

# Monthly Report

**What are the Likely Consequences of the Economic Blockade of the Separatist-Controlled Areas of Donbas?**

**Unequally Wealthy but Equally Happy: Is there an Explanation?**

**Wealth of Private Households in the EU Countries**

**Intra-Regional Trade after EU Accession: The Case of the Three Baltic States**





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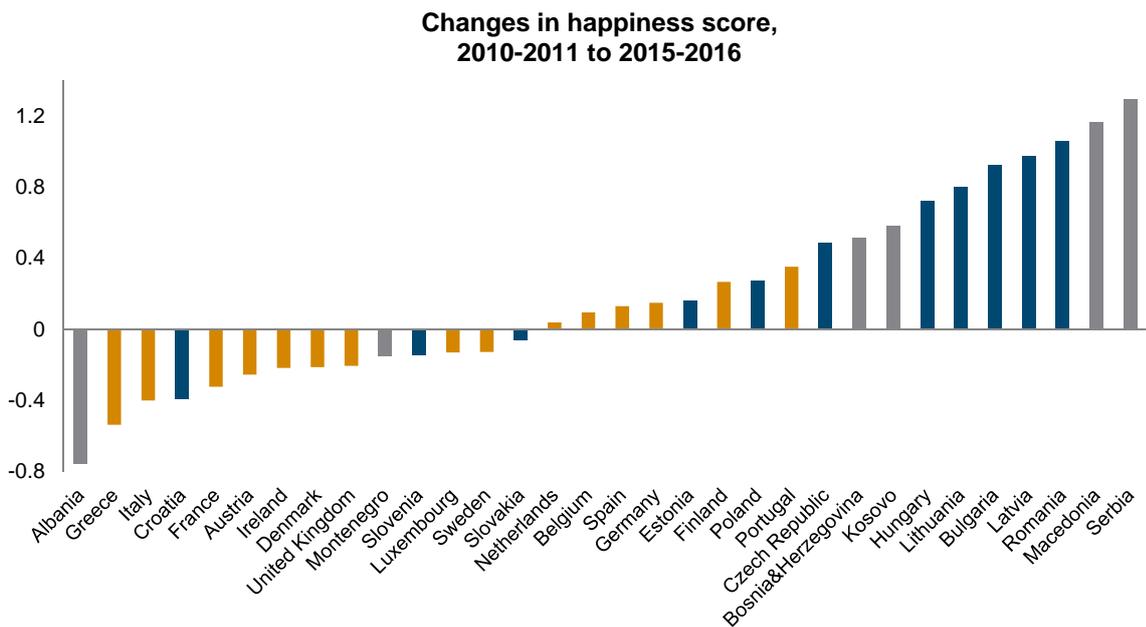
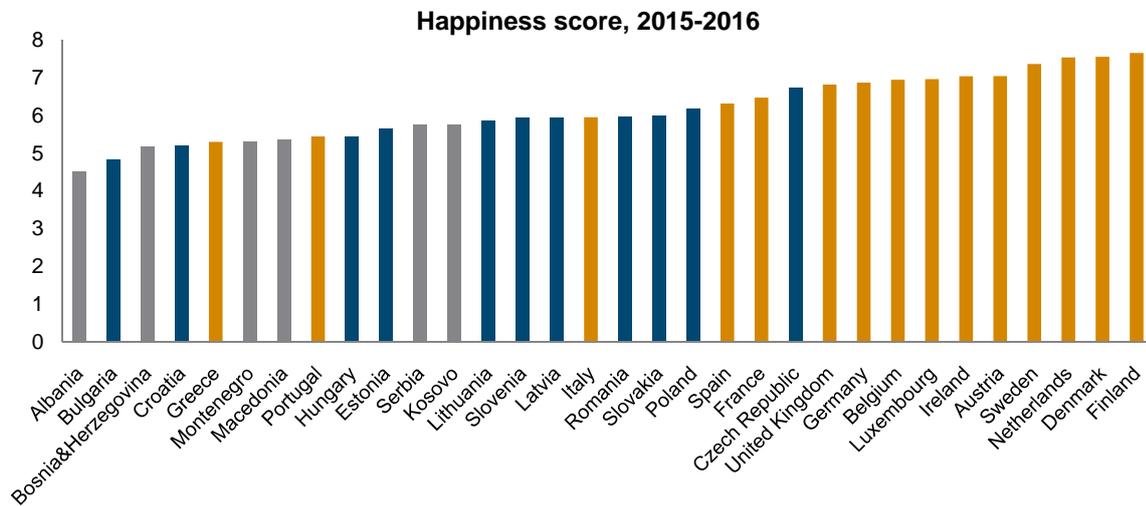


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**'Happiness' in the EU-15, EU-CEE and West Balkan countries, 2010-2016**



Note: Happiness is defined as life evaluation – an assessment on a person’s life or some aspects of it, or happiness with life in general – on a 0 to 10 scale.

Source: Own calculations using data from the *World Happiness Report 2017* (ed. by J. Helliwell, R. Layard and J. Sachs, Sustainable Development Solutions Network, New York, 2017).

## Opinion Corner: What are the likely consequences of the economic blockade of the separatist-controlled areas of Donbas?

ANSWERED BY VASILY ASTROV

*In the latest wiiw Forecast Report (Spring 2017),<sup>1</sup> we speculated whether the new geopolitical landscape – in particular the supposedly more business-like and Russia-friendly stance of the newly elected US President Donald Trump – may result in the United States partly losing its interest in Ukraine and, consequently, its leverage over the developments there. We argued that this may lead to a shift in Ukraine's policies to the political 'right', with radical nationalistic forces likely to gain more ground at the expense of the 'pragmatists', a group including President Poroshenko, which may have potentially negative consequences for the situation in Donbas.*

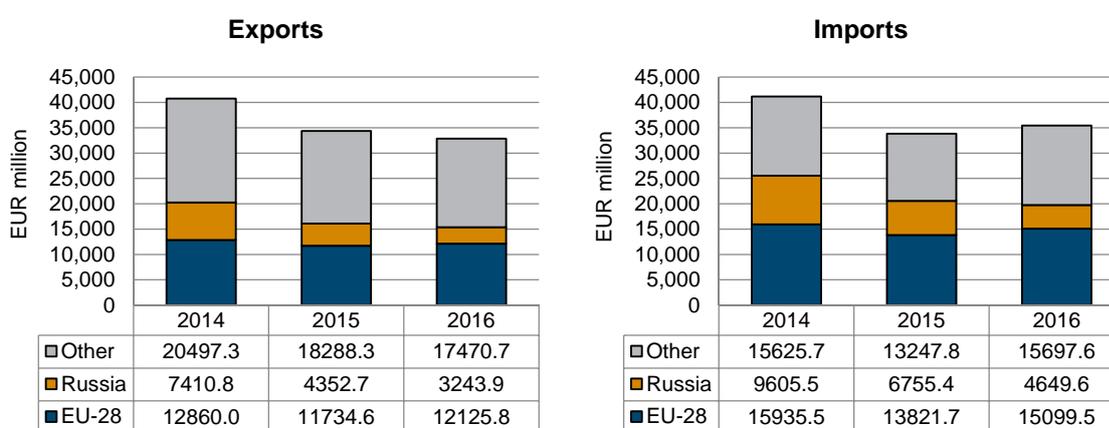
*During the recent months, this scenario has indeed partly materialised, albeit not necessarily completely for the reasons we expected: a real 'rapprochement' between Mr Trump and Mr Putin is yet to be seen. Instead, the developments in Ukraine have been driven by the logic of domestic politics rather than anything else. Starting from late January 2017, the veterans of the so-called 'anti-terrorist operation' (the official term for the military campaign against pro-Russian separatists), supported by several right-wing opposition parties, were blockading railway trade between Ukraine and the non-government controlled area (NGCA) of Donbas. Despite calling it (correctly) an act of sabotage which only hurts Ukraine's economy, the Kyiv authorities were unable to remove the blockade which was widely popular, and ultimately legitimised and even expanded it (by imposing a ban on the movement of goods across the separation line by roads) on 15 March. In the official wording, the trade ban will stay in place until a full ceasefire is implemented and enterprises located on the territory of the NGCA are returned to their Ukrainian owners. (Large industrial assets were effectively nationalised by the self-proclaimed 'people's republics' of Donetsk and Luhansk in response to the earlier unofficial trade blockade.) In another move, on 25 April Ukraine cut off electricity supplies to the 'Luhansk People's Republic' (officially, because of the accumulated payment arrears), further adding to the disruptions of economic links between the NGCA and the rest of Ukraine.*

*Clearly, the disruptions in cross-border trade will be costly for both sides at least in the short term. The stalled shipments of coal from the NGCA have already resulted in electricity shortages and have hit metals production in the rest of Ukraine. As a result, the country's industrial production contracted by 4.6% in February and by 2.7% in March, after having surged by 5.6% in January (year-on-year). Although Ukraine started importing coal from elsewhere (such as South Africa and the United States), it is reportedly more expensive and of different quality, resulting in a higher import bill and some technical problems. At the same time, Ukraine's exports of metals have suffered. All in all, the National Bank of*

<sup>1</sup> A. Adarov, V. Astrov and P. Havlik, 'A marked mood of uncertainty and risks in the CIS region', in: 'Cautious upturn in CESEE: haunted by the spectre of uncertainty', *wiiw Forecast Report*, Spring 2017, pp 34-39.

Ukraine projects that the trade blockade will result in a current account deterioration by USD 1.8 billion this year and USD 1.1 billion in 2018, and in a lower GDP growth by 1.3 pp and 0.9 pp, respectively.<sup>2</sup> For purely logistical, economic and social reasons, it would be more rational for Ukraine to trade with the NGCA (even if the latter is not under Ukraine’s direct control) rather than with countries in other corners of the world.<sup>3</sup> As Ukraine’s own recent experience with trade reorientation from Russia to the EU strongly suggests, such reorientation can prove very costly in the short run (see Figure 1), while long-run benefits are far from certain as well, unless it is accompanied by adequate investment inflows.<sup>4</sup>

**Figure 1 / Ukraine’s foreign trade developments**



Source: wiiw Database.

In the so-called ‘people’s republics’ of Donetsk and Luhansk, there will be short-term losses as well, although less information is available on that. These losses, however, should be at least partly offset by the redirection of tax payments from the newly ‘nationalised’ industrial enterprises to the ‘people’s republics’ budgets, making them somewhat less dependent on Russian subsidies. Nevertheless, the reorientation of trade flows (mainly coal and steel) to or via Russia – though obviously enjoying Russia’s political support – may take time and certainly involve additional logistical costs.

More dangerous, however, is that the new status quo may be associated with much higher costs in the medium and long run, potentially resulting in a ‘lose-lose’ situation for both Russia and Ukraine. For Ukraine, disrupting the remaining economic links with the NGCA will not make the task of its economic reintegration any easier, while politically it is certainly counter-productive. Blackmailing the ‘people’s republics’ will hardly work, since they can turn to Russia for help instead (and have indeed already done so). Quite on the contrary, it provides them with another excellent pretext for anti-Ukrainian rhetoric. All in all, the trade ban makes the chances of any future reintegration (which is the cornerstone of the Minsk-II agreement) even lower, implying that the legal status of Donbas will most probably not be

<sup>2</sup> National Bank of Ukraine, Inflation Report, April 2017, [https://bank.gov.ua/control/en/publish/category?cat\\_id=16036612](https://bank.gov.ua/control/en/publish/category?cat_id=16036612).

<sup>3</sup> For instance, neighbouring Moldova offers a relatively successful example of flourishing trade with its breakaway republic of Transnistria, which is de facto independent from Moldova, relies on Russia’s support and has its own currency. (Still, it needs to be added that the conflict in Transnistria has been frozen for more than two decades.)

<sup>4</sup> See, for instance, A. Adarov and P. Havlik (2016), ‘Benefits and Costs of DCFTA: Evaluation of the Impact on Georgia, Moldova and Ukraine’, Joint Working Paper No. 2016-12, wiiw and Bertelsmann Stiftung, Vienna, December.

*settled in the foreseeable future and military escalation will remain a risk factor. This, in turn, will negatively affect Ukraine's investment climate for the years to come, diminishing its hopes for economic restructuring and modernisation and complicating the implementation of its Deep and Comprehensive Free Trade Agreement (DCFTA) with the EU.*

*For Russia, in turn, the costs of supporting Donbas will only go up (Russia has, for instance, promptly made up for the electricity shortages in Luhansk following the cut-off from the Ukrainian side). The pro-Russian sentiment in Donbas will almost certainly strengthen further. However, Russia will hardly benefit from that, as long as it remains reluctant to formally incorporate Donbas into its own territory (as it has done with Crimea), even though it has recognised the documents issued by the self-proclaimed 'people's republics'. In these circumstances, it may prove difficult for the 'people's republics' to attract even Russian investment, making the region a constant recipient of aid from the Russian government and a burden on the Russian budget.*

*In my view, the optimal solution for both Russia and Ukraine would be to recognise the reality, i.e. the apparent willingness of the people of Donbas to live with Russia rather than Ukraine (there is little doubt that any pro-Kyiv sentiment, to the extent that it still existed in Donbas, has largely evaporated by now). A legal settlement, however controversial, would be preferable to the current status quo and would ultimately have a positive impact on the investment climate and economic prospects of the region. I realise, however, that at the current stage this solution is a sheer utopia, as it would impose huge image costs on both sides. Acknowledging the formal independence of the NGCA would be political suicide for any Ukrainian president, while for Russia annexing the separatist areas of Donbas would certainly trigger another wave of international sanctions, ultimately burying its hopes (sincere, in my view) of any improved relations with the United States under President Trump. Without a legal settlement, however, the 'lose-lose' situation may well become a reality for both Ukraine and Russia for the years to come.*

# Unequally wealthy but equally happy: is there an explanation?<sup>1</sup>

BY ISILDA MARA

## A SNAPSHOT OF COUNTRY COMPARISONS

The World Happiness Report 2017<sup>2</sup> published in March showed where on earth the happiest people live.<sup>3</sup> The results for 2016 indicate that the happiest people – with a score of 7.5 points – live in Norway, Denmark and Iceland. The ranking of countries by the level of happiness found the Czech (place 23 out of 155 countries), Slovak (40/155) and Polish (46/155) citizens to be the happiest in the group of the Central, East and Southeast European (CESEE) countries.<sup>4</sup> In contrast, the Hungarians (75/155), Croats (77/155) and Bulgarians (105/155) are the least happy. The Western Balkan countries ranked quite low, but within the region the happiest seem to be the Serbs (73/155) and Kosovo citizens (78/155) while the most miserable appear to be the Macedonians (92/155) and the Albanians (109/155).<sup>5</sup>

The worldwide comparison revealed that living in Canada or New Zealand produces almost the same level of happiness, both countries enjoying the 7th and 8th place in the ranking. Other pairs of countries – quite distant geographically but similarly happy – are Austria and Costa Rica (12th and 13<sup>th</sup> rank, respectively), or the United Kingdom and Chile (ranks 20 and 21). As far as CESEE countries are concerned, the Czech Republic and Argentina (ranks 23 and 24) share a similar level of happiness, as do Slovakia and Bahrain (ranks 40 and 41), Hungary and Jamaica (75 and 76), Bulgaria and Sierra Leone (105 and 106) or Albania and Iran (ranks 108 and 109).<sup>6</sup>

The comparison of country pairs indicates that, first, despite living in different and distant corners of the earth, people might share a similar level of happiness, and second, what explains happiness in one country may be different from the other. The Austria-Costa Rica comparison is one of the examples which indicate that, while the income per capita impact on happiness is higher in Austria than in Costa Rica, the residual component (the unexplained level of happiness) appears to be much higher for the latter country. The same reasoning applies to other pairs of countries such as the Czech Republic and Argentina, Bulgaria and Sierra Leone, or Slovenia and Peru, etc.

<sup>1</sup> The author wishes to thank Mahdi Ghodsi for useful remarks and suggestions.

<sup>2</sup> J. Helliwell, R. Layard and J. Sachs (eds) (2017), *World Happiness Report 2017*, Sustainable Development Solutions Network, New York.

<sup>3</sup> Happiness is defined as life evaluation – an assessment on a person's life or some aspects of it, or happiness with life in general – on a 0 to 10 scale across 155 countries over a sample of 1,000 individuals in each country (*World Happiness Report 2017*, Ch. 2, p. 11).

<sup>4</sup> For a graphical display of main results see 'Graph of the month' on page 1.

<sup>5</sup> Source: *World Happiness Report 2017*, Ch. 2, pp. 20-22.

<sup>6</sup> Ibid.

Therefore the question emerges, do happier people live in certain countries/corners of the world or does the place where the person lives make a difference in the level of happiness? For example, are Norwegians predominantly happier or does living in Norway make people happier? The World Happiness Report 2017 revealed that the drivers of happiness among the Norwegians certainly are wealth, but also the freedom to make choices as well as values such as democracy and trust in the government. At the same time, happier people or those in pursuit of happiness tend to choose geographical locations with favourable climate and weather conditions (Feddersen et al., 2016). Usually studies have also argued that the direction of causality climate–happiness follows from climate to happiness (Denissen et al., 2008). So how to reconcile these findings with the findings of what are the drivers of happiness?

