxing-GDP/>

A UN peace-keeping operation is the only way forward in Ukraine:

[http://carnegie.ru/commentary/73251?mkt\\_tok=eyJpIjoiWkRlJNU9UUmNakExTldOailsInQiOiJGUUhWRVZXZmU1TENCQnpqWIB6dDRTcER4WXFKSmJHQIBFc3FyN1JmNhdUE5hQ2pxY1B5U3V6MGRlenZKWEpTdTRyY1ZWRElWMIl3MUFQbUtDTmVDallxT3Y4aXdLUFwvRVlBamJic0MxWTJGaXFaQlB0RXN4cDRJN21JQUxENEoifQ%3D%3D](http://carnegie.ru/commentary/73251?mkt_tok=eyJpIjoiWkRlJNU9UUmNakExTldOailsInQiOiJGUUhWRVZXZmU1TENCQnpqWIB6dDRTcER4WXFKSmJHQIBFc3FyN1JmNhdUE5hQ2pxY1B5U3V6MGRlenZKWEpTdTRyY1ZWRElWMIl3MUFQbUtDTmVDallxT3Y4aXdLUFwvRVlBamJic0MxWTJGaXFaQlB0RXN4cDRJN21JQUxENEoifQ%3D%3D)

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\* Recommendation is not necessarily endorsement. The editors are grateful to Peter Havlik, Vladimir Gligorov and Richard Grieveson for their valuable contributions to this section.

# Monthly and quarterly statistics for Central, East and Southeast Europe

Starting from **September 2017** the Statistical Annex has acquired a new look with a modified set of graphs. Additional indicators and altered combinations of time series offer a more comprehensive picture of short-term economic trends, and their identification becomes easier and faster.

The monthly and quarterly statistics cover **20 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: <https://data.wiiw.ac.at/monthly-database.html>. 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	HUF	Hungarian forint	RSD	Serbian dinar
BAM	Bosnian convertible mark	KZT	Kazakh tenge	RUB	Russian rouble
BGN	Bulgarian lev	MKD	Macedonian denar	TRY	Turkish lira
CZK	Czech koruna	PLN	Polish zloty	UAH	Ukrainian hryvnia
HRK	Croatian kuna	RON	Romanian leu		
EUR	euro – national currency for Montenegro 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 Annual Database**



**wiiw Monthly Database**



**wiiw FDI Database**

The wiiw databases are accessible via a simple web interface, with only one password needed to access all databases (and all wiiw publications).

You may access the databases here: <https://data.wiiw.ac.at>.

If you have not yet registered, you can do so here: <https://wiiw.ac.at/register.html>.

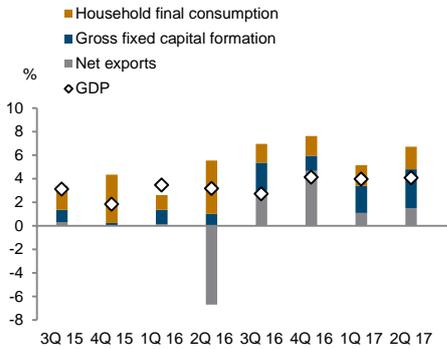
### Service package available

We offer an additional service package that allows you to access all databases – a Premium Membership, at a price of €2,300 (instead of €2,000 as for the Basic Membership). Your usual package will, of course, remain available as well.

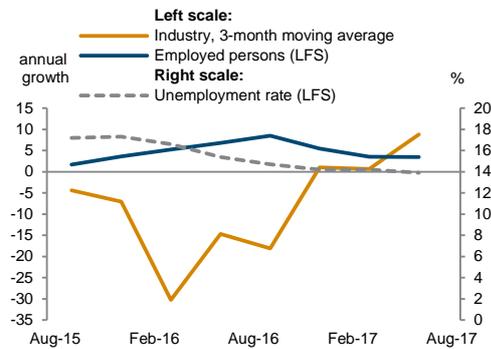
For more information on database access for Members and on Membership conditions, please contact Ms. Gabriele Stanek ([stanek@wiiw.ac.at](mailto:stanek@wiiw.ac.at)), phone: (+43-1) 533 66 10-10.

# Albania

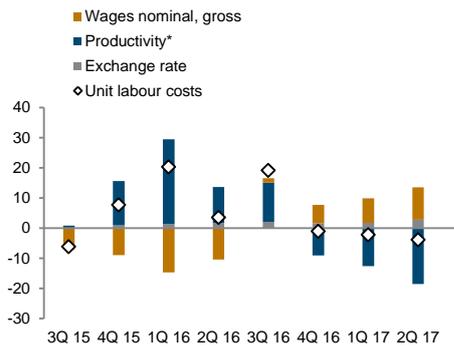
**Real GDP growth and contributions**  
year-on-year



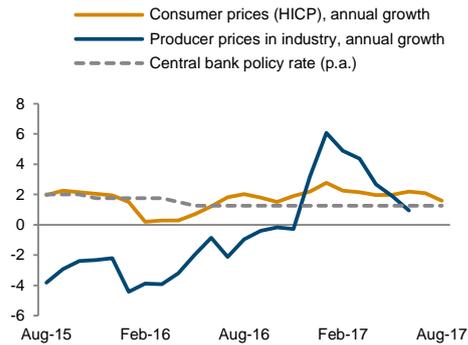
**Real sector development**  
in %



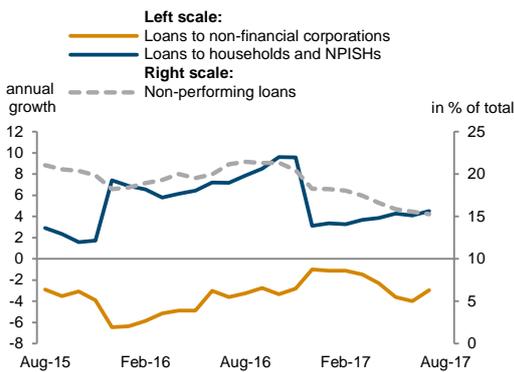
**Unit labour costs in industry**  
annual growth rate in %



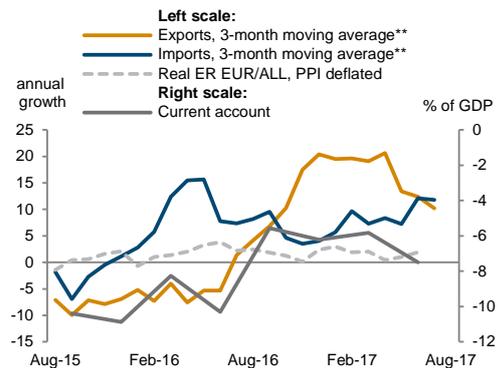
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



\*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.

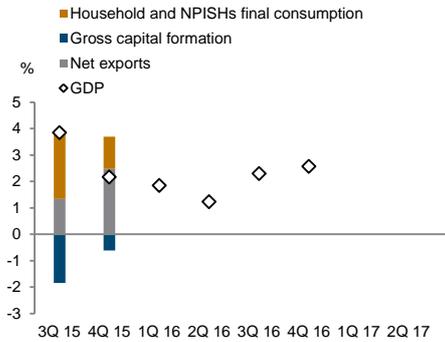
Baseline data, country-specific definitions and methodological breaks in time series are available under:

<https://data.wiiw.ac.at/monthly-database.html>

# Bosnia and Herzegovina

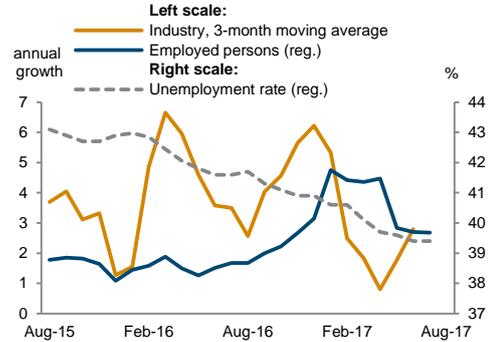
### Real GDP growth and contributions

year-on-year



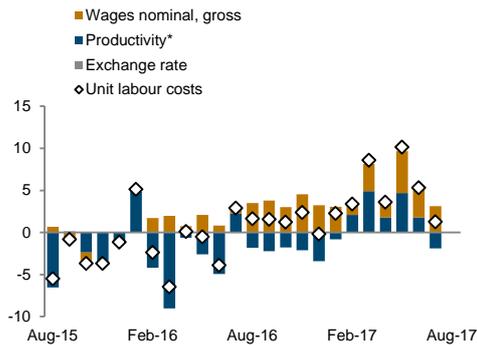
### Real sector development

in %



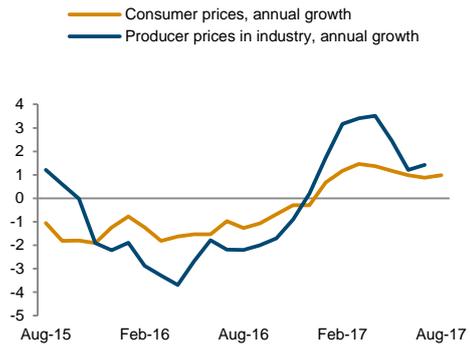
### Unit labour costs in industry

annual growth rate in %



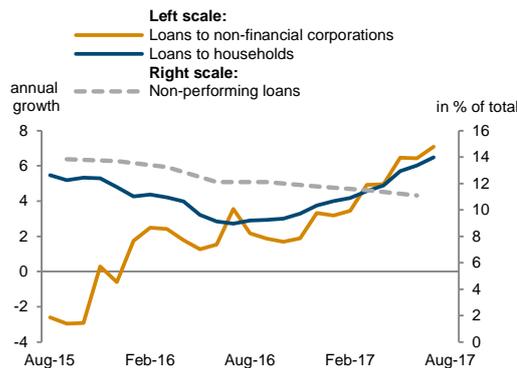
### Inflation

in %



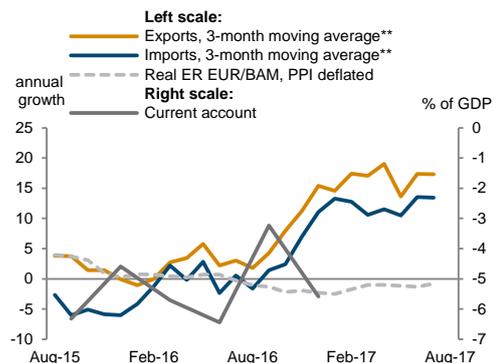
### Financial indicators

in %



### External sector development

in %



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

\*\*EUR based.