Accordingly, what we would like to investigate further is whether the geographical location (which we proxy by longitude and latitude) explains part of happiness or helps to understand why citizens of less wealthier countries tend to be equally happy as the richer ones despite the income gap, e.g. why the people in Costa Rica are as happy as people in Austria despite lower level of income per capita. Does geographical location explain part of the higher and unexplained residual on happiness?<sup>7</sup>

## WHAT EXPLAINS HAPPINESS?

There is an important body of literature about happiness and what explains it. One of the most discussed, investigated, contested and important drivers of happiness appears to be income. However, one of the first who studied the issue empirically and argued that happiness is not all about money was Easterlin (1974, 1995, 2001). He found that happiness increases with wealth only up to a certain threshold. Thereafter the level of happiness appears to be unaffected by even higher levels of absolute income.<sup>8</sup>

One important aspect of happiness is its long-term or short-term perspective. Happiness is very complex and subjective in the sense that individuals provide an evaluation of their lives which mixes the present (the current positive or negative state of events influencing their lives for the time being), the past (e.g. positive or negative experiences in the past) and the future (e.g. expectations or future life projections). Recently Rutledge et al. (2016), using a computational model, have developed an equation which tries to capture the effects of the past, present and future at least in momentary happiness. According to their study, happiness depends on certain rewards, but also on to what extent such rewards have been below or above our expectations. Such insights are very useful and offer in part valid explanations about positive or negative momentary happiness.

An extensive literature provides evidence of the dependency of happiness on climate amenities. Climate plays an important role for the mood and positive or negative affect<sup>9</sup>. A number of studies argue that climate-related amenities might fail making us feel better but at least might help us to feel less miserable (Denissen et al., 2008). The investigation of the relationship between weather and daily mood showed

<sup>7</sup> For detailed information on the ranking of countries by the determinants of happiness see *World Happiness Report 2017*, Ch. 2, pp. 20-22.

<sup>8</sup> In the literature this is recognised as the Easterlin Paradox.

<sup>9</sup> Usually, positive affect is defined as the average of previous-day affect measures of happiness, laughter and enjoyment. Negative affect is defined as the average of previous-day affect measures for worry, sadness and anger (*World Happiness Report 2017*, Ch. 2, p. 17).

no significant effect of daily weather on positive affect.<sup>10</sup> Nevertheless, the influence of climate amenities on negative affect is confirmed to be significant even though the sensitivity of people to daily weather changes is of a different scale. Furthermore, the literature suggests that there is special preference for a certain type of climate because of its effect on individuals – physically and mentally (e.g. as concerns nutrition or as concerns mood, aggression or seasonal affective disorders) – but also its effect on the economy (especially for those sectors of the economy which are weather/climate-related, e.g. agriculture) (see Parker, 1995; Rehdanz and Maddison, 2005).

The World Happiness Report 2017 tries to explain happiness taking into account six main variables: income per capita, social support, life expectation, social freedom, generosity, and lack of corruption. In addition, two more short-term indicators – positive and negative affect – have been used to measure happiness.

## THE ASSOCIATION OF HAPPINESS WITH THE GEOGRAPHICAL LOCATION

We did our own calculations and estimated further what determines happiness. We used the online data of the World Happiness Report 2017 but included in addition geographical location indicators such as longitude and latitude<sup>11</sup> as a proxy for climate amenities – especially as a proxy for exposure to sunny days or temperature<sup>12</sup>. The regressions are comparable across regions, and here the region of our interest is represented by the EU-15/EFTA countries, the Central and East European EU Member States (EU-CEE) and the Western Balkan countries (WB).<sup>13</sup> We included both GDP per capita and GDP per capita squared to test the Easterlin Paradox. The results confirm it and show that the level of happiness is non-linear and bell-shaped especially for the EU-15/EFTA countries and the Rest of the World (RoW). The effect seems to be much stronger for the wealthier EU-15/EFTA countries.<sup>14</sup>

For the EU-CEE countries the estimates indicate that happiness is increasing with income, whereas for the WB countries we do not find any significant effect of income on happiness.<sup>15</sup> Interestingly, for the EU-CEE countries the Easterlin Paradox applies as to the effect of income on positive affect<sup>16</sup>, suggesting that among EU-CEE countries the positive mood of the day might be moving up with income but there is a diminishing marginal effect of income on the positive mood of the day. Accordingly, different patterns of attachment to money transpire for Eastern Europe compared to WB countries, the EU-15 but also the RoW. Higher income helps the EU-15/EFTA citizens to relieve their negative mood of

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<sup>10</sup> Denissen et al. (2009).

<sup>11</sup> Absolute latitude and longitude of the country has been used. The data have been attained from the CEPII database, [http://www.cepii.fr/cepii/en/bdd\\_modele/bdd.asp](http://www.cepii.fr/cepii/en/bdd_modele/bdd.asp). Higher latitudes are characterised by extreme weather conditions while lower latitudes are supposed to have a longer exposure to sunlight.

<sup>12</sup> Temperature is an important factor that helps to distinguish happiness among people. Also seasonal and climate zone variations affect happiness (Peng et al., 2016).

<sup>13</sup> EU-CEE includes Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia; the WB countries include Serbia, Kosovo, Montenegro, Bosnia and Herzegovina, Macedonia and Albania; the EU-15/EFTA countries include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden, the United Kingdom, Norway, Switzerland and Iceland.

<sup>14</sup> See Table 1 for details. Model 1 uses the happiness score or overall life evaluation as a dependent variable. Model 2 uses positive affect as a dependent variable and Model 3 uses negative affect as a dependent variable.

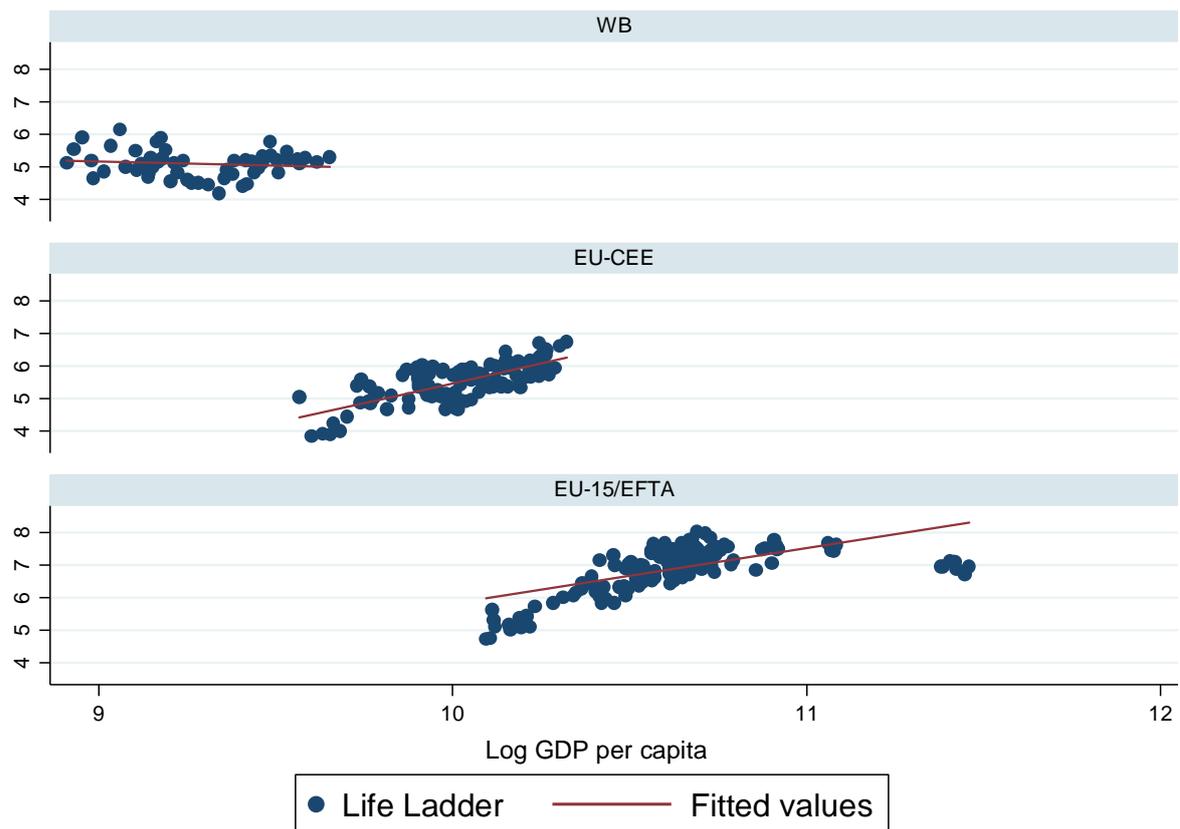
<sup>15</sup> See M1, Table 1.

<sup>16</sup> See M 2, Table 1.

the day<sup>17</sup>, implying that higher income above a certain level might fail to make EU-15/EFTA citizens overall happier but at least helps them to feel less miserable in the short term. Referring to WB countries, we find that money does not matter or, at least at its current level, is insignificant as concerns making citizens in the WB countries happier, suggesting that the absolute level of income as well as relative income matter for happiness.

Figure 1 shows that EU-CEE and EU-15/EFTA countries exhibit a positive and increasing relationship between income and happiness. However, the EU-CEE countries still have lower levels of GDP per capita as well as happiness compared with the EU-15/EFTA countries. As for the WB economies, we observe that not only are they lagging quite behind in GDP per capita terms, but higher income has also not led to a higher level of happiness. As such, the gap in income and happiness between WB, EU-CEE and EU-15/EFTA countries still remains remarkable.

**Figure 1 / Happiness score (Life Ladder) vs GDP per capita, WB, EU-CEE, EU-15/EFTA, 2006-2016**



Source: Own calculations using online data; *World Happiness Report 2017*, Chapter 2.

In contrast, what we find as strongly significant for the RoW but insignificant for citizens living in Europe is the effect of social support<sup>18</sup> and healthy life expectancy at birth on overall happiness, and positive

<sup>17</sup> See M 3, Table 1.

<sup>18</sup> Social support is defined as 'counting on relatives and friends to help one in case need' (*World Happiness Report 2017*, Ch. 2, p. 17).

and negative affect. Other determinants such as 'freedom to make life choices'<sup>19</sup> are found to be strong and significant for overall life evaluation as well as positive and negative affect especially in the WB and EU-CEE countries and the RoW. In particular, for WB and EU-CEE citizens, who have experienced severe dictatorships, the value of freedom and mastering their own life has certainly been a great source of happiness (Frey and Stutzer, 2000). The perceived level of corruption<sup>20</sup> is found to make EU-15/EFTA countries citizens less happy, but interestingly EU-CEE citizens happier – a subject worth future research.

Generosity is another source of overall happiness for the rest of the world, whereas it helps EU-15/EFTA citizens' positive mood of the day and WB citizens to feel less miserable in the short term. This finding is in line with that of Rutledge et al. (2016), who show that generosity relates to how happiness is affected by the inequalities experienced in everyday life. So generosity is more common among those people who feel less happy if they get more than others; or it is less common among those who are indifferent to the suffering of others.

Finally, the results about the impact of the geographical location show that absolute latitude or longitude has no effect on overall happiness in EU-CEE and EU-15/EFTA countries<sup>21</sup>. Higher latitude implies a lower exposure to daylight. Interestingly, higher latitude is shown to have a negative influence on the good mood as concerns the RoW, but a positive one for EU-15/EFTA citizens<sup>22</sup>. One interpretation might be that people get accustomed to the amenities characterising the geographical location where they live. Historically, these customs are transmitted over time and are part of the culture of that specific location (Denissen et al., 2008).

If for the RoW the geographical location is associated with a positive effect on overall happiness – but not for the EU-15/EFTA and EU-CEE countries – we might argue that the amenities which derive from geographical location certainly produce some impact on overall happiness – even though small in size. As mentioned earlier, Costa Ricans, despite being less wealthy than Austrians, are found to be equally happy as the latter. To some extent this might be thanks to the amenities characterising the corner of the earth they were born in. So we might speculate a bit or leave it to future research whether there is a piece of happiness granted to us from that part of the world where we were born. A choice we certainly cannot make is our country of birth; however, at least we can choose – to a certain degree – the country where we wish to live. So I would like to close this article with the lines written by Mathew Arnold<sup>23</sup>:

'Is it so small a thing,  
to have enjoyed the sun,  
to have lived light in the spring,  
to have loved, to have thought, to have done?'

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<sup>19</sup> Defined from the question: 'Are you satisfied or dissatisfied with your freedom to choose what you do with your life?' (*World Happiness Report 2017*, Ch. 2, p. 17.)

<sup>20</sup> Perception of corruption captured by the question: 'Is corruption widespread throughout the government or within businesses?' (*World Happiness Report 2017*, p. 17).

<sup>21</sup> See M1, Table 1.

<sup>22</sup> See M2, Table 1.

<sup>23</sup> Cited by Layard (2005) in 'Happiness: Lessons from a new science', Allen Lane, London.

Table 1 / Regression results of happiness determinants

Variable		Happiness score	Positive affect	Negative affect
		M1	M2	M3
<b>dum#gdp per capita</b>	RoW	0.0000***	0.0000	0.0000
	WB	-0.0004	0.0000	0.0001
	EU-CEE	0.0004*	0.0000*	0.0000
	EU-15/EFTA	0.0001***	0.0000	-0.0000*
<b>dum#gdp per capita squared</b>	RoW	-0.0000***	-0.0000**	0.0000
	WB	0.0000	0.0000	0.0000
	EU-CEE	0.0000	-0.0000*	0.0000
	EU-15/EFTA	-0.0000***	0.0000	0.0000
<b>dum#social support</b>	RoW	2.4586***	0.3127***	-0.2308***
	WB	2.2644	-0.1242	-0.0249
	EU-CEE	-2.0675	0.1537	-0.1649
	EU-15/EFTA	3.0206	-0.1473	0.0616
<b>dum#healthy life expectancy at birth</b>	RoW	0.0385***	0.0011*	0.0030***
	WB	0.0292	0.0032	0.0006
	EU-CEE	-0.0144	-0.0026	-0.0055
	EU-15/EFTA	0.0187	0.0042	0.0036
<b>dum#Freedom to make life choices</b>	RoW	0.8961***	0.2146***	-0.0843***
	WB	2.1206*	0.2417*	-0.3210**
	EU-CEE	1.6289*	0.2284**	0.0177
	EU-15/EFTA	0.4204	0.1477	-0.1542
<b>dum#generosity</b>	RoW	0.2720*	0.0819***	0.0101
	WB	0.3873	0.0729	-0.2270*
	EU-CEE	-0.557	0.0131	0.0748
	EU-15/EFTA	0.0503	0.1112*	-0.0402
<b>dum# perceptions of corruption</b>	RoW	0.2123	0.0281	0.0810***
	WB	-1.1227	-0.2188	0.1741
	EU-CEE	1.8398*	-0.1151	0.1836
	EU-15/EFTA	-1.0375**	0.0341	0.0281
<b>dum# latitude</b>	RoW	-0.0025	-0.0024***	-0.0006***
	WB	0.1307**	0.0074	-0.0139*
	EU-CEE	0.0041	-0.0026	-0.0043
	EU-15/EFTA	0.001	0.0034*	-0.0005
<b>dum# longitude</b>	RoW	0.0015*	0.0006***	-0.0003**
	WB	-0.0812	0.0163	-0.0079
	EU-CEE	-0.0109	-0.0013	0.0009
	EU-15/EFTA	0.0105	-0.0012	-0.0021*
<b>_cons</b>		0.1616	0.2734***	0.3140***
<b>N</b>		1249	1246	1248
<b>r2_a</b>		0.7687	0.6025	0.2825

Standard errors in parentheses. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001. Pooled OLS regressions with years fixed effects. Source: Own calculations.

## REFERENCES

- Denissen, J.J.A., L. Butalid, L. Penke and M.A.G. van Aken (2008), 'The effect of weather on daily mood: a multilevel approach', *Emotion*, Vol. 8, No. 5, pp. 662-667, doi: 10.1037/a0013497.
- Easterlin, R.A. (1974), 'Does Economic Growth Improve the Human Lot? Some Empirical Evidence', in: P.A. David and M.W. Reder (eds), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*, Academic Press, Inc., New York.
- Easterlin, R.A. (1995), 'Will raising the incomes of all increase the happiness of all?', *Journal of Economic Behavior & Organization*, Vol. 27, No. 1, pp. 35-47.
- Easterlin, R.A. (2001), 'Income and happiness: towards a unified theory', *The Economic Journal*, Vol. 111, No. 473, pp. 465-484.
- Feddersen, J., R. Metcalfe, M. Wooden (2016), 'Subjective wellbeing: why weather matters', *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, Vol. 179, No. 1, pp. 203-228.
- Frey, B.S. and A. Stutzer (2000), 'Happiness, Economy and Institutions', *The Economic Journal*, Vol. 110, No. 466, pp. 918-938.
- Helliwell, J., R. Layard and J. Sachs (eds) (2017), *World Happiness Report 2017*, Sustainable Development Solutions Network, New York.
- Parker, P. (1995), *Climatic Effects on Individual, Social, and Economic Behavior: A Physioeconomic Review of Research Across Disciplines*. Greenwood Press, <https://books.google.at/books?id=iid2QgAACAAJ>.
- Peng, Y.-F., J.-H. Tang, Y. Fu, I. Fan, M.-K. Hor and T.-C. Chan (2016), 'Analyzing Personal Happiness from Global Survey and Weather Data: A Geospatial Approach', *PLoS One*, Vol. 11, No. 4, e0153638, doi:10.1371/journal.pone.0153638.
- Rehdanz, K. and D. Maddison (2005), 'Climate and happiness', *Ecological Economics*, Vol. 52, No. 1, pp. 111-125.
- Rutledge, R.B., A.O. de Berker, S. Espenhahn, P. Dayan and R.J. Dolan (2016), 'The social contingency of momentary subjective well-being', *Nature Communications*, 7, Article No. 11825, doi:10.1038/ncomms11825.

# Wealth of private households in the EU countries

BY SEBASTIAN LEITNER

## INTRODUCTION

Research on inequality has regained attention, taking into consideration possible causes of the economic crisis and the diverging effects of the latter on households across the income distribution. Recently also the effect of widening inequalities in households' welfare positions on political stability have been discussed more intensively. While in previous decades comparable micro data across countries were only available for household income and its composition, in more recent years also wealth data have become available for most EU countries. In December 2016, the data of the second wave of the 'Household Finance and Consumption Survey' (HFCS) were published by the ECB<sup>1</sup>. These data were collected mainly in 2013-2014 and are available for all euro-area countries (except Lithuania) and in addition for Hungary and Poland. In the following some highlights of the data for selected countries will be presented with a focus on differences between Central and East European (EU-CEE) and West European Member States of the EU.

## WEALTH HOLDINGS OF HOUSEHOLDS

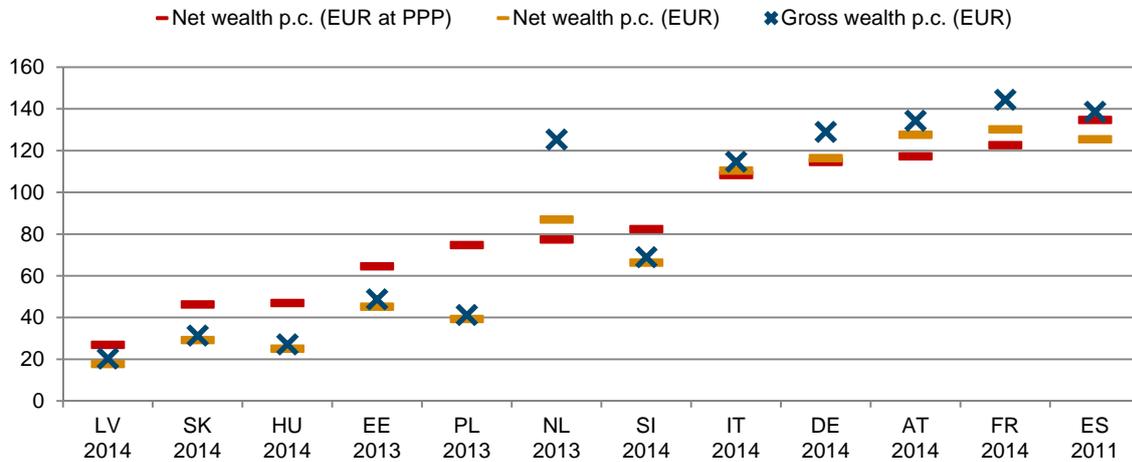
The average levels of wealth holdings (gross and net by subtracting debt burdens), as expected, differ considerably between households in EU-CEE and in West European countries of the EU (see Figure 1). For a cross-country comparison we calculated mean wealth levels per capita in EUR at purchasing power parities (PPP).

In this comparison Latvia ranks last, with net wealth amounting to about EUR 27,000 per capita at PPP, whereas Spain is at the top – its net wealth is about 5 times larger, at almost EUR 135,000 at PPP. It may surprise that Spain is still ranked first even after the economic crisis. However, considering that average prices for dwellings have fallen in Spain by about 25% between 2011 (the time of data collection in the country) and 2014, the assets of Spanish households have depreciated in the meantime. But also within the group of EU-CEE countries, per capita wealth levels diverge significantly. For instance, Slovenians own 3 times more net wealth than Latvians. Moreover, we can see from Figure 1 that households' gross and net wealth levels do not differ a lot in the EU-CEE countries, while particularly in the Netherlands, but also in other West European countries such as Germany, Austria, France or Spain, the average debt burden of households is higher, pointing to a generally more pronounced degree of financialisation of the household sector in those economies. Thus, in net terms, the average wealth position of households in the Netherlands is less favourable.

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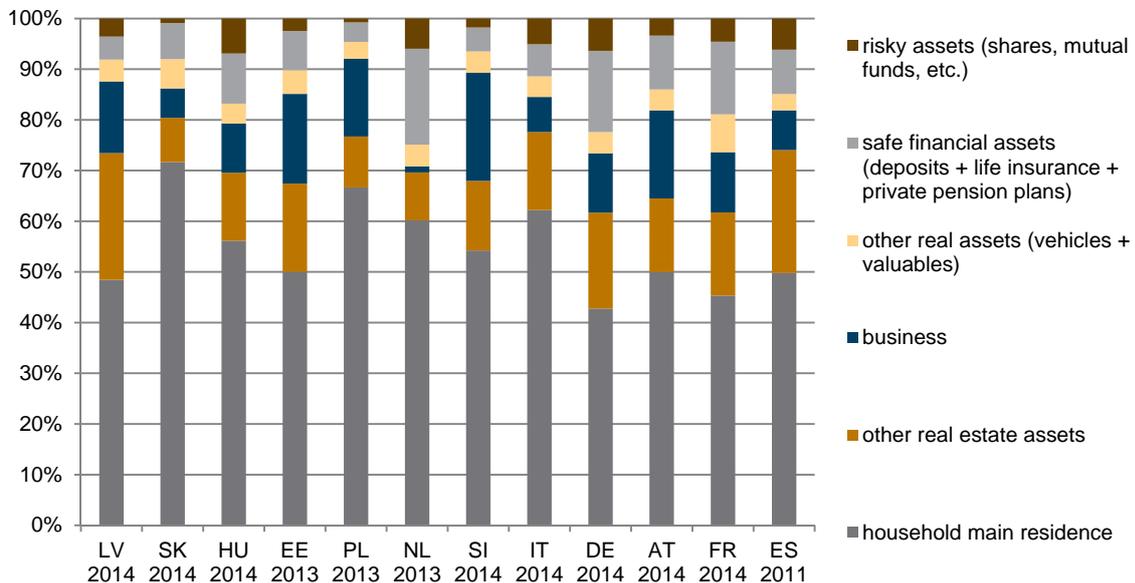
<sup>1</sup> For detailed results and methods applied, see: Household Finance and Consumption Network (2016a, 2016b).

**Figure 1 / Net and gross wealth of private households in selected EU countries (means of per capita holdings, in thousand EUR / EUR at PPP)**



Source: HFCS, 2<sup>nd</sup> wave; wiiw calculations.

**Figure 2 / Gross wealth holdings of households in selected EU countries, share by asset type**



Source: HFCS, 2<sup>nd</sup> wave; wiiw calculations.

Looking at the asset composition of gross wealth (Figure 2) we can see that in most countries the main residence accounts for 50% or more of the wealth of private households. The relative share is driven by the actual level of real estate prices, on the one hand, and by the ownership structures in the particular country, on the other. In the selected EU-CEE countries, on average about 80% of the households own their main residence, which is similar to the situation in South European countries. By contrast, e.g. in Austria and Germany less than half of the households own their dwelling, while the rest are renters. An

important reason for this is that in the latter countries investment in public housing is relatively more widespread. On average, another 16% of the asset portfolio in the whole group of EU countries investigated is allocated to further real estate and 12% to self-employment businesses. The share of financial assets in the gross wealth portfolio is much lower in EU-CEE countries with the exception of Hungary. In the West European countries simple saving in bank accounts, but also in the form of life insurance and private pension plans is more widespread. In addition, also the share of more risky assets (shares, mutual funds, etc.) is higher in West European countries; however, it is also prominent in Latvia and Hungary.

## DISTRIBUTION OF NET WEALTH BETWEEN HOUSEHOLDS

Obviously, 'average' households are quite rare when it comes to wealth positions, and distribution matters a lot. As we can see from Table 1, inequality of net wealth between households is much higher when measured by the Gini coefficient (ranging between 0: perfect equality and 100: perfect inequality) compared to inequality of net income. The highest level of inequality in net wealth is to be found in Latvia, followed by Germany, Austria, the Netherlands and Estonia. In all other EU-CEE countries, inequality of net wealth is below the average of EU countries. The lowest level is reported for Slovakia. While the Gini coefficient is a composite index measuring the average inequality throughout the whole distribution, the P80/P20 ratio is a more intuitive measure for describing welfare differences. It compares the median net wealth of households in the 80<sup>th</sup> percentile in comparison to those in the 20<sup>th</sup> percentile of the distribution. Thus, e.g. in Latvia the former own about 30 times more than those in the 20<sup>th</sup> percentile. Measured by this indicator, the highest wealth inequality is to be found for Germany, the Netherlands and Austria, while the dispersion is much lower for all EU-CEE countries, again except for Latvia. Comparing inequality indices of income and wealth, we see no significant correlation between those measures.

**Table 1 / Distribution of net wealth and net income of households in selected EU countries**

Country	Net wealth		Net income <sup>1)</sup>	
	Gini	p80/p20	Gini	p80/p20
Latvia <sup>2)</sup>	78.5	32.8	35.5	2.9
Germany <sup>2)</sup>	76.2	111.4	30.7	2.2
Austria <sup>2)</sup>	73.1	57.0	27.6	2.0
Netherlands <sup>3)</sup>	69.8	71.3	25.1	2.5
Estonia <sup>3)</sup>	69.1	17.9	32.9	2.4
France <sup>2)</sup>	67.6	32.4	29.2	2.7
Hungary <sup>2)</sup>	64.3	10.4	28.6	2.0
Slovenia <sup>2)</sup>	62.8	12.4	25.0	2.1
Italy <sup>2)</sup>	60.3	30.1	32.4	2.3
Spain <sup>4)</sup>	59.9	7.7	34.0	2.8
Poland <sup>3)</sup>	58.7	12.9	30.7	2.1
Slovakia <sup>2)</sup>	49.2	5.4	26.1	2.1

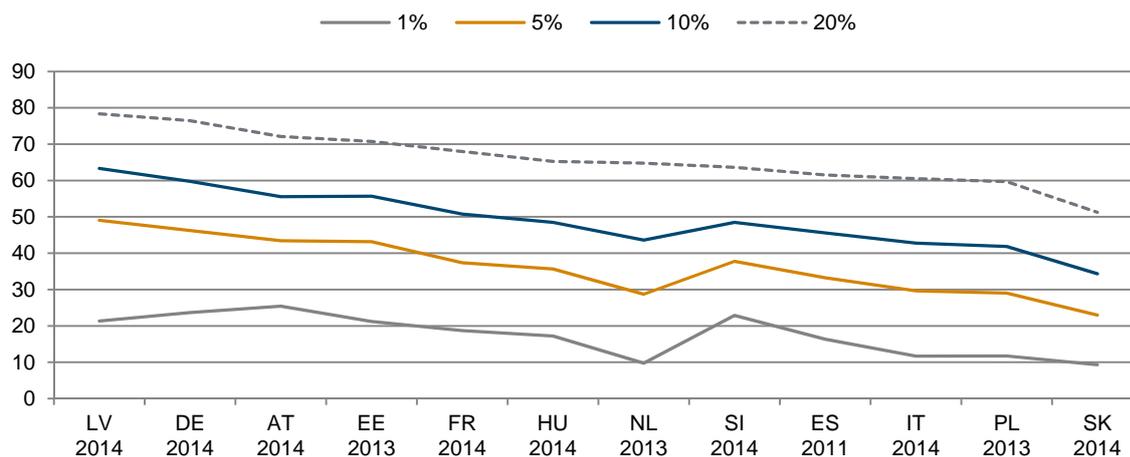
Note: 1) Net equivalised income per household member based on EU SILC data. - 2) 2014. - 3) 2013. - 4) 2011.

Source: HFCS, 2<sup>nd</sup> wave; wiiw calculations; Eurostat database.

Another interesting way to describe the distribution of private wealth is plotted in Figure 3. In the Baltic countries, but also in Germany and Austria, the richest 20% of the population hold a share of 70% to

80% of all assets possessed by households, while in Slovakia this share amounts to only 50%. Even stronger differences are reported for the richest 1% of households. In Austria but also Slovenia they possess close to 25% of total net wealth; in the Netherlands, Italy, Poland and Slovakia Republic the figure is much lower, at about 10%.

**Figure 3 / Share of the richest 1%, 5%, 10% and 20% of households in total net wealth, in %**

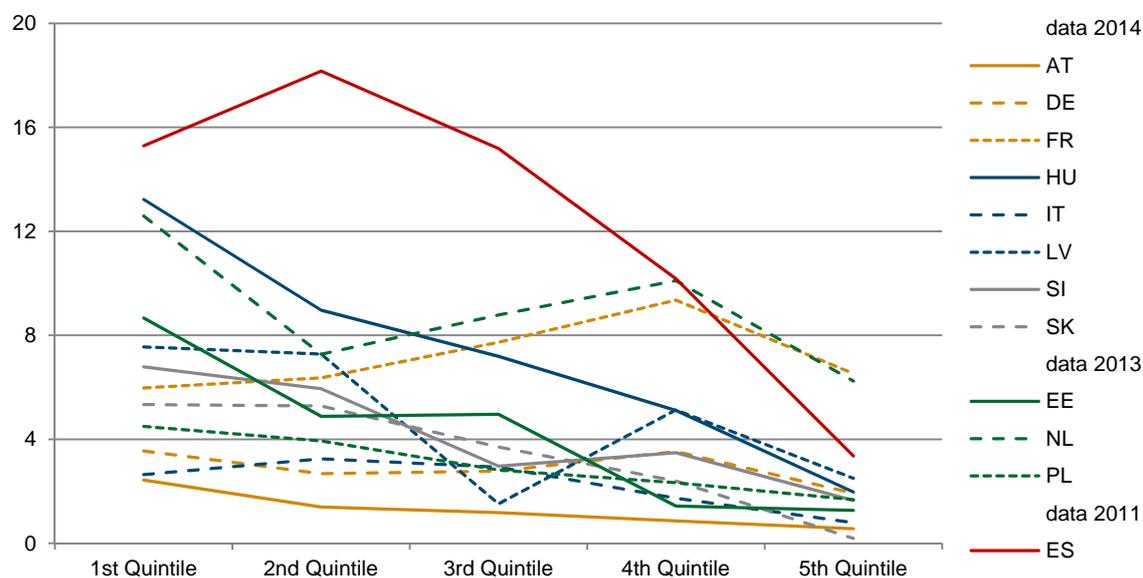


Source: HFCS, 2<sup>nd</sup> wave; wiiw calculations.

However, it should be noted that households in the top tail of the distribution are not covered well by the HFCS. Hence, the total wealth share of the richest 1% of households is in fact higher and the overall inequality between households underestimated when using HFCS data (see e.g. Vermeulen, 2016).

In the literature, drivers of wealth inequality were analysed by a number of authors based on cross-country differences and drawing on HFCS data from the 1<sup>st</sup> wave (see e.g. Leitner, 2016; Fessler and Schürz, 2015). One of the most important explanatory variables at the micro level is inheritance, transferring wealth inequality from one generation to the next. At the macro level, less spending on public welfare (housing, pensions and social expenditures) force lower-income groups to invest particularly in dwellings and (thus) to engage in precautionary saving. By contrast, in countries with more established welfare systems lower-income groups can consume more and refrain from accumulating wealth. This may, however, also cause higher levels of wealth inequality in the latter countries.

One of the dangers of broad-based debt-financed real estate ownership is presented in Figure 4, showing that particularly in Spain a high share of low-income households can be classified as financially vulnerable in the short run, which is defined as a debt service to gross household income ratio of above 30%. Also in Hungary and the Netherlands, in the first quintile (based on household income), more than 10% of the households and about 8% in Estonia and Latvia are in such a fragile position. In Austria, Germany and Italy the debt position of average low-income households is relaxed, and in most of the EU-CEE countries investigated here the situation is far out of the danger zone.

**Figure 4 / Percentage of households with debt service to income ratio at or above 30%**

Source: HFCS, 2<sup>nd</sup> wave; wiiw calculations.

## CONCLUSIONS

Private wealth is distributed quite unequally between households in the EU. Average wealth levels of households are much lower in the EU-CEE countries than in West European EU countries. However, relatively high levels of inequality between households can be found both in some EU-CEE countries, such as Latvia and Estonia, as well as in West European countries, such as Austria and Germany. The levels of wealth inequality are shaped by a variety of factors: differences in nation-specific structures of economic power, the relative importance of own merit versus inheritance in shaping the accumulation process and institutional settings of the welfare system are just some of the reasons being relevant.

## REFERENCES

- Fessler, P. and M. Schürz (2015), 'Private wealth across European countries: the role of income, inheritance and the welfare state', *ECB Working Paper Series* 1847.
- Household Finance and Consumption Network (2016a), 'The Household Finance and Consumption Survey: methodological report for the second wave', *Statistics Paper Series*, 17.
- Household Finance and Consumption Network (2016b), 'The Household Finance and Consumption Survey: results from the second wave', *Statistics Paper Series*, 18.
- Leitner, S. (2016), 'Drivers of wealth inequality in euro area countries', *European Journal of Economics and Economic Policies*, Vol. 13, No. 1, pp. 114-136.
- Vermeulen, P. (2016), 'Estimating the Top Tail of the Wealth Distribution', *American Economic Review*, Vol. 106, No. 5, pp. 646-650.