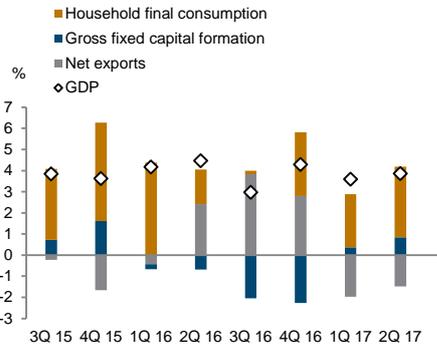
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

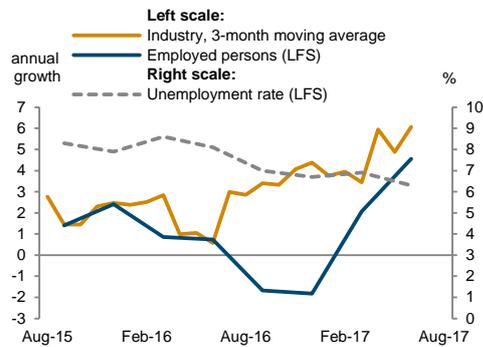
<https://data.wiiw.ac.at/monthly-database.html>

# Bulgaria

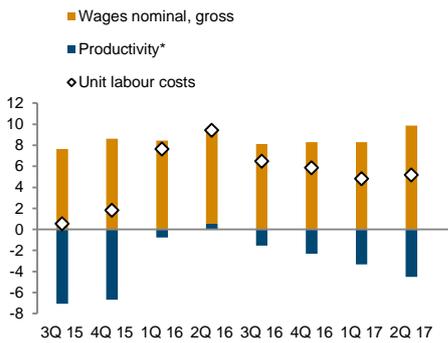
**Real GDP growth and contributions**  
year-on-year



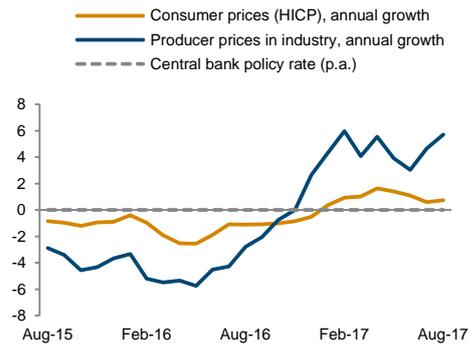
**Real sector development**  
in %



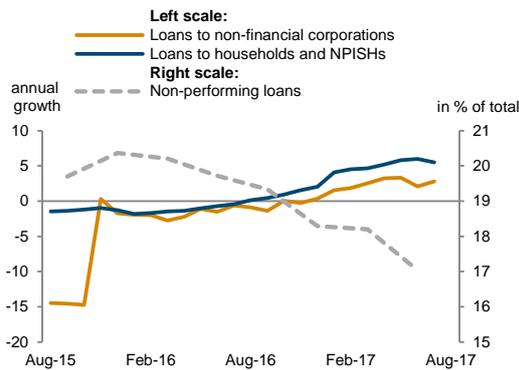
**Unit labour costs in industry**  
annual growth rate in %



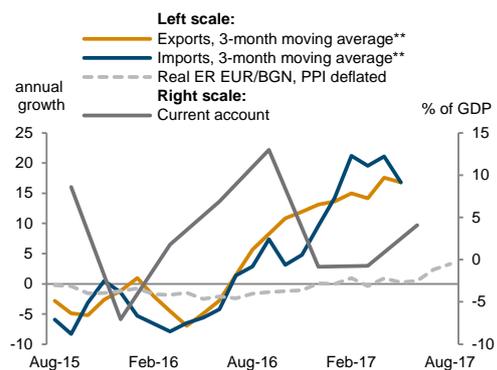
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



\*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.

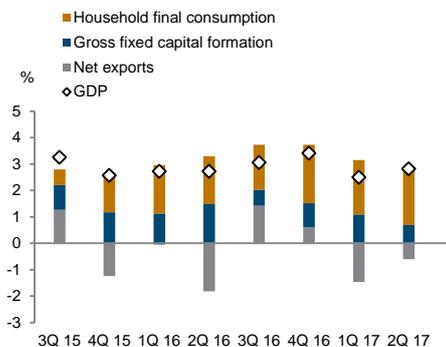
Baseline data, country-specific definitions and methodological breaks in time series are available under:

<https://data.wiiw.ac.at/monthly-database.html>

# Croatia

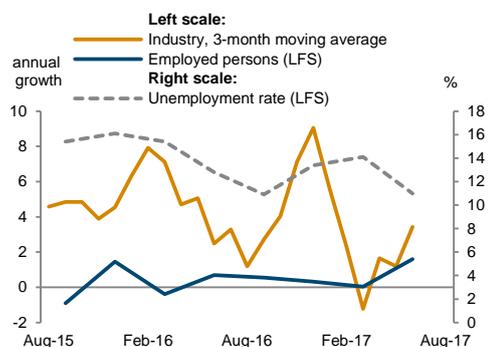
### Real GDP growth and contributions

year-on-year



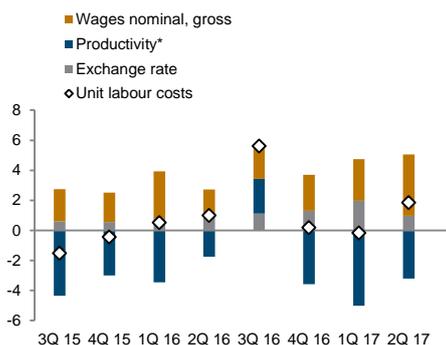
### Real sector development

in %



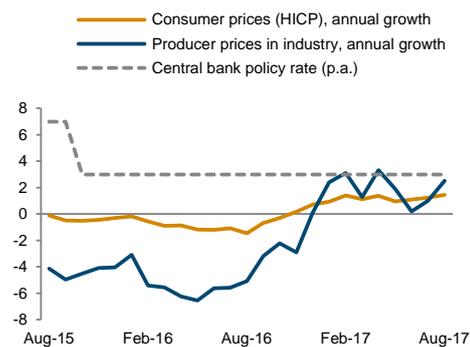
### Unit labour costs in industry

annual growth rate in %



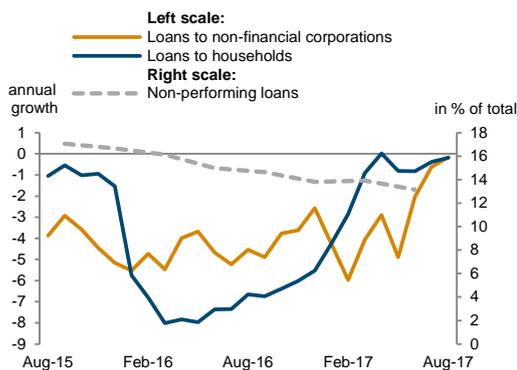
### Inflation and policy rate

in %



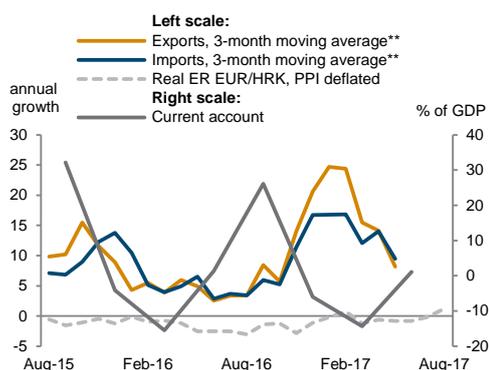
### Financial indicators

in %



### External sector development

in %



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

\*\*EUR based.