# Intra-regional trade after EU accession: the case of the three Baltic states

BY SÁNDOR RICHTER

## INTRODUCTION

After the EU accession of the Czech Republic, Hungary, Poland and Slovakia (the so-called Visegrád countries) in 2004, one of the most remarkable developments was a sudden upturn in their mutual trade. In the post-accession years each of the Visegrád countries showed substantially higher growth rates of goods exports to other members of the Visegrád group than in trade with the EU-15. Also, individual Visegrád countries had higher export growth rates to other Visegrád members in the post-accession period than in the years before EU accession.<sup>1</sup> In the East Balkan new Member States of the EU a similar development was observed. Statistical data suggest that the EU accession in 2007 gave an impetus to mutual trade of Bulgaria and Romania, just as it was the case for the Visegrád countries.<sup>2</sup> It is an interesting question whether this phenomenon appeared in the mutual trade of the three Baltic countries as well.

## INTRA-BALTIC REGIONAL TRADE AFTER EU ACCESSION

As Table 1 displays, the average rate of export growth of any individual Baltic country to the other two Baltic countries combined was substantially higher in the period *after* these countries' EU accession in 2004 than in the period *before* the EU accession.<sup>3</sup> This means that we see a pattern similar to that observed in the cases of the Visegrád countries and Bulgaria and Romania.

Nevertheless, the acceleration of export growth observed in the *intra-Baltic regional trade* must be viewed as part of a broader picture. The same phenomenon could be observed in these countries' total exports, where the overall expansion was more dynamic after the EU accession than before it. However, in the case of Estonia and Latvia the difference in favour of intra-Baltic regional trade is striking. In Lithuania exports to the other two Baltic countries hardly accelerated after EU accession, but in total trade the expansion was even weaker in the post-EU-accession years than before. Another important feature of the three countries' exports to the *EU-15* was that they increased less dynamically after their EU accession than they did before.

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<sup>1</sup> Foster et al. (2011).

<sup>2</sup> Richter (2014).

<sup>3</sup> The bilateral free trade agreements for industrial products between the EU and the three Baltic states came into force on 01.01.1995. The intra-Baltic free trade agreement for industrial products took effect on 01.04.1994, and it was extended to agricultural products on 01.01.1997.

**Table 1 / Average annual growth rate of exports to various destinations before and after EU accession, in %**

	Export destinations			
	Baltic region	EU-15	Total non-EU	World
<b>Estonia</b>				
2003/1999	13.3	16.1	24.8	17.1
2007/2003	34.4	10.4	41.1	19.4
<b>Latvia</b>				
2003/1999	17.8	12.3	10.2	12.4
2007/2003	47.1	10.1	34.3	24.1
<b>Lithuania</b>				
2003/1999	25.3	19.1	35.7	25.1
2007/2003	28.6	15.7	18.3	19.5

Source: Own calculations based on EU Comext data.

## SHIFT IN RELATIVE SIGNIFICANCE OF EXPORT DESTINATIONS

How did the relative significance of intra-Baltic regional trade change after the accession to the EU? Although the three Baltic economies are relatively small, intra-Baltic regional trade is not negligible and, as displayed in Table 2, its share in total exports has increased in the case of Estonia and Latvia and remained at the same level in the case of Lithuania after these countries' EU accession.

**Table 2 / Share of selected destinations in total exports of the Baltic countries, 1999-2015, in %**

Year	Estonia				Latvia				Lithuania			
	Baltic region	EU 15	Russia	Total non-EU	Baltic region	EU 15	Russia	Total non-EU	Baltic region	EU 15	Russia	Total non-EU
1999	11.7	72.8	3.4	14.2	12.2	62.5	6.6	22.3	14.8	53.0	5.8	26.2
2003	10.8	68.2	3.9	17.7	14.7	61.9	5.4	20.6	14.0	43.1	8.9	37.2
2004	13.0	61.6	5.6	19.8	17.0	52.5	6.4	25.5	15.2	45.5	9.3	32.8
2007	17.4	49.7	8.8	30.1	28.8	38.2	12.9	27.6	18.7	37.6	15.0	35.2
2015	16.2	54.8	6.7	25.0	29.1	30.7	11.4	30.8	15.2	33.4	13.7	38.9

Source: Own calculations based on EU Comext data.

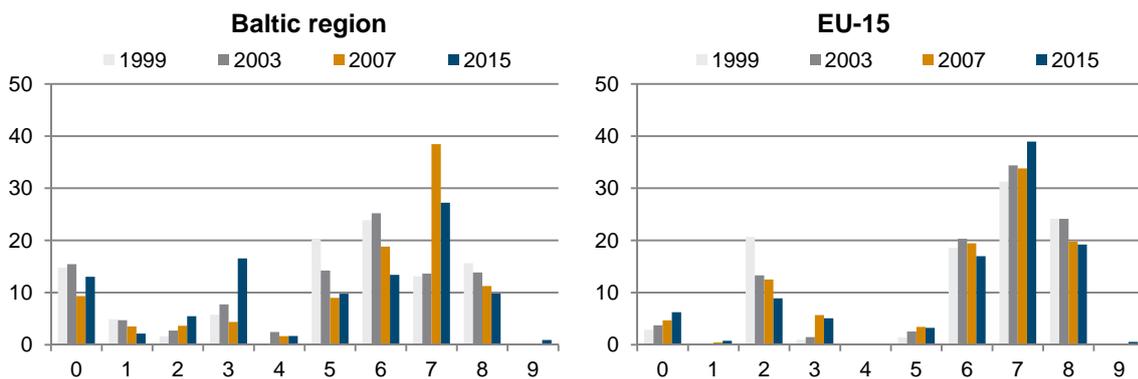
The spectacular decrease in the importance of the EU-15 as an export destination of the Baltic states is also remarkable. In the case of Latvia the share of exports to other Baltic countries in 2015 was nearly as high as that to the EU-15. Another export destination, Russia – which had been playing a very important role up until two and a half decades ago, when the Baltic countries were still part of the Soviet economy – also plays a surprisingly modest role, with intra-regional Baltic exports being more important than exports to Russia. It is even more interesting, however, that EU accession of the Baltic countries did not hinder trade relations with Russia, at least not on the export side: Russia's relative share in the Baltic countries' export destinations became remarkably higher *after* those countries' accession to the EU.

## CHANGES IN THE COMMODITY PATTERNS OF EXPORTS

Concerning trade patterns, similar changes took place in Estonia and Latvia (see Figures 1 and 2). In *intra-Baltic* regional exports the share of commodity group SITC 7 (machinery and transport equipment) more than doubled between 1999 and 2015 and became the largest item in exports of both countries. In exports to the *EU-15*, in the case of Estonia the already initially high share of machinery and transport equipment remained at that high level in the whole period investigated, while in the case of Latvia it increased rapidly, though from a very low initial level in 1999 and to a less high level than in Estonia.

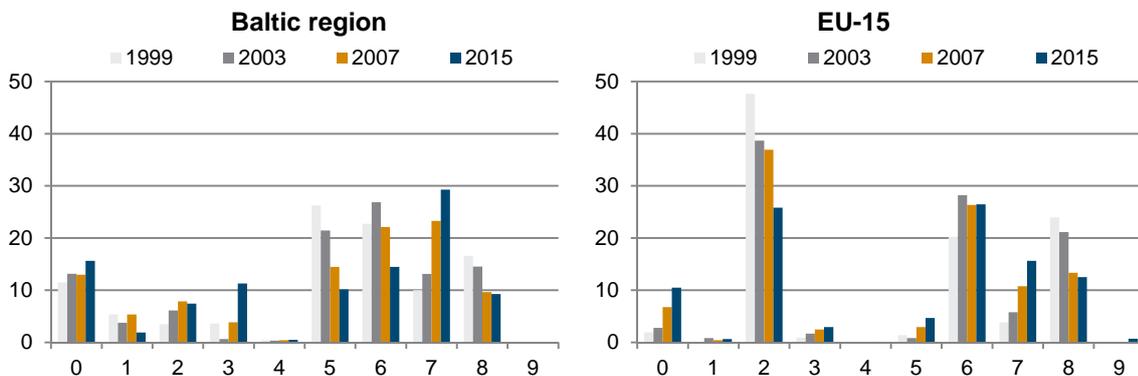
In Lithuania, machinery and transport equipment had been playing a less outstanding role in overall exports though in exports to the *Baltic region* this commodity group's share had doubled in the period 1999-2007 (see Figure 3). Here, the commodity group SITC 3 (fuels) had the largest weight in exports to the other two Baltic countries. Nevertheless, after EU accession this commodity group's share diminished substantially, while that of machinery and transport equipment doubled by 2015.

**Figure 1 / Estonia: Commodity composition of exports by SITC code in two destinations, 1999-2015, shares in %**



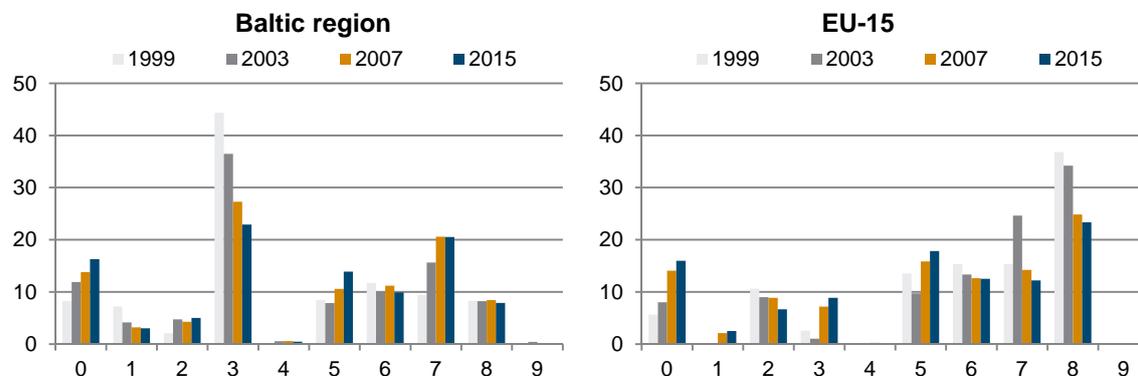
Note: SITC 0 – 9 see definition Figure 3.  
Source: Own calculation based on EU COMEXT data.

**Figure 2 / Latvia: Commodity composition of exports by SITC code in two destinations, 1999-2015, shares in %**



Note: SITC 0 – 9 see definition Figure 3.  
Source: Own calculation based on EU COMEXT data.

**Figure 3 / Lithuania: Commodity composition of exports by SITC code in two destinations, 1999-2015, shares in %**



Definition: 0 - Food and live animals  
 1 - Beverages and tobacco  
 2 - Crude materials, inedible, except fuels  
 3 - Mineral fuels, lubricants and related materials  
 4 - Animal and vegetable oils, fats and waxes  
 5 - Chemicals and related products, n.e.s.  
 6 - Manufactured goods classified chiefly by material  
 7 - Machinery and transport equipment  
 8 - Miscellaneous manufactured articles  
 9 - Commodities and transactions not classified elsewhere in the SITC

Source: Own calculation based on EU COMEXT data.

## CONCLUSIONS

It appears that EU accession gave an important impetus to mutual trade of Estonia, Latvia and Lithuania, just as it was the case for the Visegrád countries and the bilateral trade between Bulgaria and Romania. It is not easy to find an explanation to this phenomenon. The removal of trade barriers may not have played an outstanding role as free trade between the Baltic countries had been in place long before their accession to the EU.

In the case of the Visegrád countries it was the increasing presence of foreign-owned firms in the region and their rapidly expanding intra-regional (often also intra-company) trade which was found to be the major explanatory factor for the upturn in intra-Visegrád trade.<sup>4</sup> In addition, the elimination of non-tariff trade barriers following these countries' EU accession may have been a significant contributing factor as well.<sup>5</sup> Further research will be needed to find out whether these two factors – FDI and non-tariff barriers – have had a similar catalyst role in the rapid expansion of intra-Baltic regional trade.

<sup>4</sup> Foster et al. (2011).

<sup>5</sup> Hornok (2010).

## REFERENCES

Foster, N., G. Hunya, O. Pindyuk and S. Richter (2011), 'Revival of the Visegrád Countries' Mutual Trade after their EU Accession: a Search for Explanation', *wiiw Research Report* No. 372.

Hornok, C. (2010), 'Trade-Enhancing EU Enlargement and the Resurgence of East-East Trade', *Focus on European Economic Integration*, Q3/2010, Oesterreichische Nationalbank, Vienna.

Richter, S. (2014), 'Bilateral trade between Bulgaria and Romania: the upturn after EU accession', *wiiw Monthly Report* 2014/5, pp. 11-13.

## The editors recommend for further reading\*

### France

A collection of columns by Pisani-Ferry and Martin (Macron's advisors):

<http://voxeu.org/article/macron-s-economic-advisors-voxeu>

### Labour, income and mobility

Martin Ravallion on basic income:

<http://voxeu.org/article/arguments-against-basic-income-are-straw-men>

Noah Smith on the labour share:

<https://www.bloomberg.com/view/articles/2017-04-24/cracking-the-mystery-of-labor-s-falling-share-of-gdp>

Chetty et al. on mobility: <http://voxeu.org/article/trends-us-absolute-income-mobility-1940>

### Trade and jobs

Pay rise in CESEE urged:

<http://www.etui.org/Publications2/Working-Papers/Why-central-and-eastern-Europe-needs-a-pay-rise>

Trade and jobs debate:

<http://www.bradford-delong.com/2017/04/trade-jobs-and-inequality-cuny.html>

Tariffs still matter: <http://voxeu.org/article/theory-and-evidence-last-two-decades-tariff-reductions>

### China

Piketty, Yang and Zucman on inequality in China: <http://www.nber.org/papers/w23368.pdf>

Easternisation: Asia's Rise and America's Decline from Obama to Trump and Beyond:

<http://www.nybooks.com/articles/2017/05/11/easternization-can-china-replace-the-west/>

### Miscellaneous

Wren-Lewis on growth slowdown in the UK in first quarter:

<https://mainlymacro.blogspot.co.at/2017/04/the-brexite-slowdown-begins-probably.html>

The European Commission's paper on competitiveness in low-income and low-growth regions:

[http://ec.europa.eu/regional\\_policy/en/information/publications/reports/2017/competitiveness-in-low-income-and-low-growth-regions-the-lagging-regions-report](http://ec.europa.eu/regional_policy/en/information/publications/reports/2017/competitiveness-in-low-income-and-low-growth-regions-the-lagging-regions-report)

Why the Arab Spring turned into Arab Winter: understanding the Middle East crises through culture, religion, and literature: <http://www.tandfonline.com/doi/full/10.1080/23739770.2017.1313544>

Why we need to engage with Putin's Russia: <https://www.socialeurope.eu/2017/04/professor-stiglitzs-critique-illiberal-stagnation-raises-unaddressed-questions/>

On the self-induced deconstruction of western culture:

<https://www.the-american-interest.com/2017/04/12/the-deconstruction-of-the-west/>

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\* Recommendation is not necessarily endorsement. The editors are grateful to Vladimir Gligorov and Hermine Vidovic for valuable contributions to this section.

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

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 tendencies in the real sector, pictures the situation in the labour market and inflation, reflects fiscal and monetary policy changes, and depicts external sector development.

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
GDP	Gross Domestic Product
LFS	Labour Force Survey
HICP	Harmonized Index of Consumer Prices (for new EU Member States)
PPI	Producer Price Index
M1	Currency outside banks + demand deposits / narrow money (ECB definition)
M2	M1 + quasi-money / intermediate money (ECB definition)
p.a.	per annum
mn	million (10 <sup>6</sup> )
bn	billion (10 <sup>9</sup> )

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

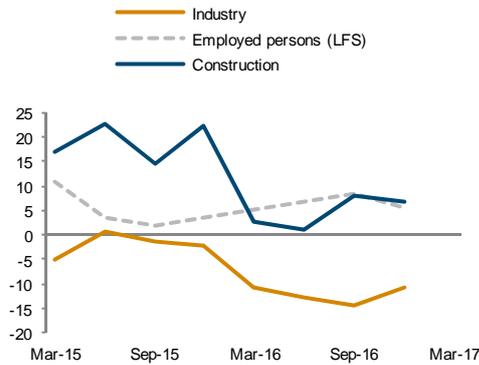
We offer an additional service package that allows you to access all databases – a Premium Membership, at a price of €2,300 (instead of €2,000 as for the Basic Membership). Your usual package will, of course, remain available as well.

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

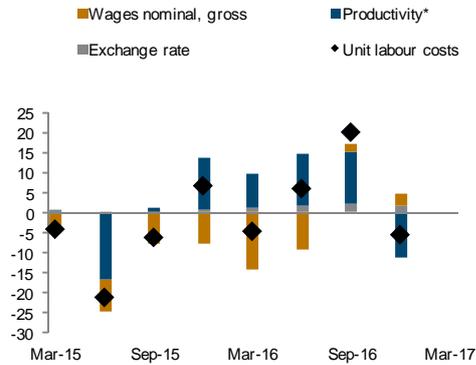
## Real sector development

annual growth rate in %



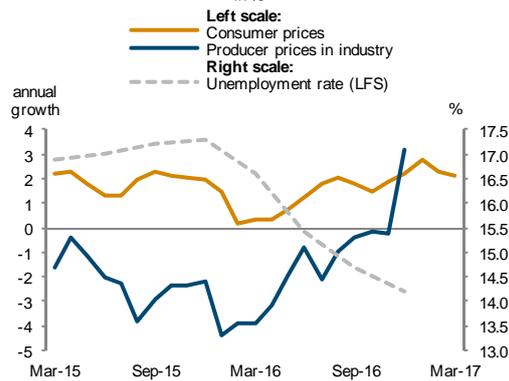
## Unit labour costs in industry

annual growth rate in %



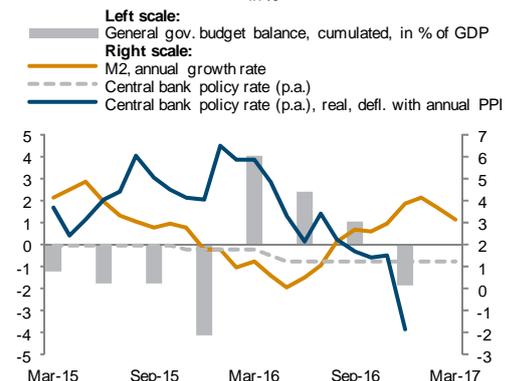
## Inflation and unemployment

in %



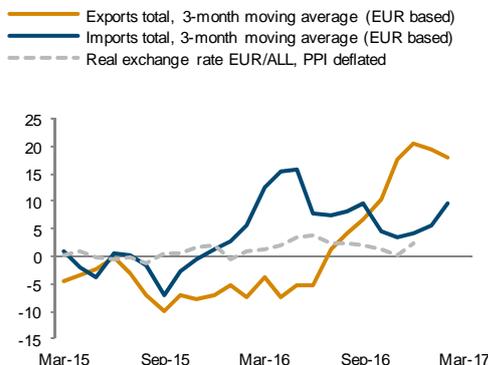
## Fiscal and monetary policy

in %



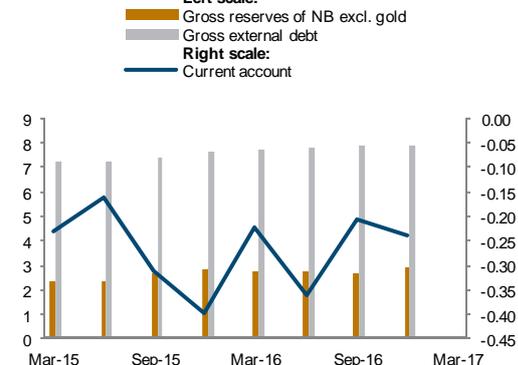
## External sector development

annual growth rate in %



## External finance

EUR bn



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

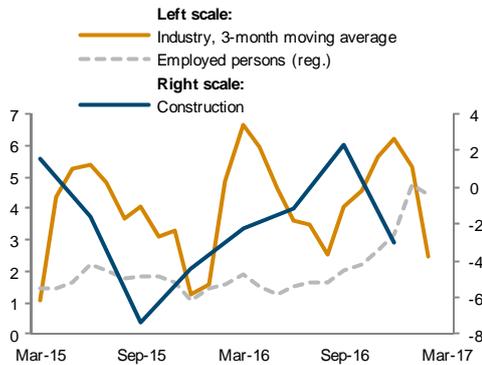
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

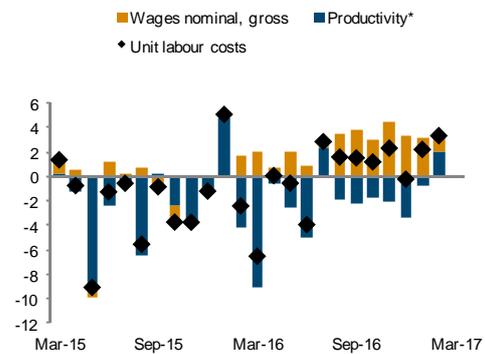
<https://data.wiiw.ac.at/monthly-database.html>

# Bosnia and Herzegovina

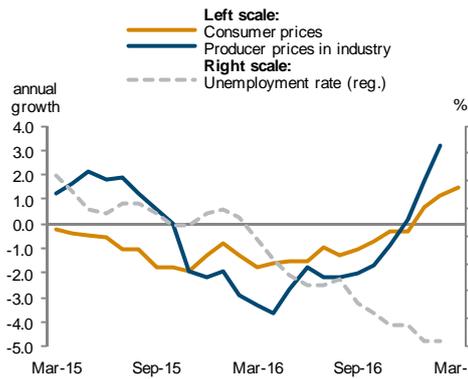
**Real sector development**  
annual growth rate in %



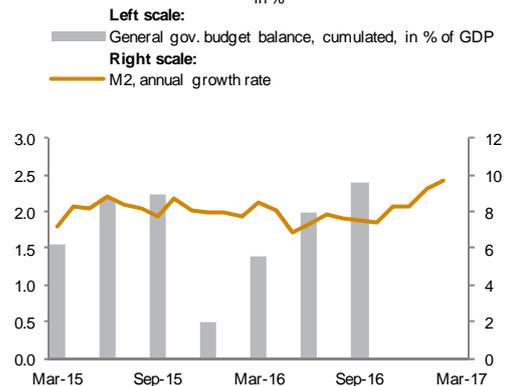
**Unit labour costs in industry**  
annual growth rate in %



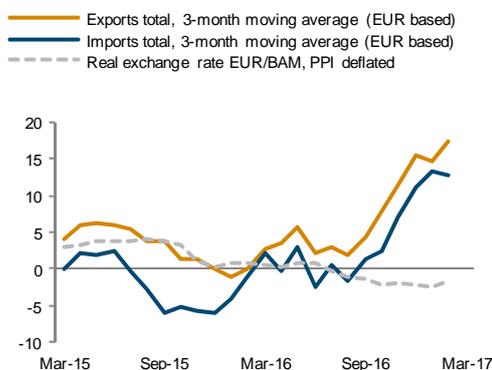
**Inflation and unemployment**  
in %



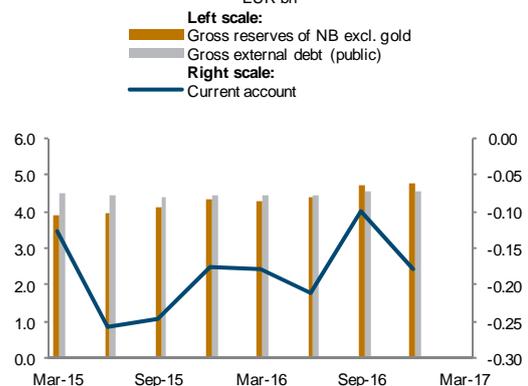
**Fiscal and monetary policy**  
in %



**External sector development**  
annual growth rate in %



**External finance**  
EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

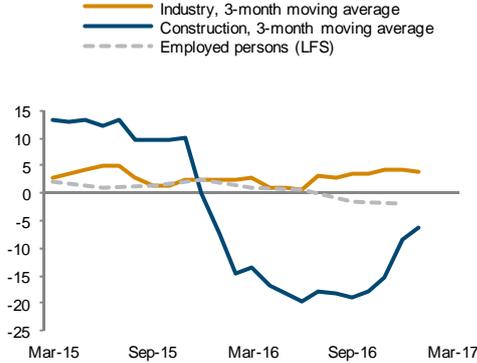
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

# Bulgaria

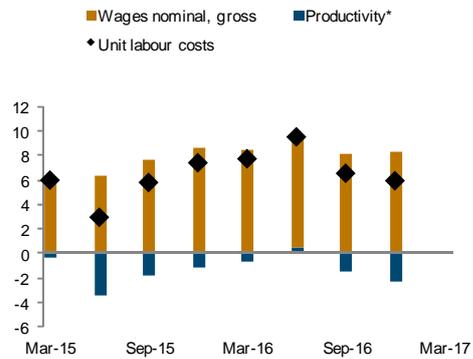
## Real sector development

annual growth rate in %



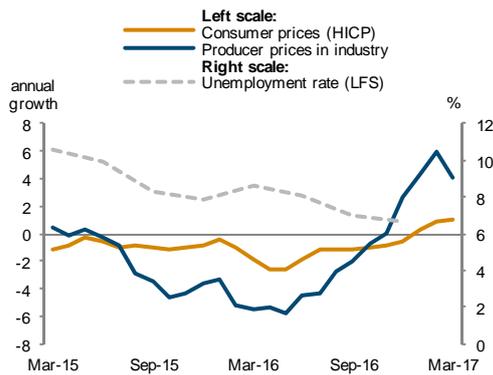
## Unit labour costs in industry

annual growth rate in %



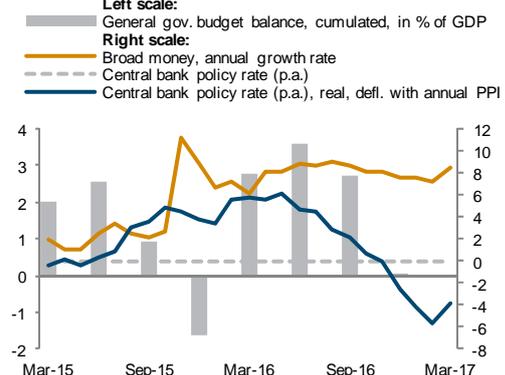
## Inflation and unemployment

in %



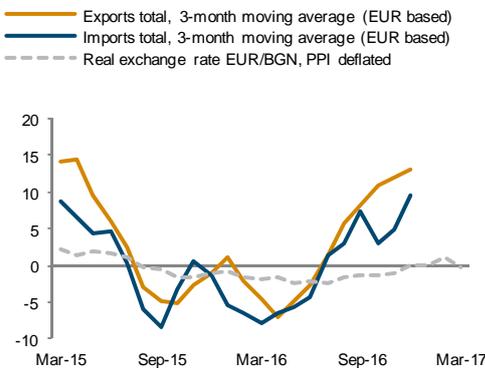
## Fiscal and monetary policy

in %



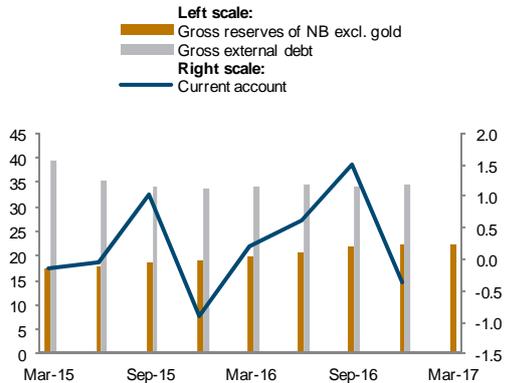
## External sector development

annual growth rate in %



## External finance

EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

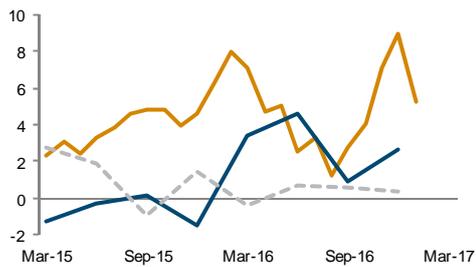
<https://data.wiiw.ac.at/monthly-database.html>

# Croatia

## Real sector development

annual growth rate in %

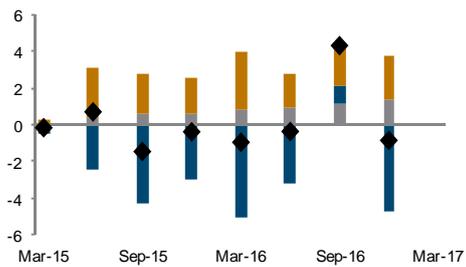
- Industry, 3-month moving average
- Construction, 3-month moving average
- - - Employed persons (LFS)



## Unit labour costs in industry

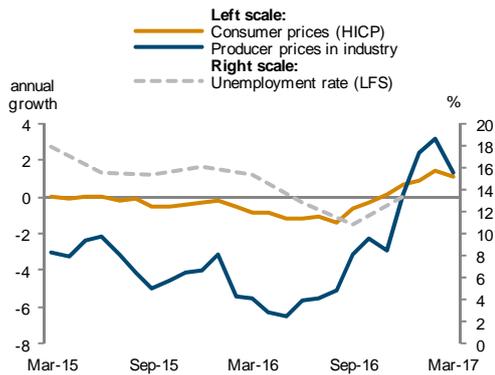
annual growth rate in %

- Wages nominal, gross
- Productivity\*
- Exchange rate
- ◆ Unit labour costs



## Inflation and unemployment

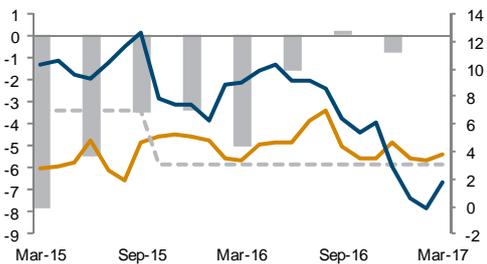
in %



## Fiscal and monetary policy

in %

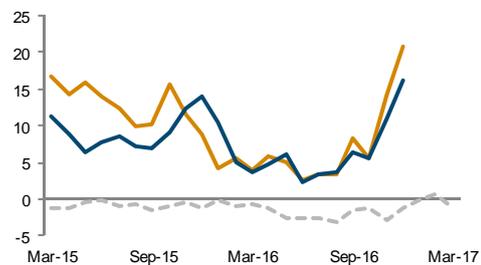
- General gov. budget balance, cumulated, in % of GDP
- Broad money, annual growth rate
- - - Central bank policy rate (p.a.)
- Central bank policy rate (p.a.), real, defl. with annual CPI



## External sector development

annual growth rate in %

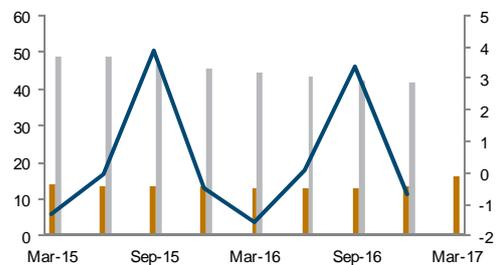
- Exports total, 3-month moving average (EUR based)
- Imports total, 3-month moving average (EUR based)
- - - Real exchange rate EUR/HRK, PPI deflated



## External finance

EUR bn

- Gross reserves of NB excl. gold
- Gross external debt
- Current account



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

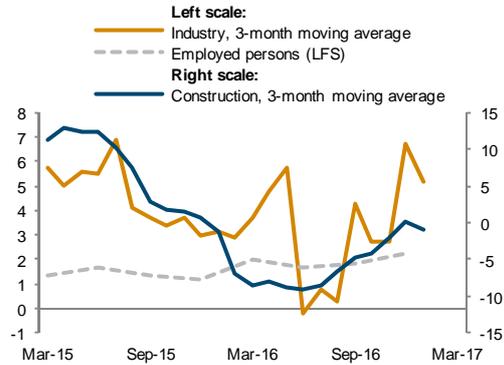
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

# Czech Republic

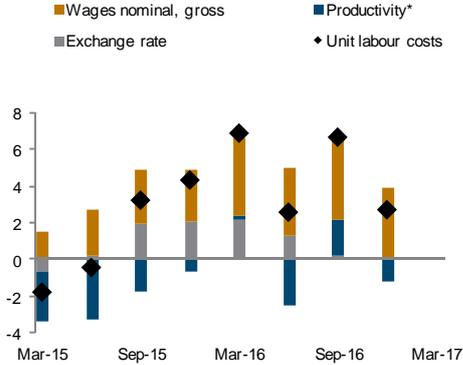
## Real sector development

annual growth rate in %



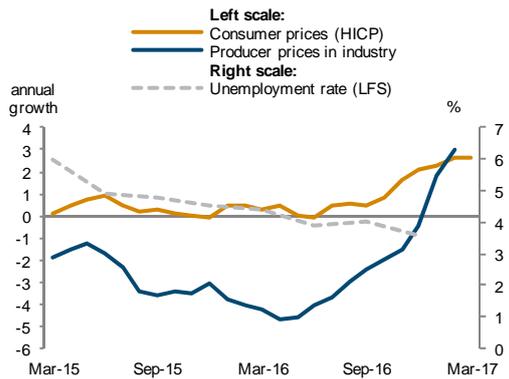
## Unit labour costs in industry

annual growth rate in %



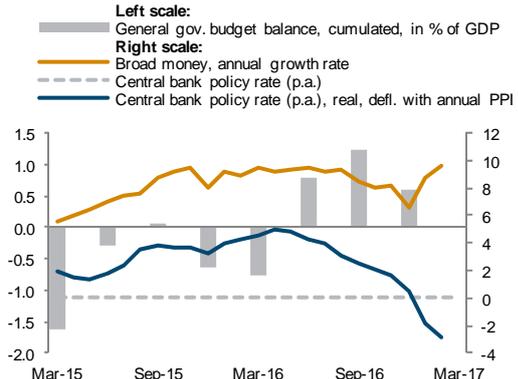
## Inflation and unemployment

in %



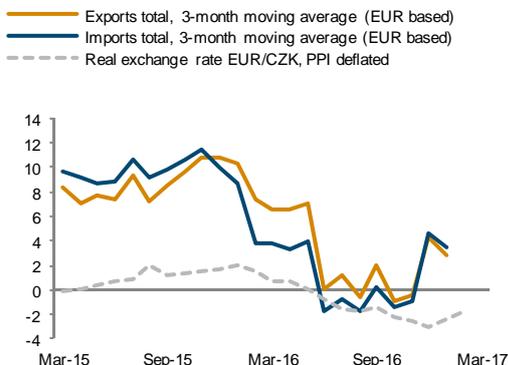
## Fiscal and monetary policy

in %



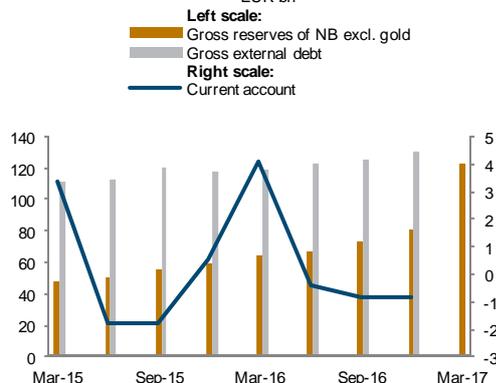
## External sector development

annual growth rate in %



## External finance

EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

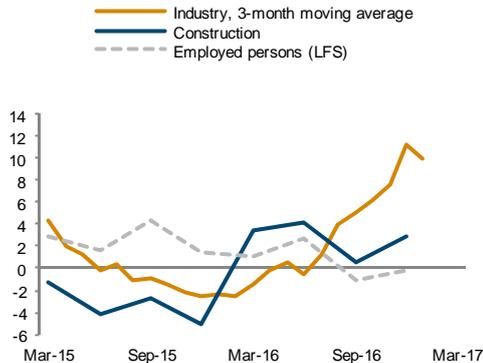
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