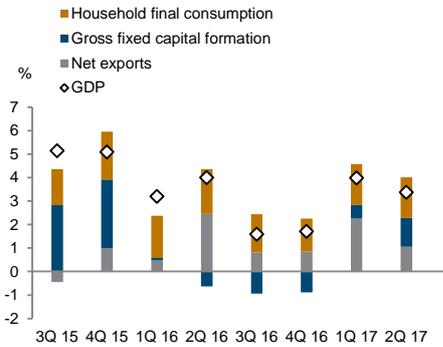
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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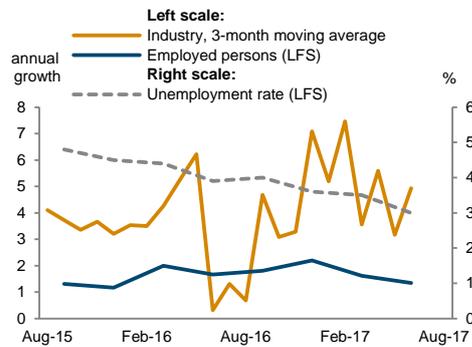
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# Czech Republic

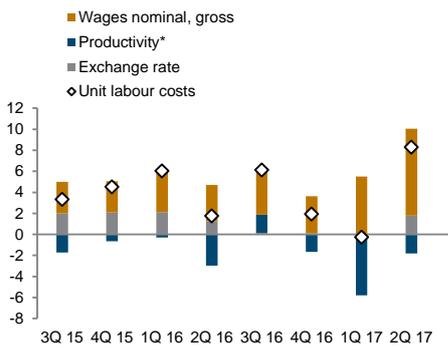
**Real GDP growth and contributions**  
year-on-year



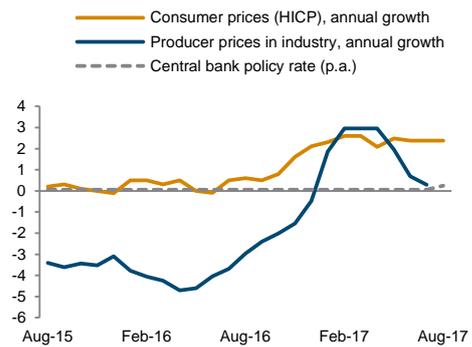
**Real sector development**  
in %



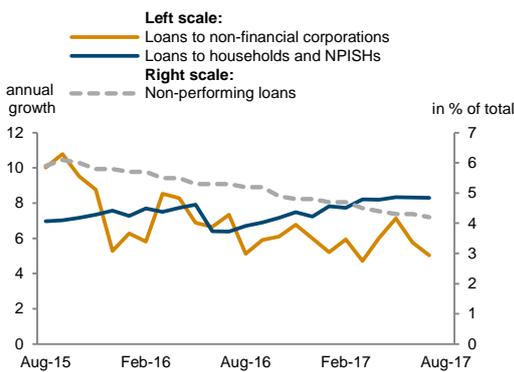
**Unit labour costs in industry**  
annual growth rate in %



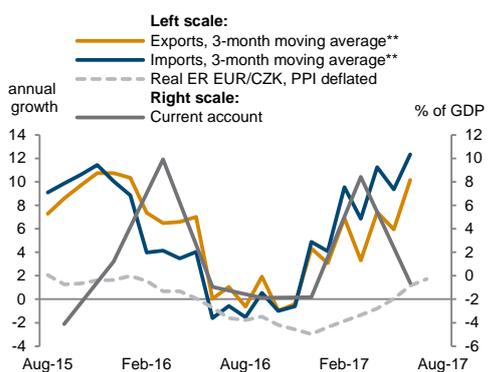
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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

\*\*EUR based.

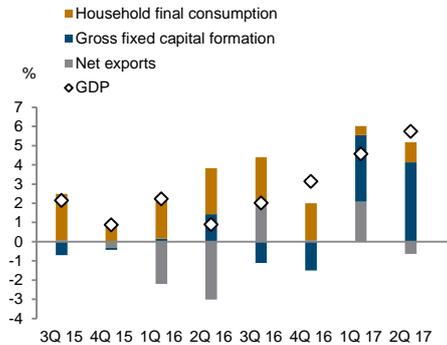
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

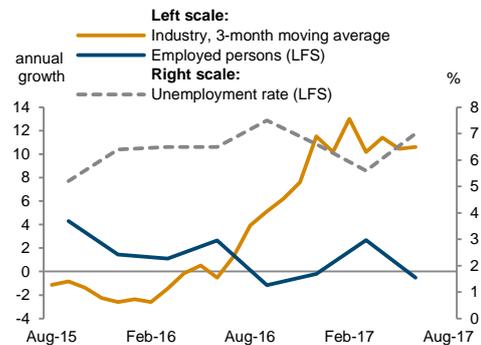
<https://data.wiiw.ac.at/monthly-database.html>

## Estonia

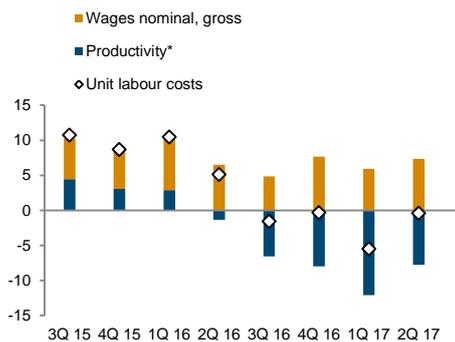
**Real GDP growth and contributions**  
year-on-year



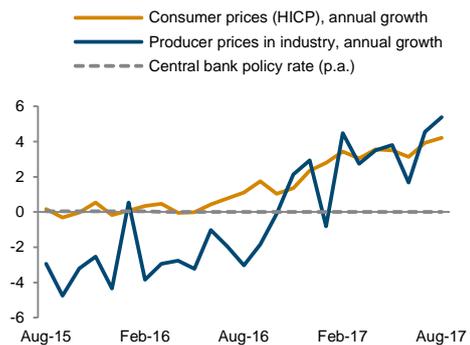
**Real sector development**  
in %



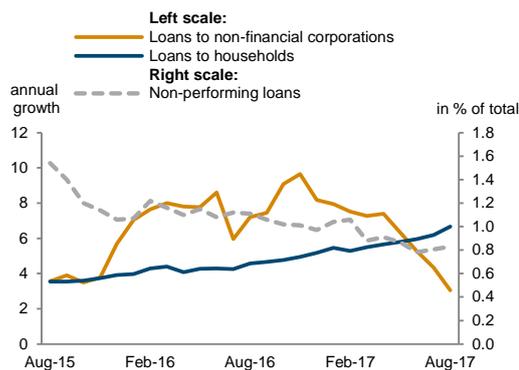
**Unit labour costs in industry**  
annual growth rate in %



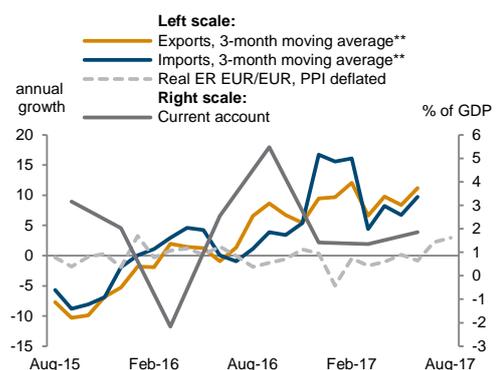
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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

\*\*EUR based.

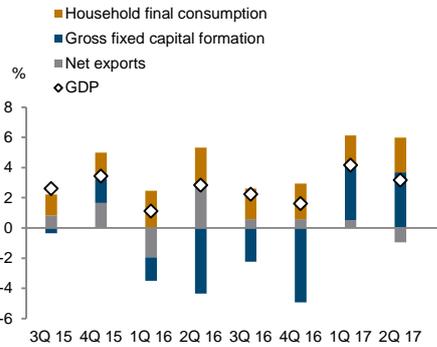
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

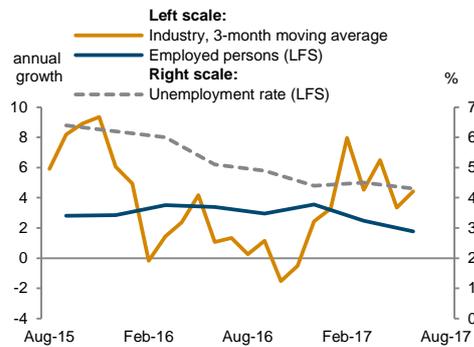
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# Hungary

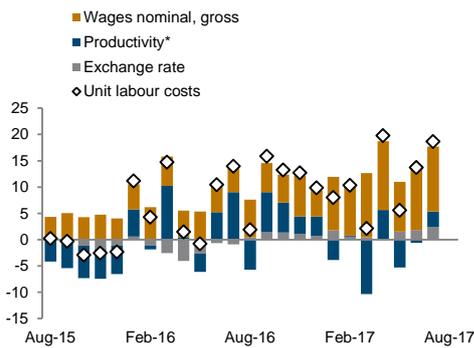
**Real GDP growth and contributions**  
year-on-year



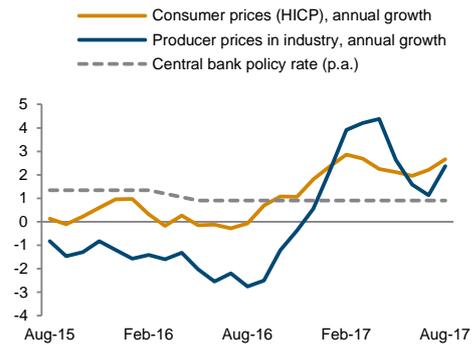
**Real sector development**  
in %



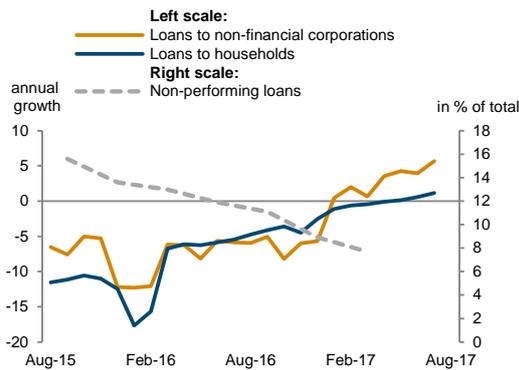
**Unit labour costs in industry**  
annual growth rate in %



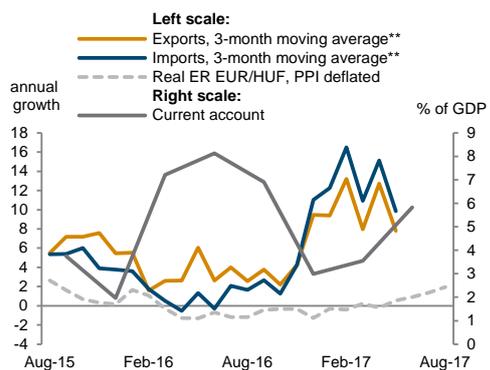
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



\*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.