# Estonia

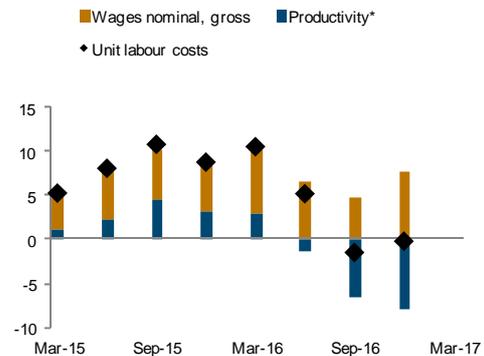
## Real sector development

annual growth rate in %



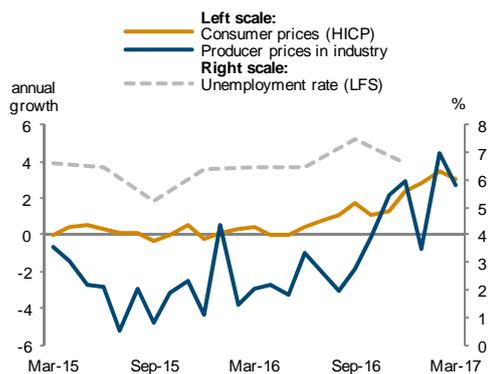
## Unit labour costs in industry

annual growth rate in %



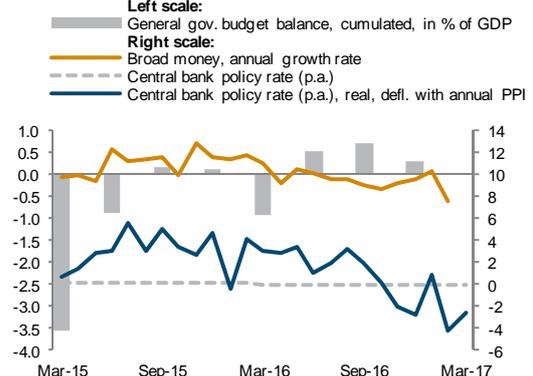
## Inflation and unemployment

in %



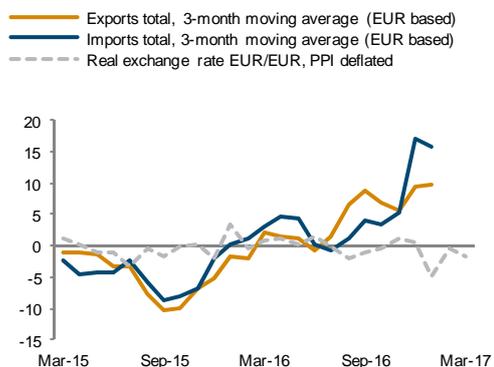
## Fiscal and monetary policy

in %



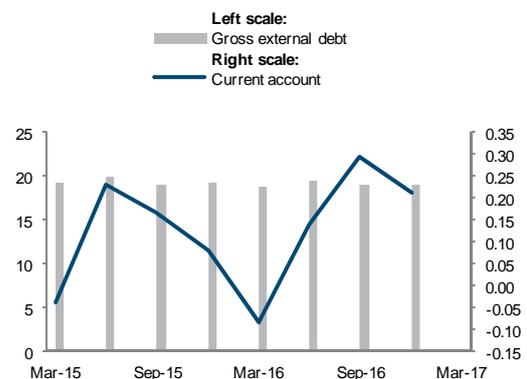
## External sector development

annual growth rate in %



## External finance

EUR bn



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

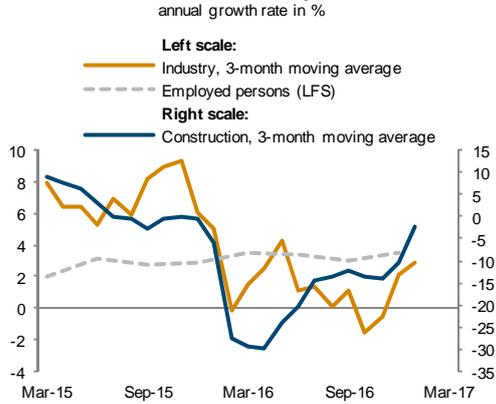
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

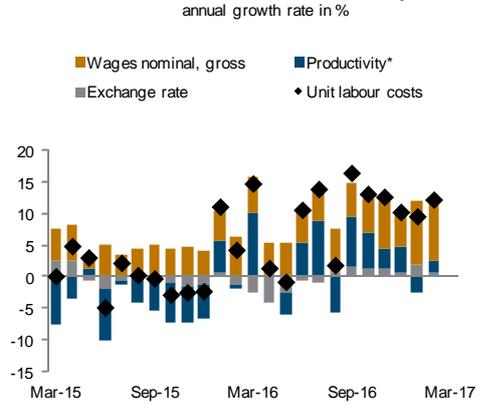
<https://data.wiiw.ac.at/monthly-database.html>

# Hungary

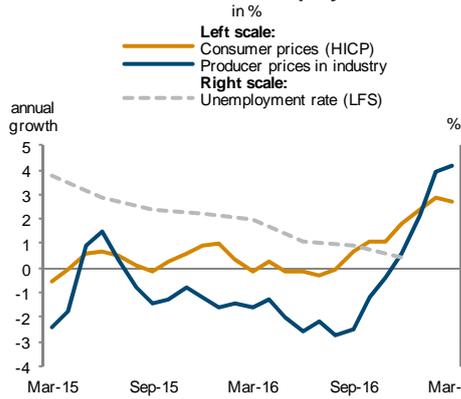
## Real sector development



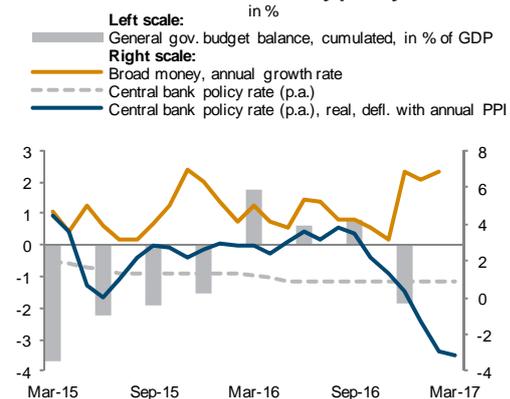
## Unit labour costs in industry



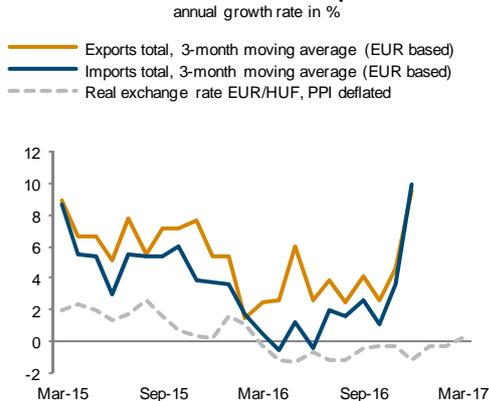
## Inflation and unemployment



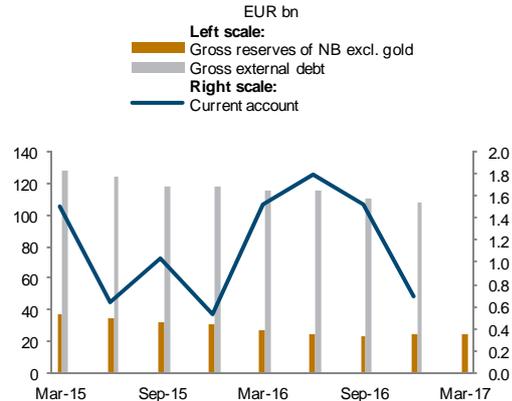
## Fiscal and monetary policy



## External sector development



## External finance



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

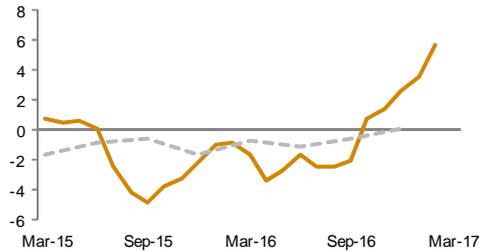
<https://data.wiiw.ac.at/monthly-database.html>

# Kazakhstan

## Real sector development

annual growth rate in %

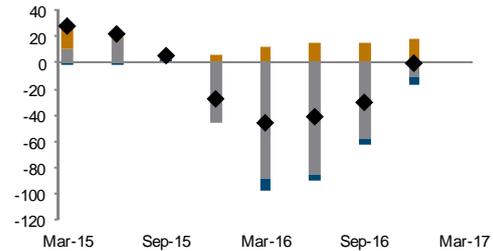
— Industry, 3-month moving average  
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

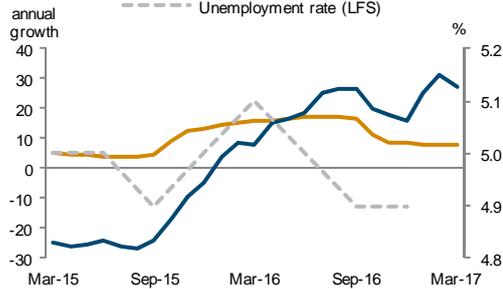
■ Wages nominal, gross    ■ Productivity\*  
■ Exchange rate    ◆ Unit labour costs



## Inflation and unemployment

in %

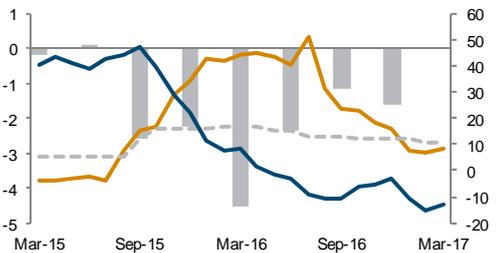
Left scale:  
— Consumer prices  
— Producer prices in industry  
Right scale:  
- - - Unemployment rate (LFS)



## Fiscal and monetary policy

in %

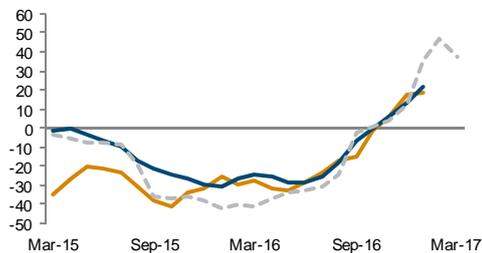
Left scale:  
■ General gov. budget balance, cumulated, in % of GDP  
Right scale:  
— Broad money, annual growth rate  
- - - Central bank policy rate (p.a.)  
— Central bank policy rate (p.a.), real, defl. with annual PPI



## External sector development

annual growth rate in %

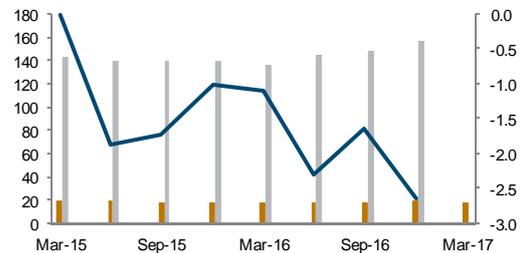
— Exports total, 3-month moving average (EUR based)  
— Imports total, 3-month moving average (EUR based)  
- - - Real exchange rate EUR/KZT, PPI deflated



## External finance

EUR bn

Left scale:  
■ Gross reserves of NB excl. gold  
■ Gross external debt  
Right scale:  
— Current account



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

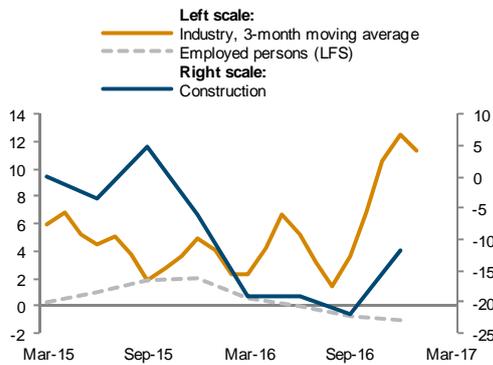
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

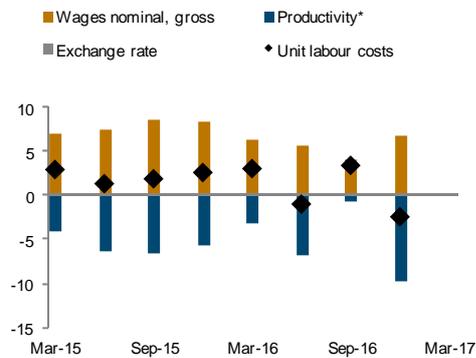
<https://data.wiiw.ac.at/monthly-database.html>

# Latvia

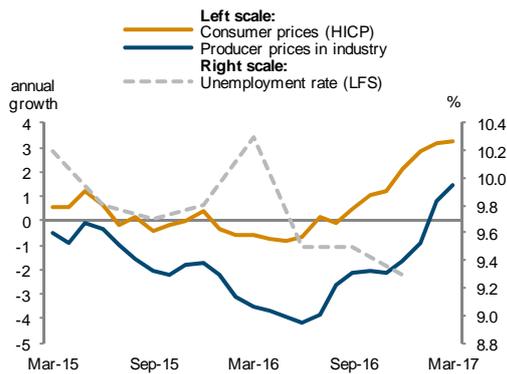
**Real sector development**  
annual growth rate in %



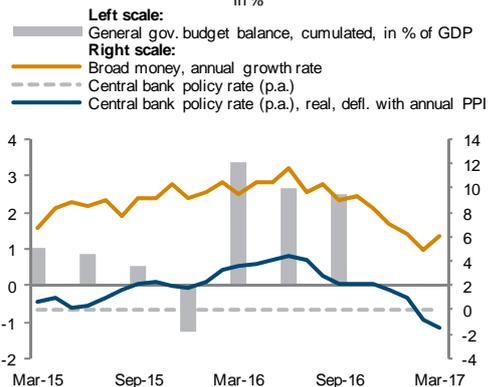
**Unit labour costs in industry**  
annual growth rate in %



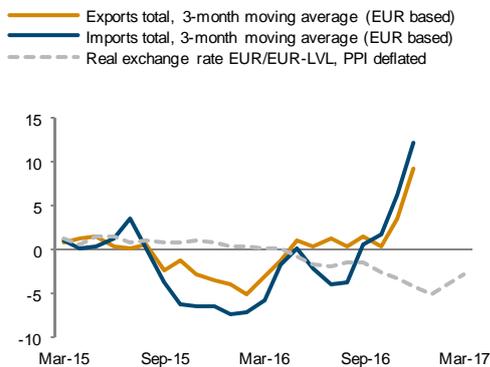
**Inflation and unemployment**  
in %



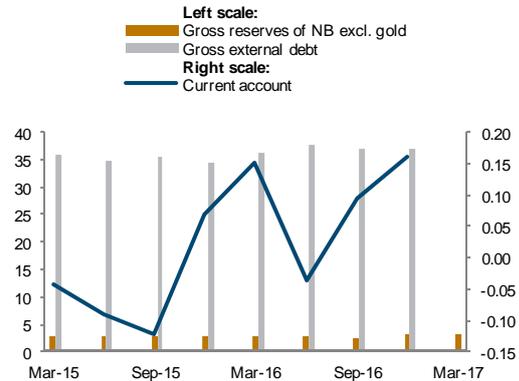
**Fiscal and monetary policy**  
in %



**External sector development**  
annual growth rate in %



**External finance**  
EUR bn



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

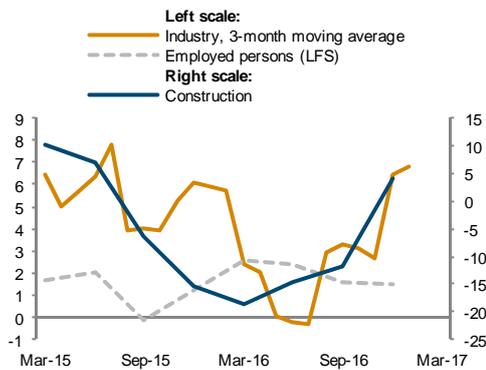
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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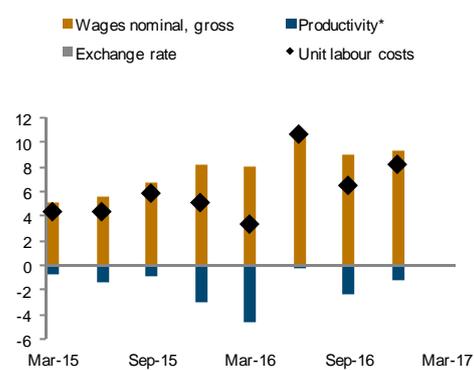
<https://data.wiiw.ac.at/monthly-database.html>