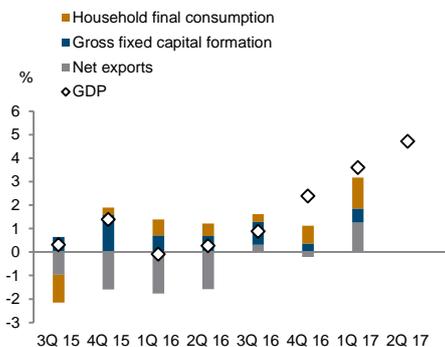
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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# Kazakhstan

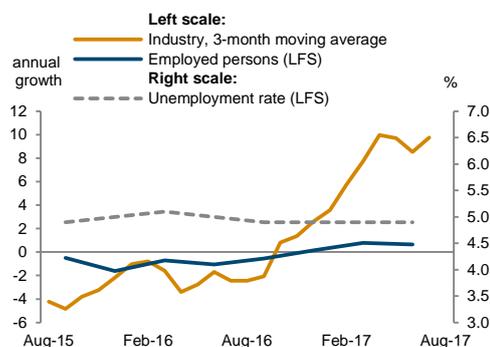
### Real GDP growth and contributions

year-on-year



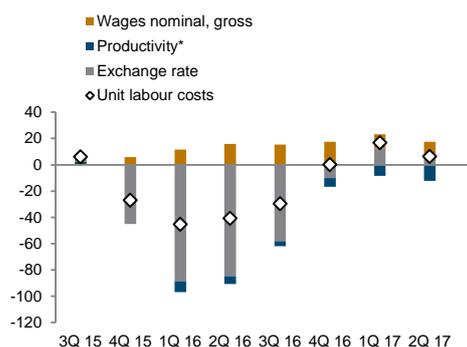
### Real sector development

in %



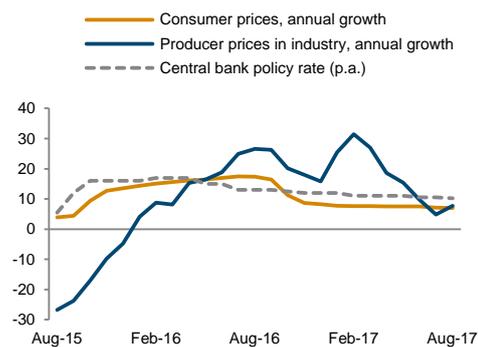
### Unit labour costs in industry

annual growth rate in %



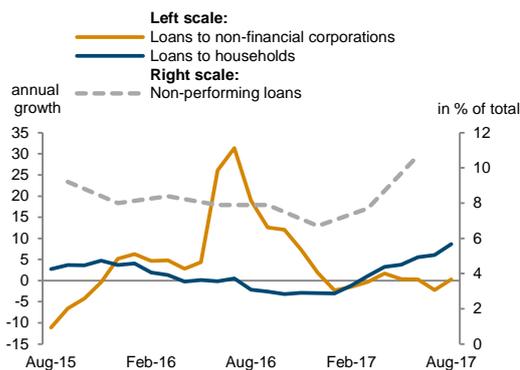
### Inflation and policy rate

in %



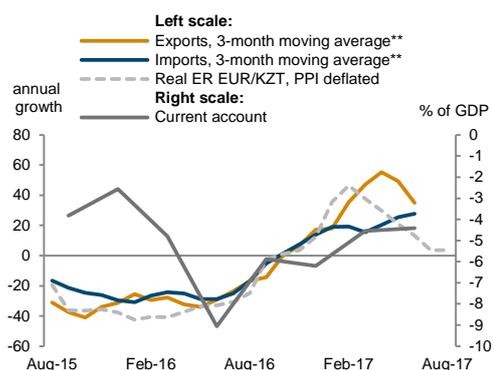
### Financial indicators

in %



### External sector development

in %



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

\*\*EUR based.

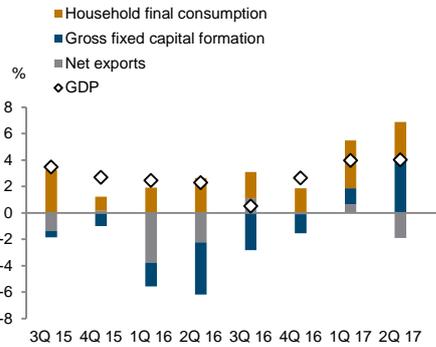
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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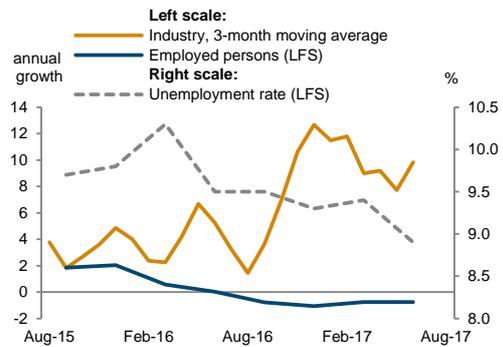
<https://data.wiiw.ac.at/monthly-database.html>

# Latvia

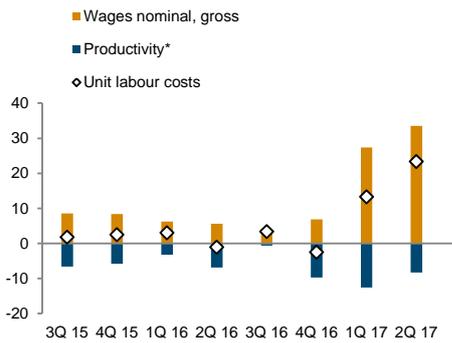
**Real GDP growth and contributions**  
year-on-year



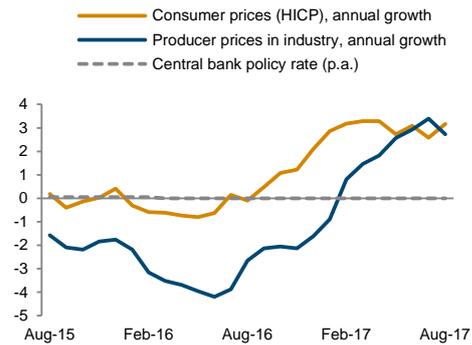
**Real sector development**  
in %



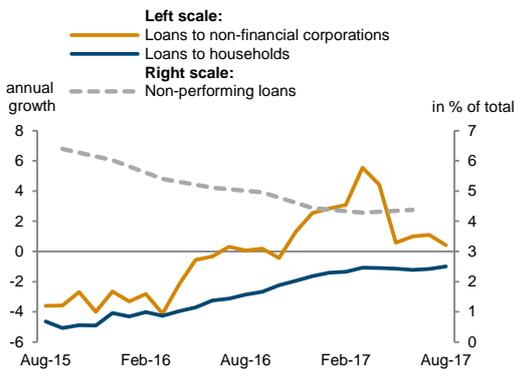
**Unit labour costs in industry**  
annual growth rate in %



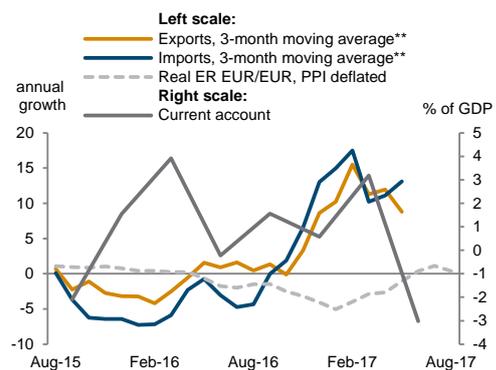
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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

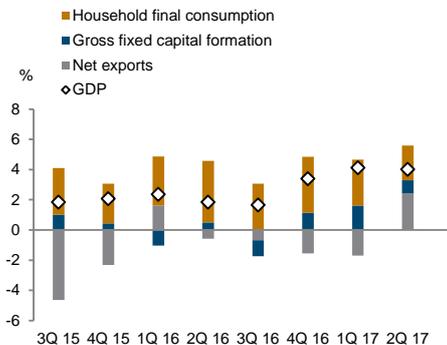
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

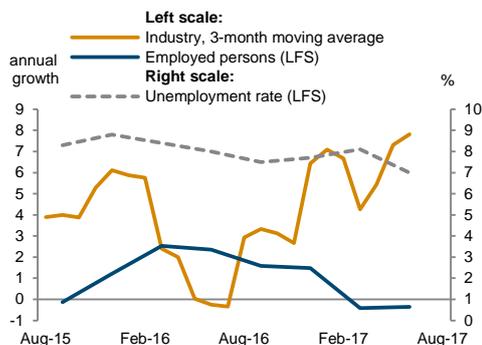
<https://data.wiiw.ac.at/monthly-database.html>

# Lithuania

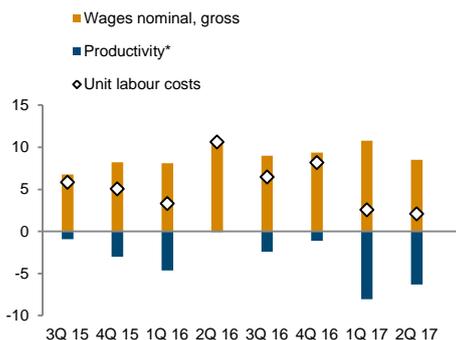
**Real GDP growth and contributions**  
year-on-year



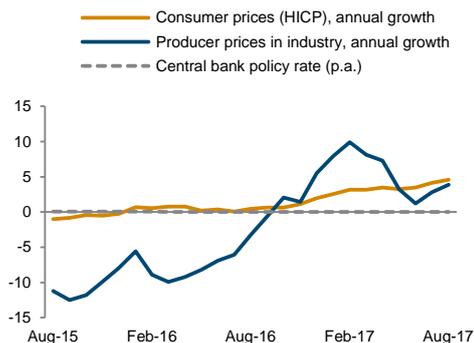
**Real sector development**  
in %



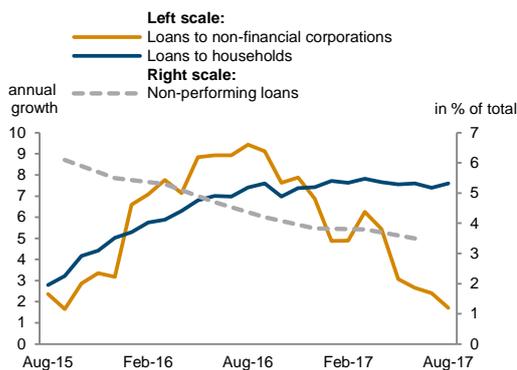
**Unit labour costs in industry**  
annual growth rate in %



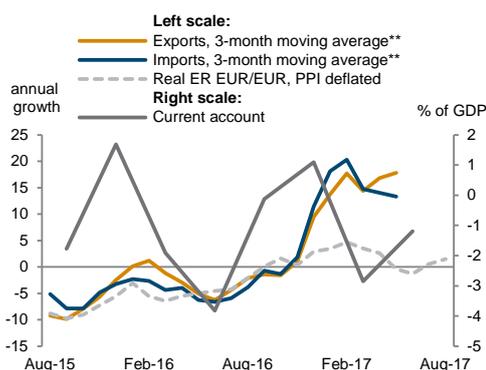
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %

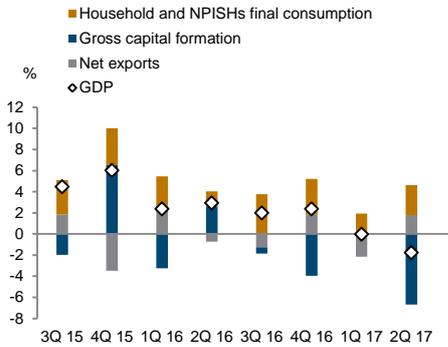


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\*\*EUR based.

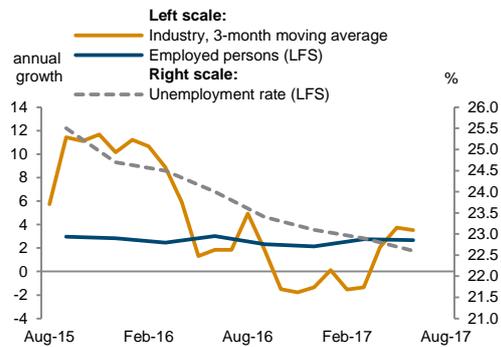
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# Macedonia

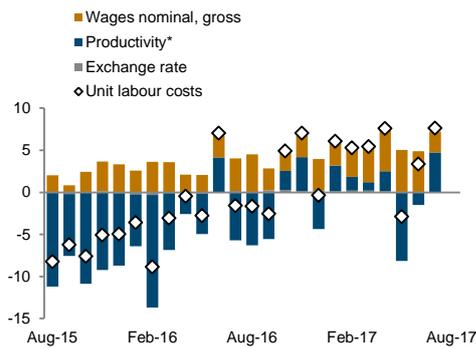
**Real GDP growth and contributions**  
year-on-year



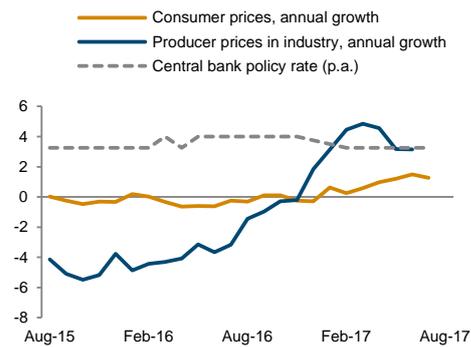
**Real sector development**  
in %



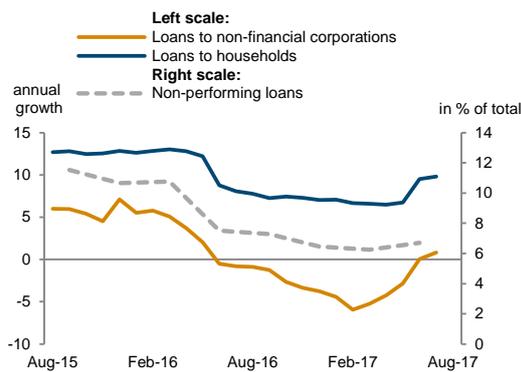
**Unit labour costs in industry**  
annual growth rate in %



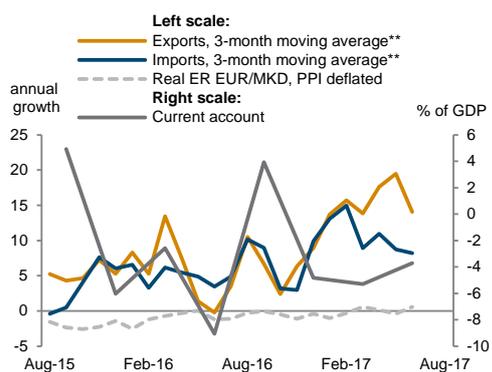
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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

\*\*EUR based.

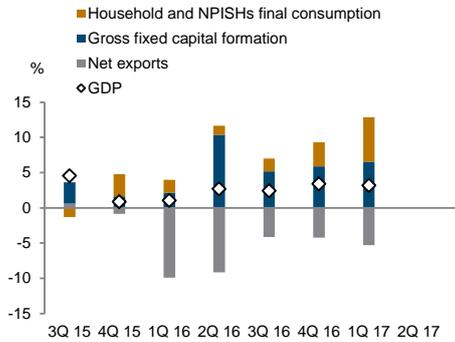
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

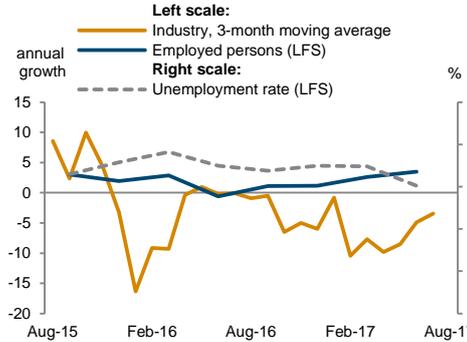
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# Montenegro

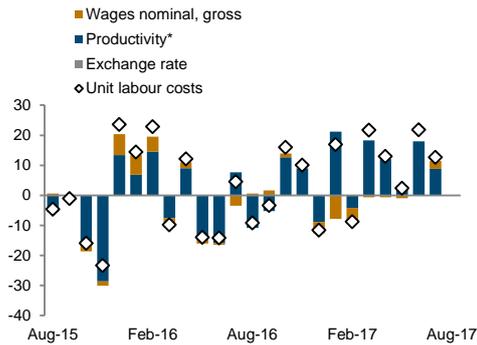
**Real GDP growth and contributions**  
year-on-year



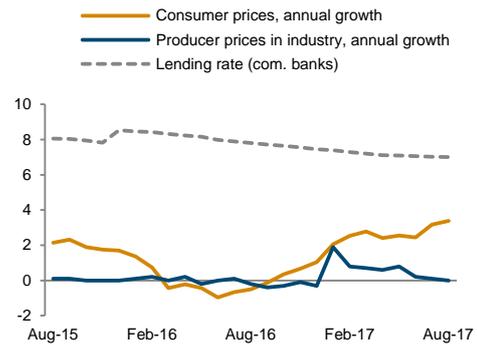
**Real sector development**  
in %



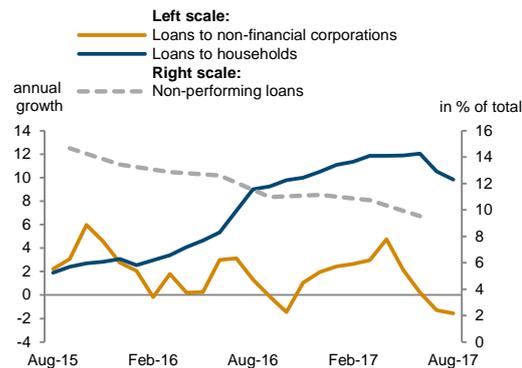
**Unit labour costs in industry**  
annual growth rate in %



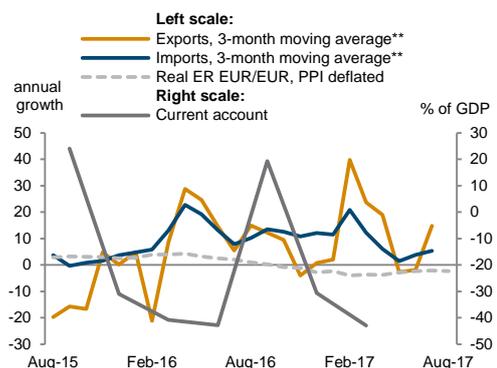
**Inflation and lending rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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

\*\*EUR based.