# Lithuania

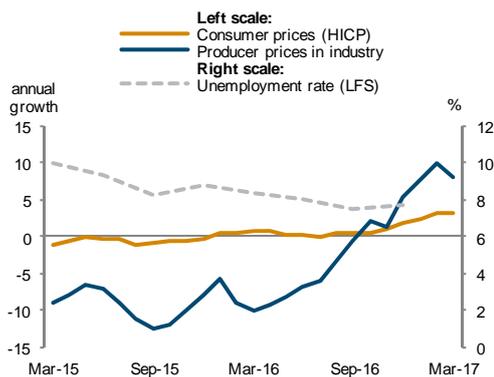
**Real sector development**  
annual growth rate in %



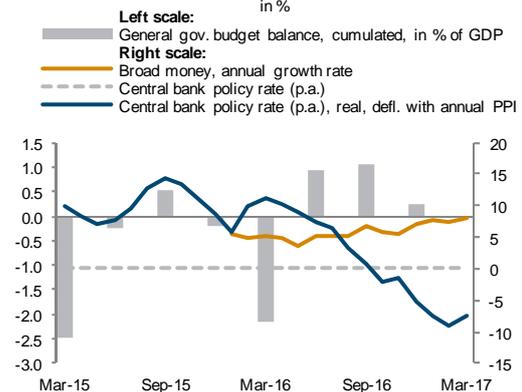
**Unit labour costs in industry**  
annual growth rate in %



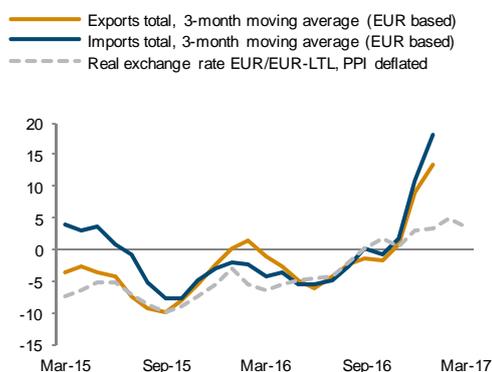
**Inflation and unemployment**  
in %



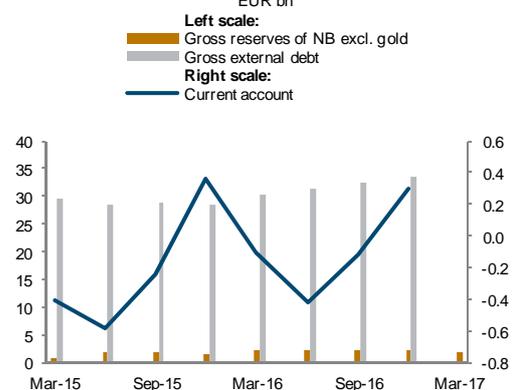
**Fiscal and monetary policy**  
in %



**External sector development**  
annual growth rate in %



**External finance**  
EUR bn



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

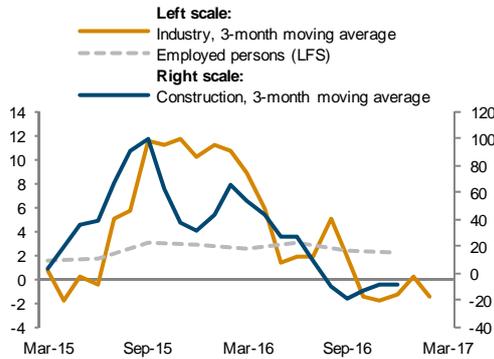
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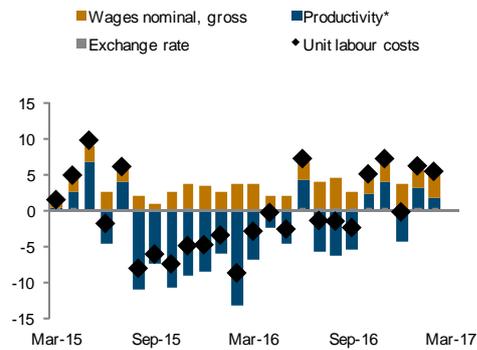
<https://data.wiiw.ac.at/monthly-database.html>

# Macedonia

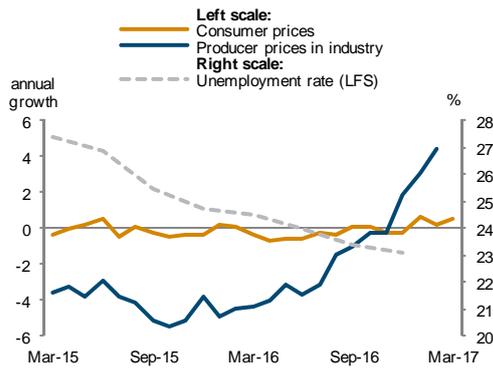
**Real sector development**  
annual growth rate in %



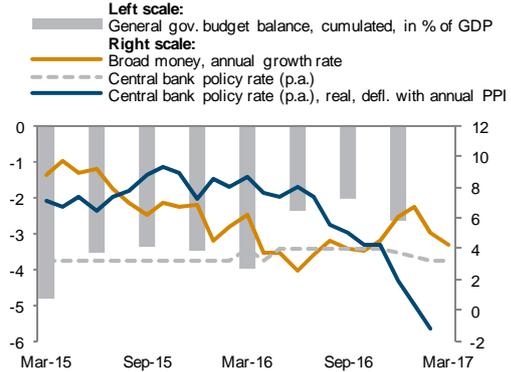
**Unit labour costs in industry**  
annual growth rate in %



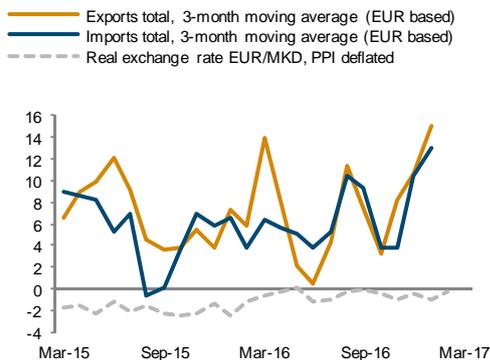
**Inflation and unemployment**  
in %



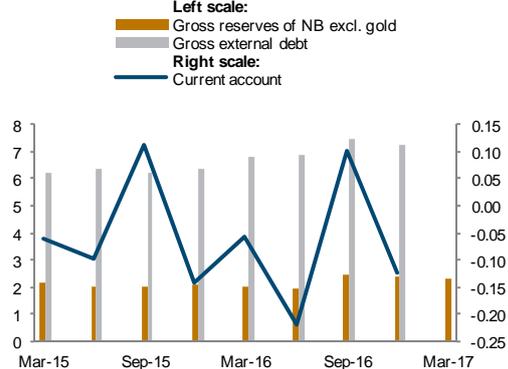
**Fiscal and monetary policy**  
in %



**External sector development**  
annual growth rate in %



**External finance**  
EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

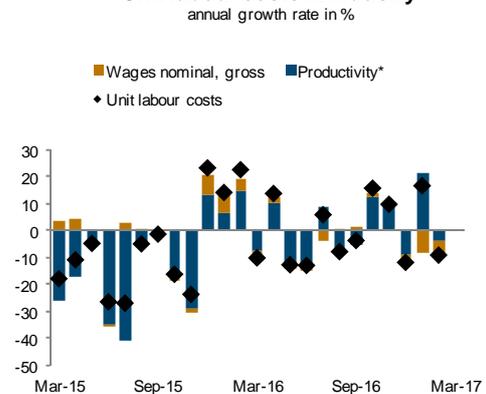
<https://data.wiiw.ac.at/monthly-database.html>

# Montenegro

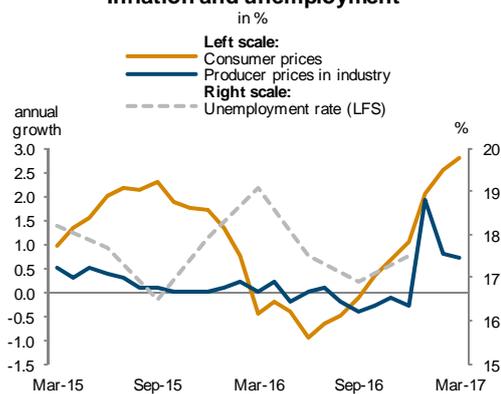
## Real sector development



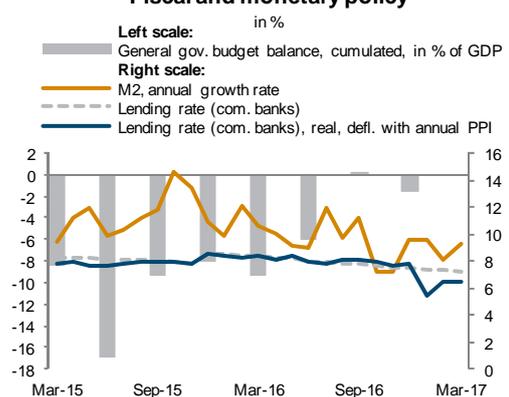
## Unit labour costs in industry



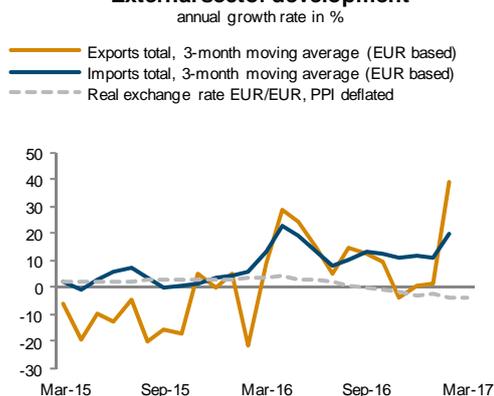
## Inflation and unemployment



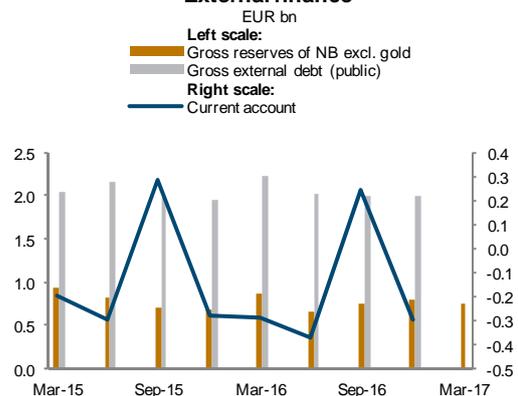
## Fiscal and monetary policy



## External sector development



## External finance



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

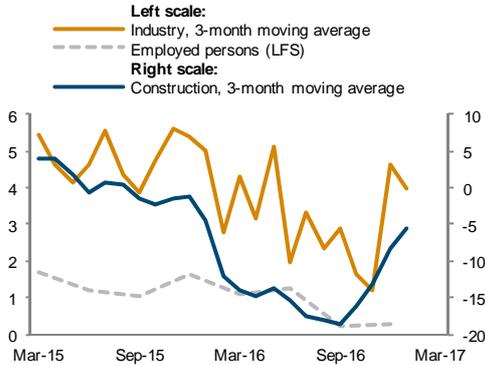
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

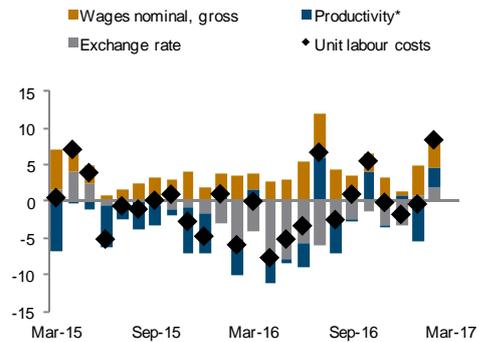
<https://data.wiiw.ac.at/monthly-database.html>

# Poland

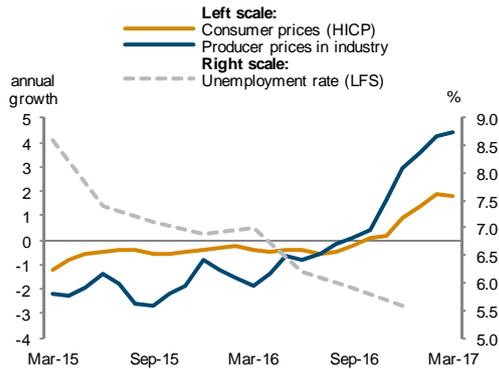
**Real sector development**  
annual growth rate in %



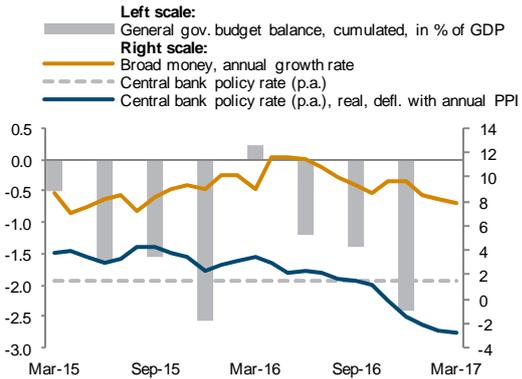
**Unit labour costs in industry**  
annual growth rate in %



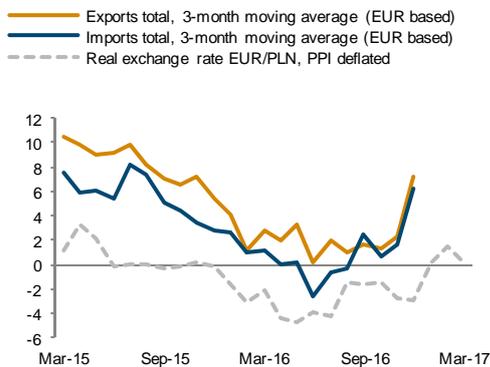
**Inflation and unemployment**  
in %



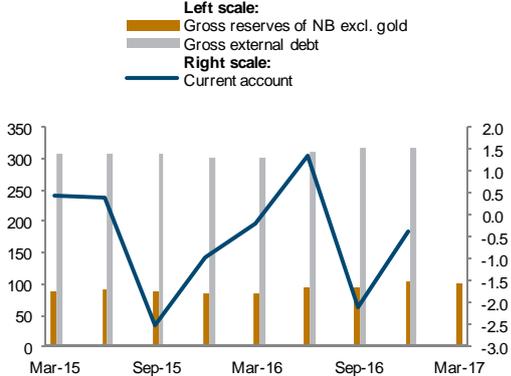
**Fiscal and monetary policy**  
in %



**External sector development**  
annual growth rate in %



**External finance**  
EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

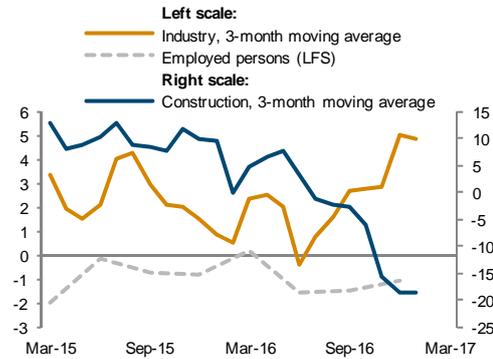
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

# Romania

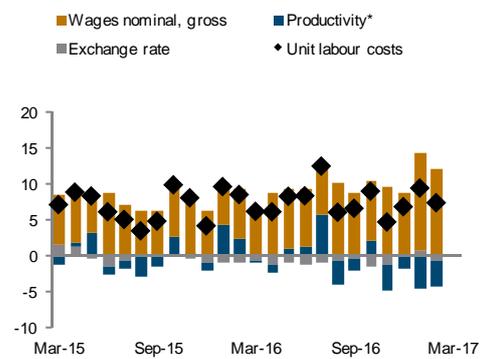
## Real sector development

annual growth rate in %



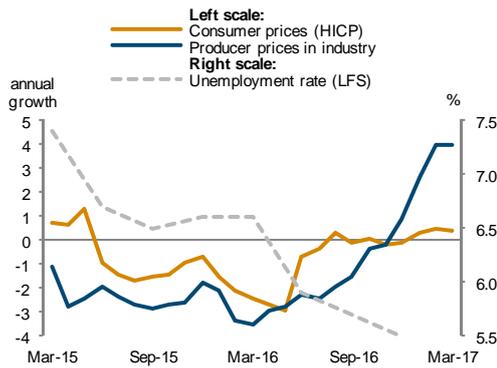
## Unit labour costs in industry

annual growth rate in %



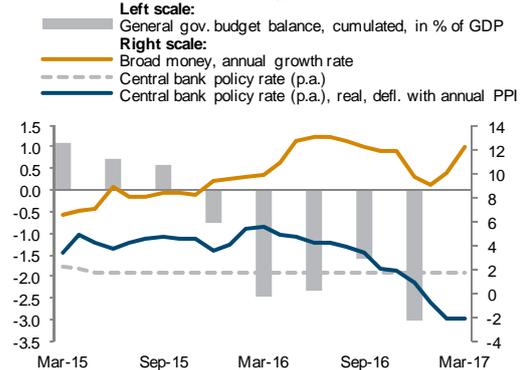
## Inflation and unemployment

in %



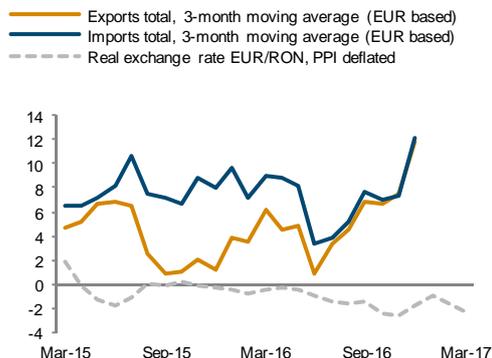
## Fiscal and monetary policy

in %



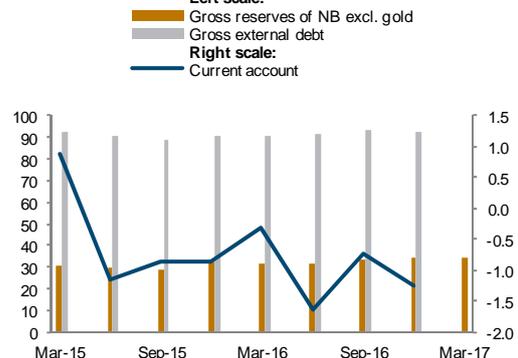
## External sector development

annual growth rate in %



## External finance

EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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