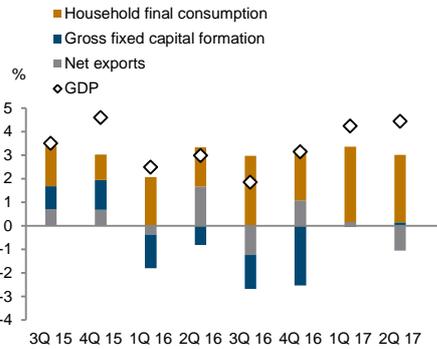
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

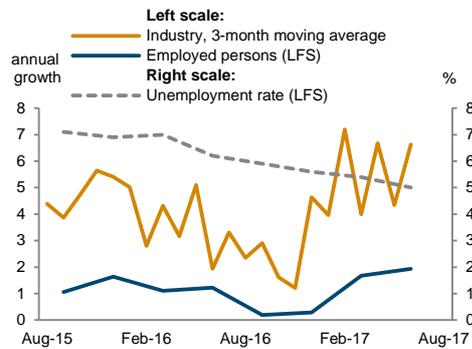
<https://data.wiiw.ac.at/monthly-database.html>

# Poland

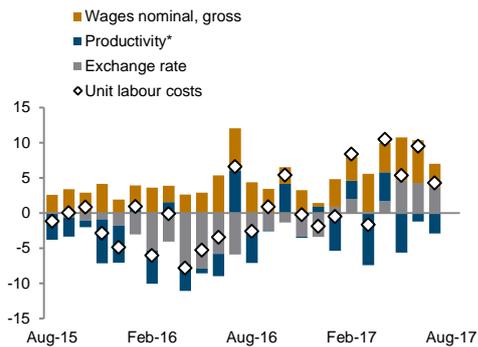
**Real GDP growth and contributions**  
year-on-year



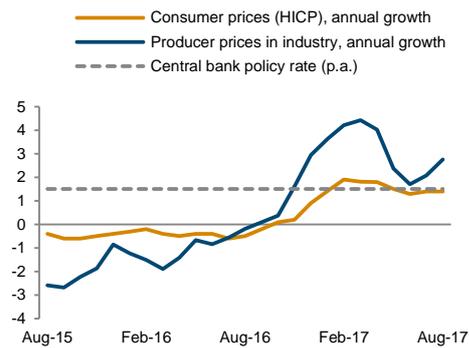
**Real sector development**  
in %



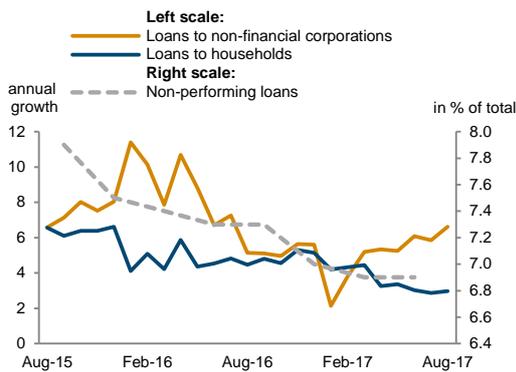
**Unit labour costs in industry**  
annual growth rate in %



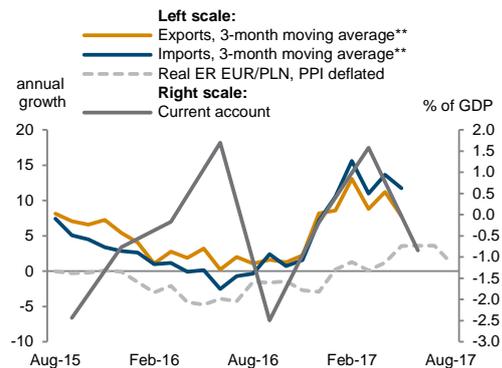
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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

\*\*EUR based.

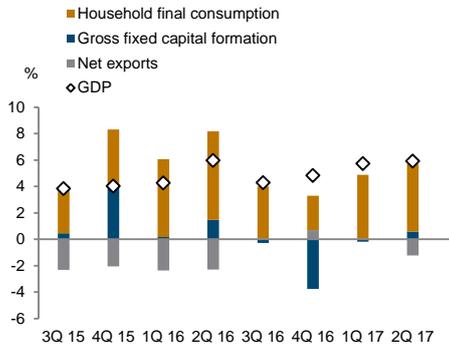
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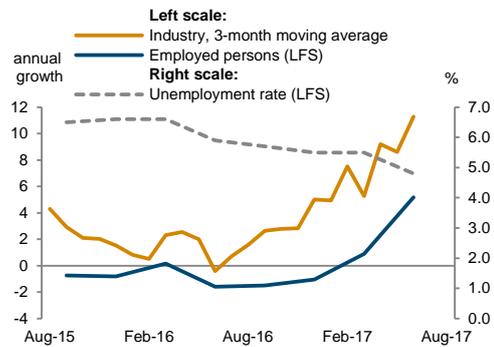
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# Romania

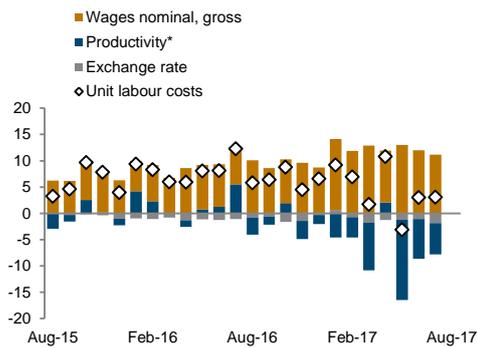
**Real GDP growth and contributions**  
year-on-year



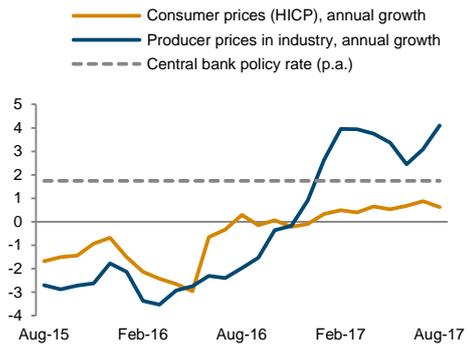
**Real sector development**  
in %



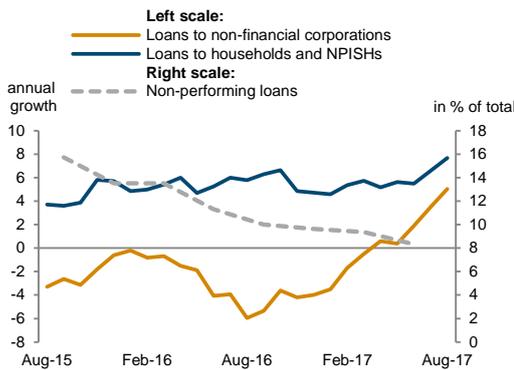
**Unit labour costs in industry**  
annual growth rate in %



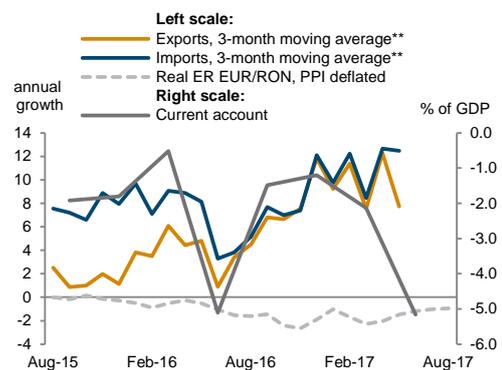
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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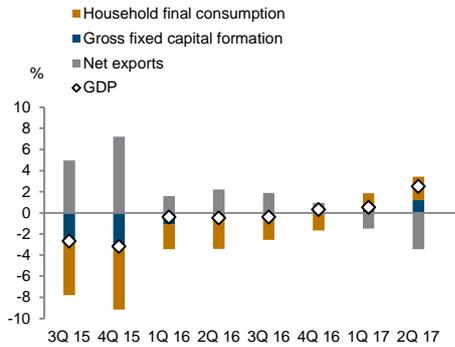
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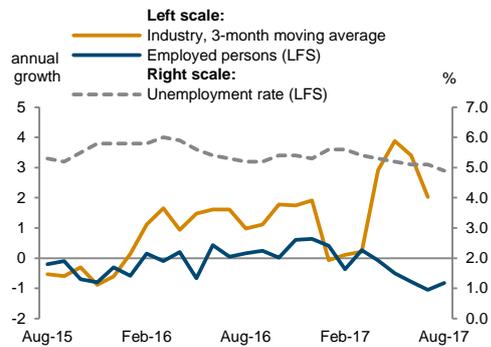
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# Russia

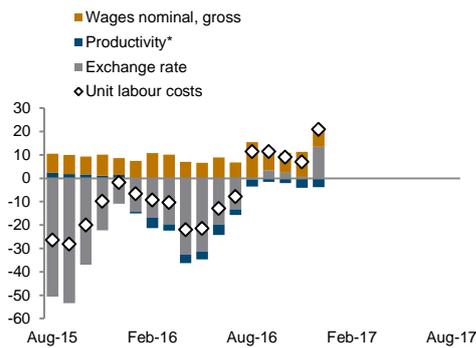
**Real GDP growth and contributions**  
year-on-year



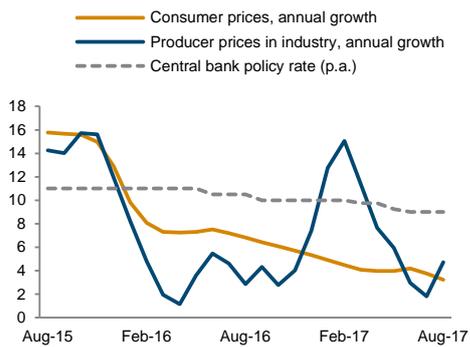
**Real sector development**  
in %



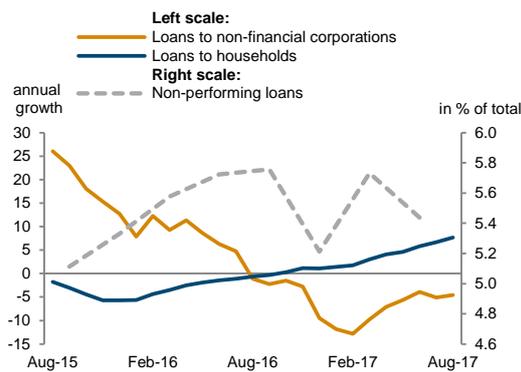
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annual growth rate in %



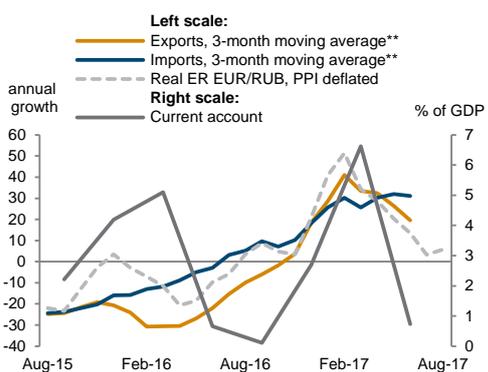
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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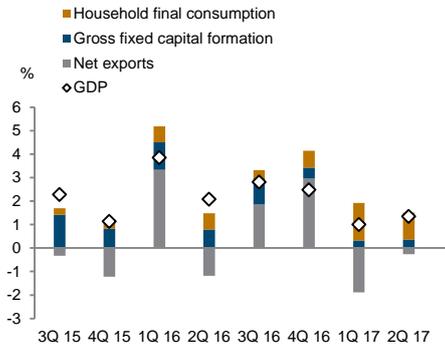
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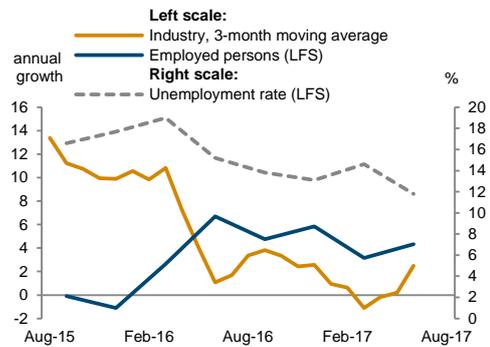
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## Serbia

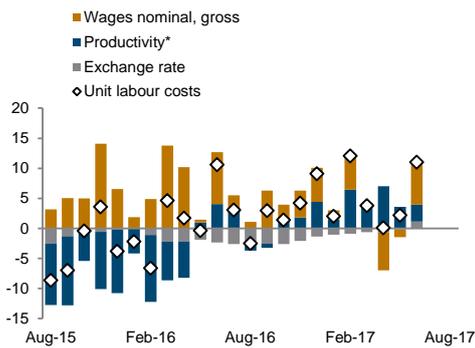
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year-on-year



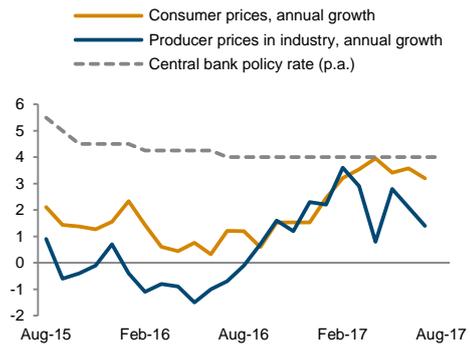
**Real sector development**  
in %



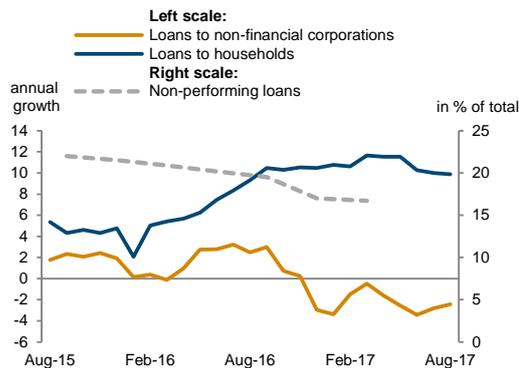
**Unit labour costs in industry**  
annual growth rate in %



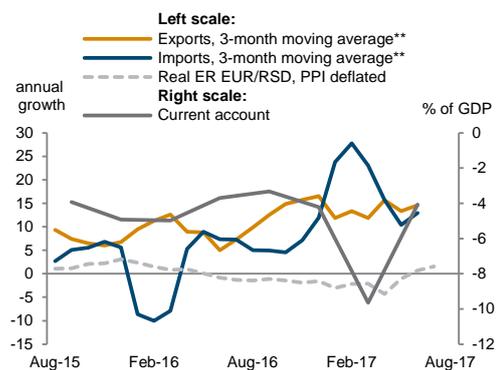
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
in %



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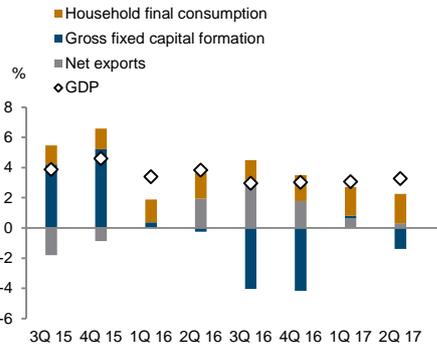
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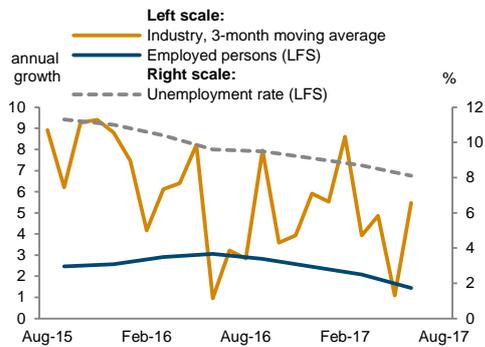
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# Slovakia

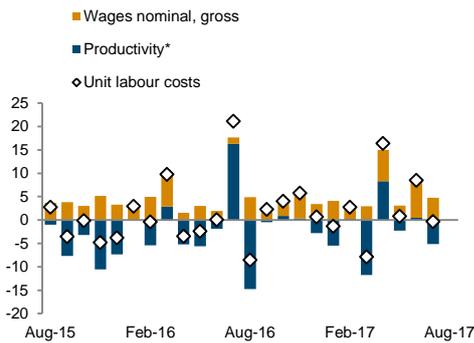
**Real GDP growth and contributions**  
year-on-year



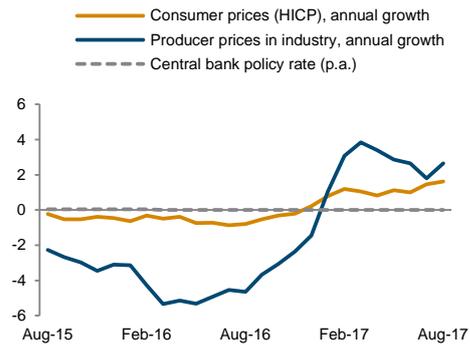
**Real sector development**  
in %



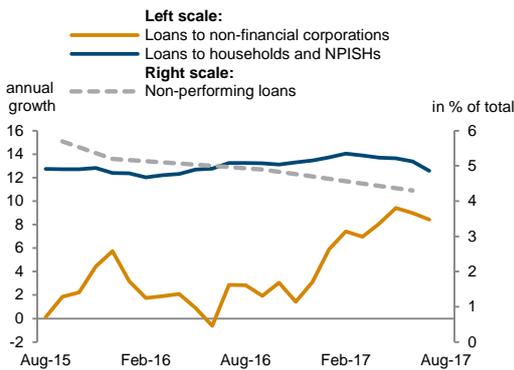
**Unit labour costs in industry**  
annual growth rate in %



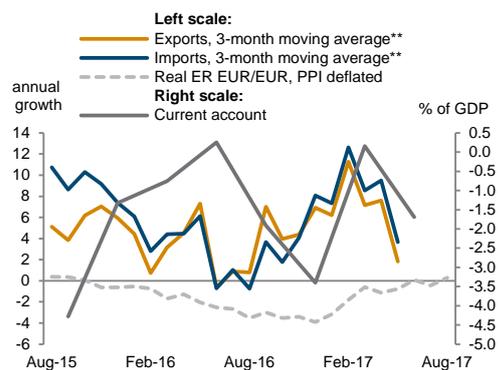
**Inflation and policy rate**  
in %



**Financial indicators**  
in %



**External sector development**  
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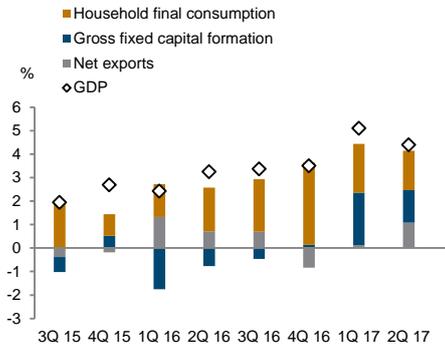
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# Slovenia

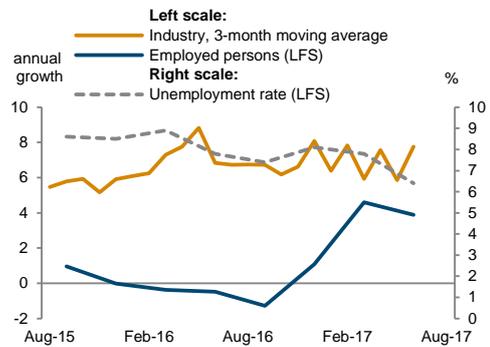
### Real GDP growth and contributions

year-on-year



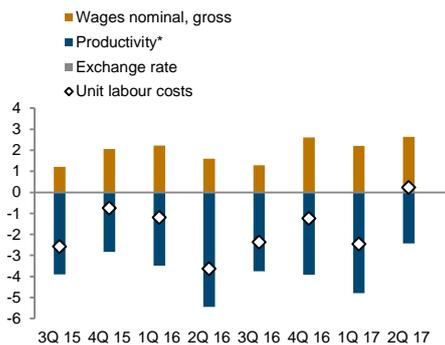
### Real sector development

in %



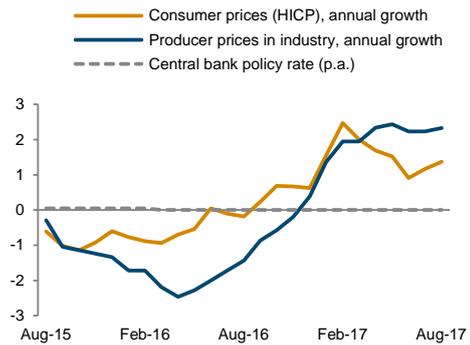
### Unit labour costs in industry

annual growth rate in %



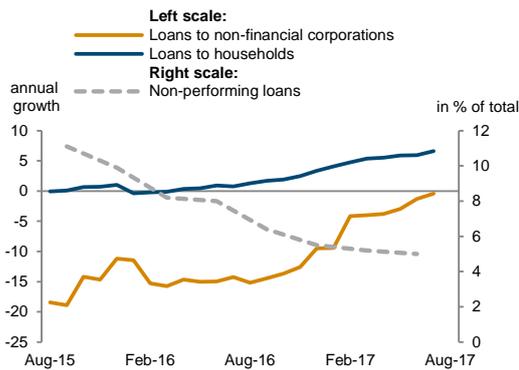
### Inflation and policy rate

in %



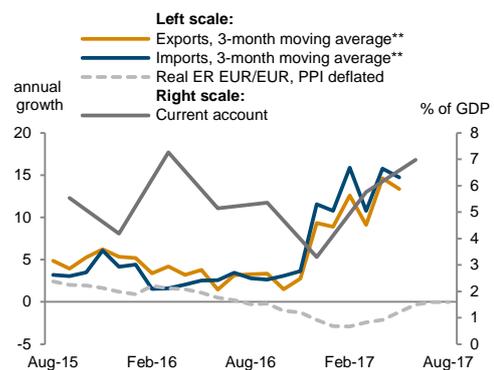
### Financial indicators

in %



### External sector development

in %



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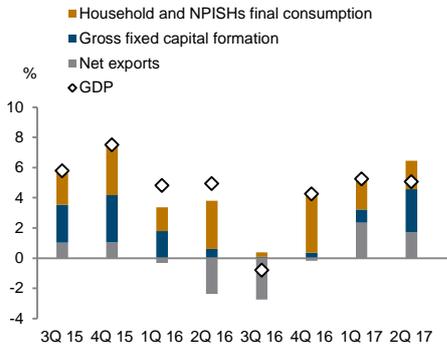
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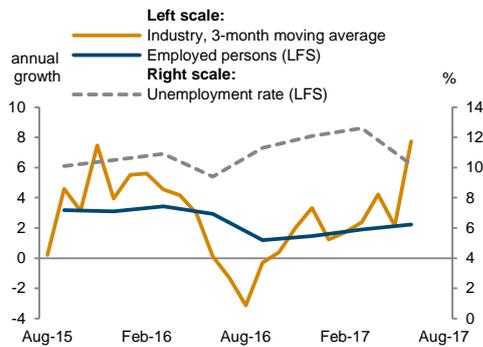
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# Turkey

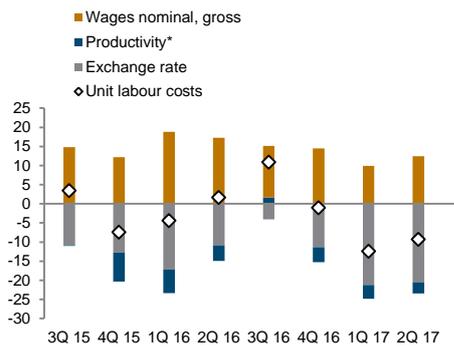
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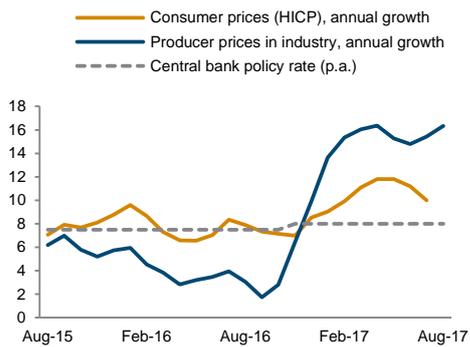
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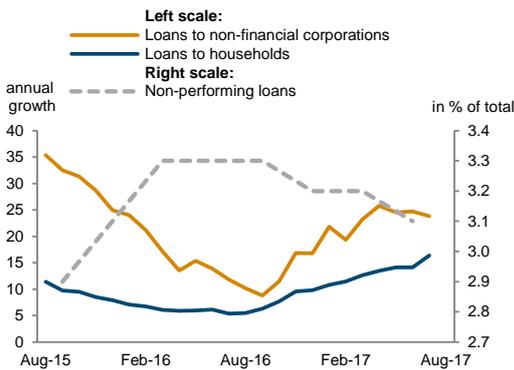
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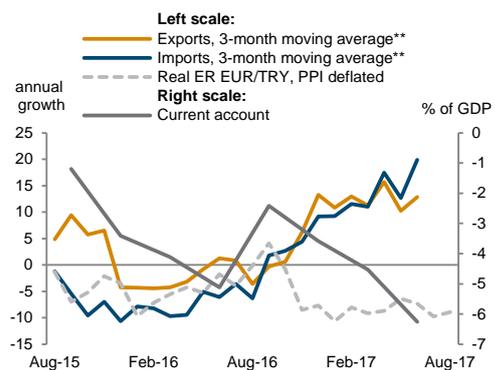
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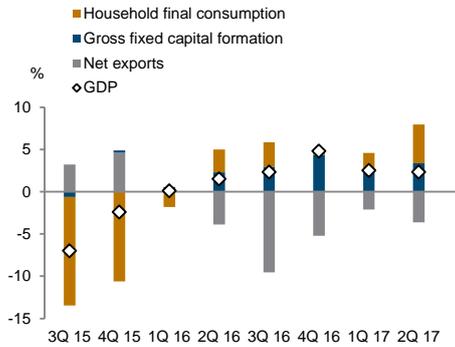
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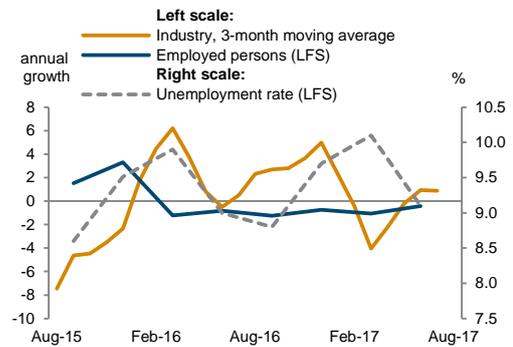
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# Ukraine

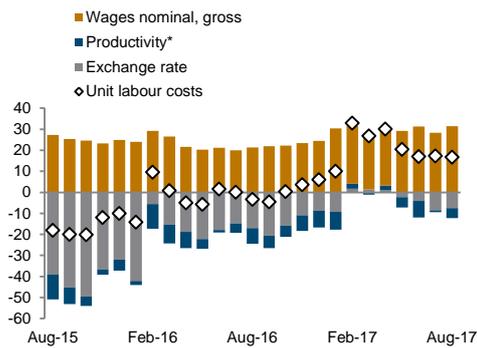
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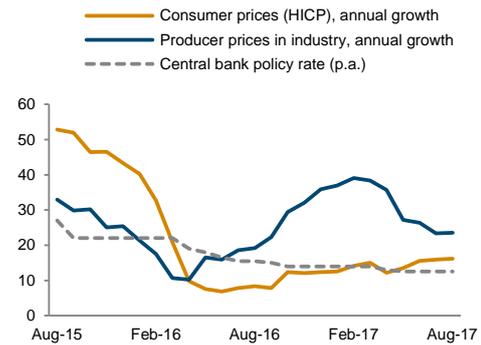
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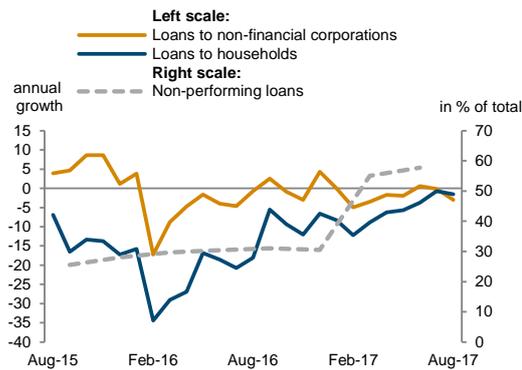
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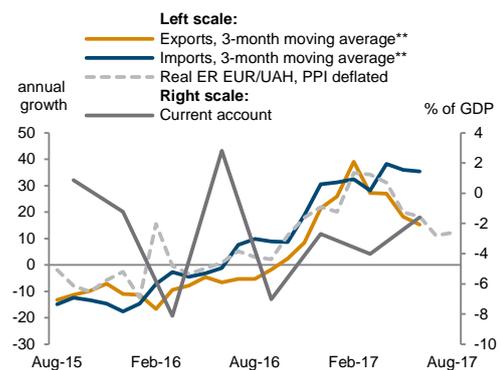
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