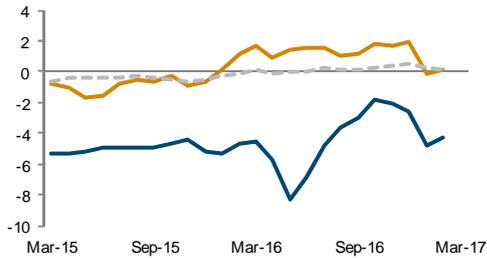
<https://data.wiiw.ac.at/monthly-database.html>

# Russia

## Real sector development

annual growth rate in %

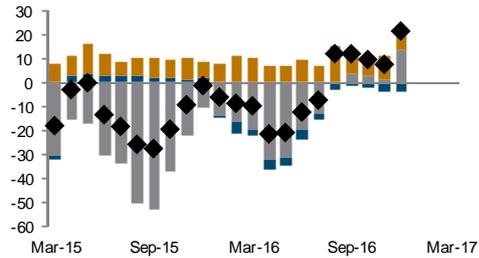
- Industry, 3-month moving average
- Construction, 3-month moving average
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

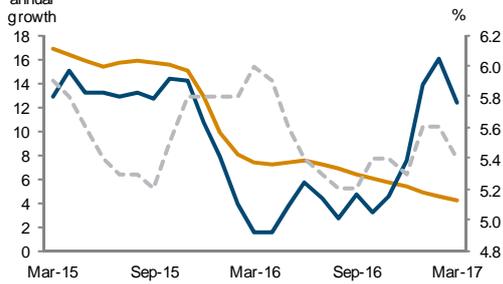
- Wages nominal, manuf., gross
- Productivity\*
- Exchange rate
- ◆ Unit labour costs



## Inflation and unemployment

in %

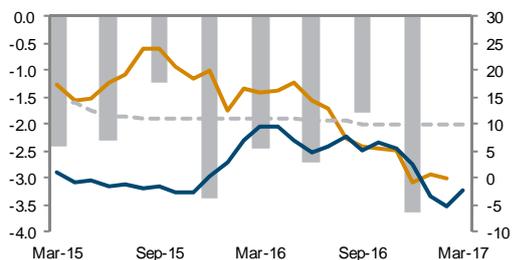
- Left scale: Consumer prices
- Producer prices in industry
- Right scale: Unemployment rate (LFS)



## Fiscal and monetary policy

in %

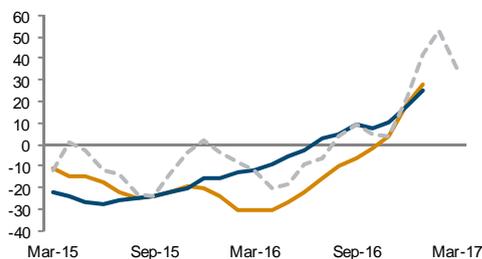
- Left scale: General gov. budget balance, cumulated, in % of GDP
- Right scale: M2, annual growth rate
- Central bank policy rate (p.a.)
- Central bank policy rate (p.a.), real, defl. with annual PPI



## External sector development

annual growth rate in %

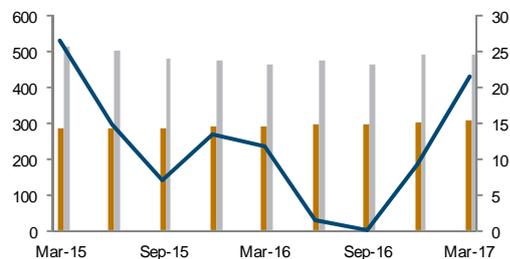
- Exports total, 3-month moving average (EUR based)
- Imports total, 3-month moving average (EUR based)
- - - Real exchange rate EUR/RUB, PPI deflated



## External finance

EUR bn

- Left scale: Gross reserves of NB excl. gold
- Gross external debt
- Right scale: Current account



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

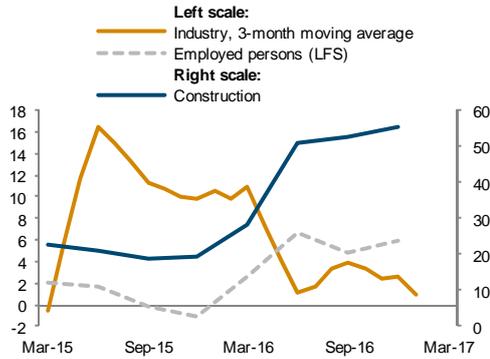
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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# Serbia

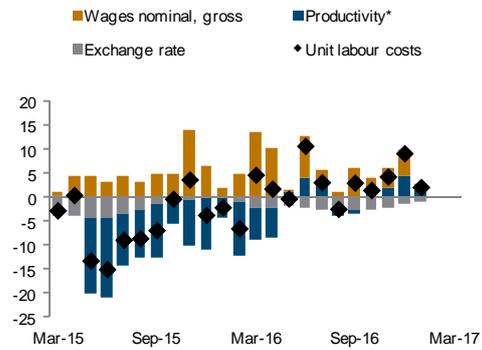
## Real sector development

annual growth rate in %



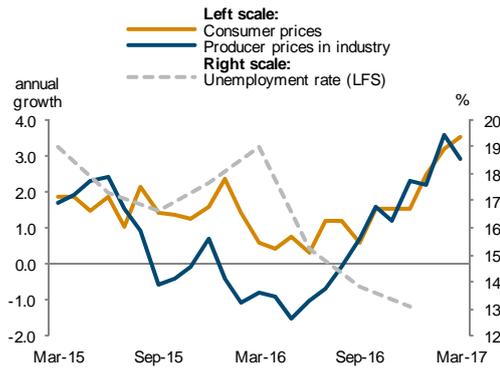
## Unit labour costs in industry

annual growth rate in %



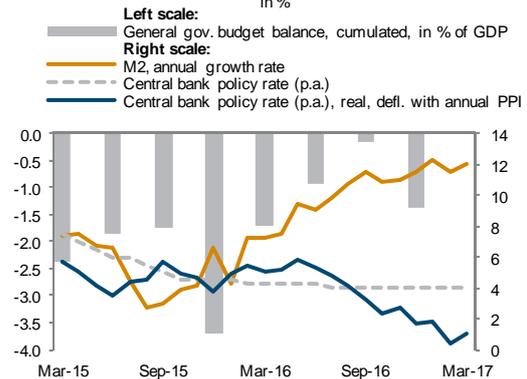
## Inflation and unemployment

in %



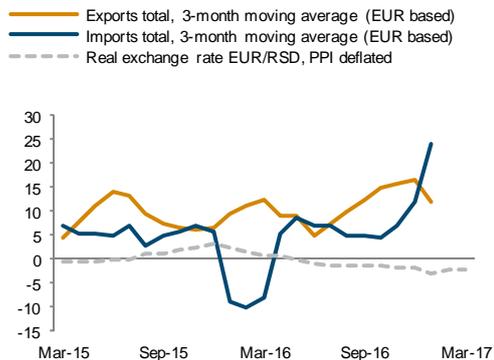
## Fiscal and monetary policy

in %



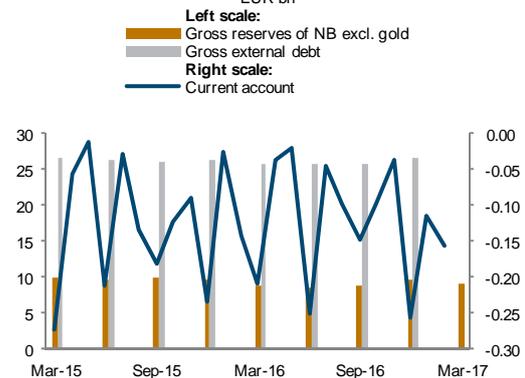
## External sector development

annual growth rate in %



## External finance

EUR bn



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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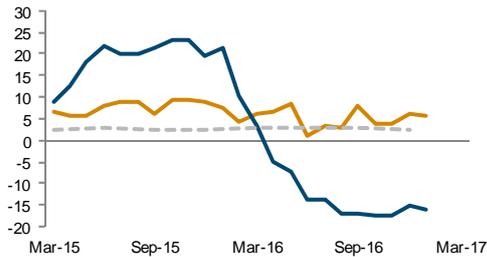
<https://data.wiiw.ac.at/monthly-database.html>

# Slovakia

## Real sector development

annual growth rate in %

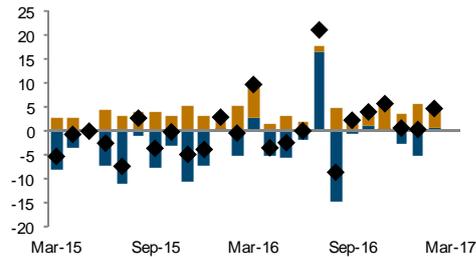
- Industry, 3-month moving average
- Construction, 3-month moving average
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

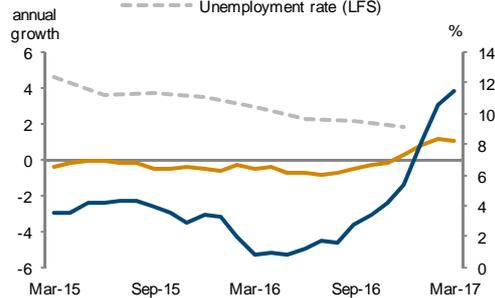
- Wages nominal, gross
- Productivity\*
- ◆ Unit labour costs



## Inflation and unemployment

in %

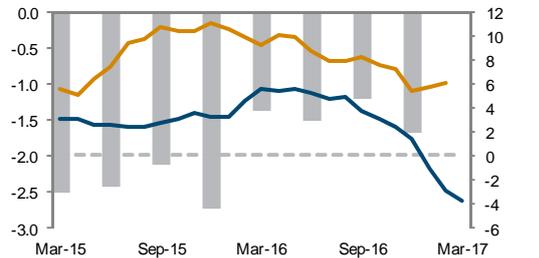
- Left scale: Consumer prices (HICP)
- Producer prices in industry
- Right scale: Unemployment rate (LFS)



## Fiscal and monetary policy

in %

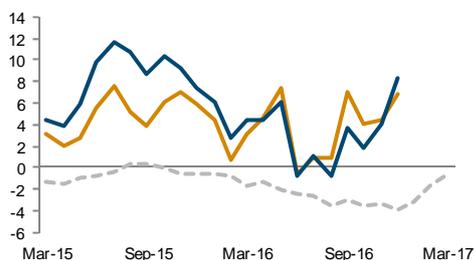
- Left scale: General gov. budget balance, cumulated, in % of GDP
- Right scale: Broad money, annual growth rate
- Central bank policy rate (p.a.)
- Central bank policy rate (p.a.), real, defl. with annual PPI



## External sector development

annual growth rate in %

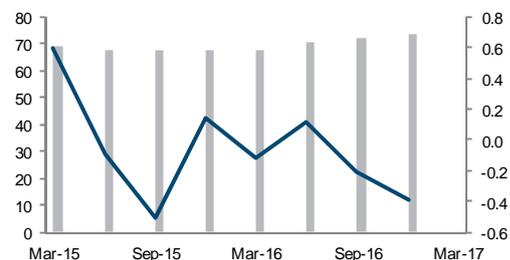
- Exports total, 3-month moving average (EUR based)
- Imports total, 3-month moving average (EUR based)
- - - Real exchange rate EUR/EUR, PPI deflated



## External finance

EUR bn

- Left scale: Gross external debt
- Right scale: Current account



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

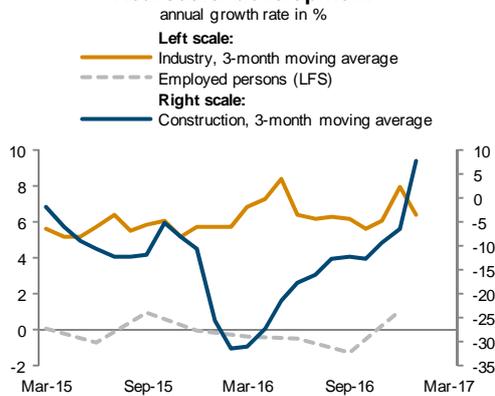
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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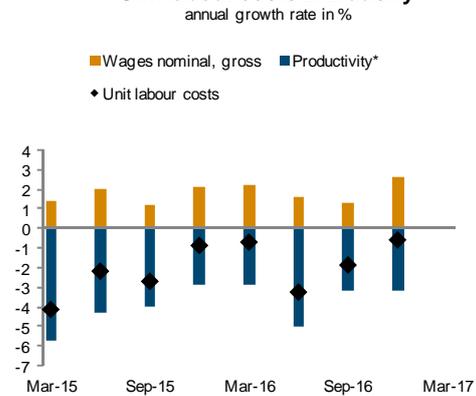
<https://data.wiiw.ac.at/monthly-database.html>

# Slovenia

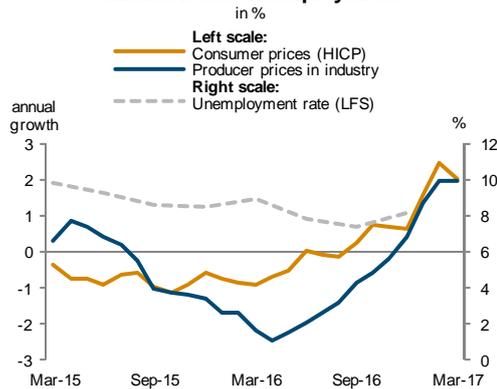
## Real sector development



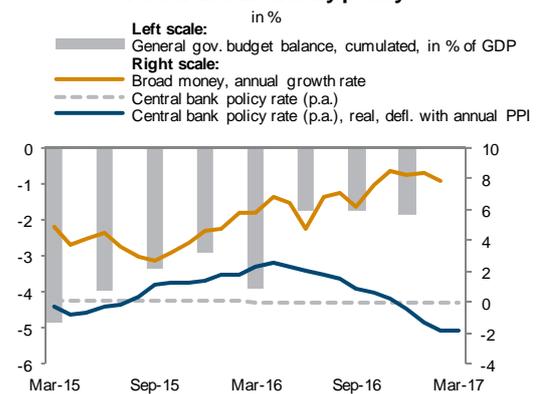
## Unit labour costs in industry



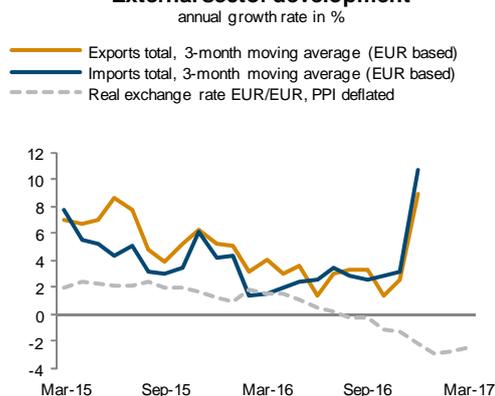
## Inflation and unemployment



## Fiscal and monetary policy



## External sector development



## External finance



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

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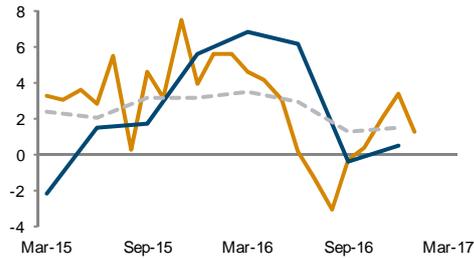
<https://data.wiiw.ac.at/monthly-database.html>

# Turkey

## Real sector development

annual growth rate in %

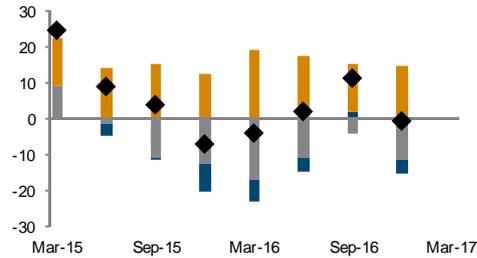
- Industry, 3-month moving average
- Construction
- Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

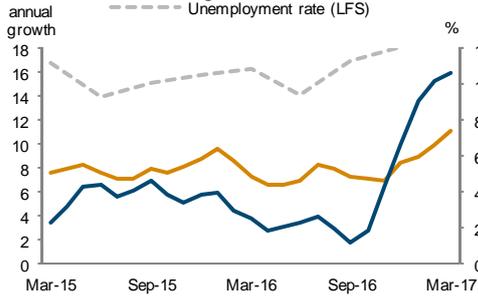
- Wages nominal, gross
- Exchange rate
- Productivity\*
- Unit labour costs



## Inflation and unemployment

in %

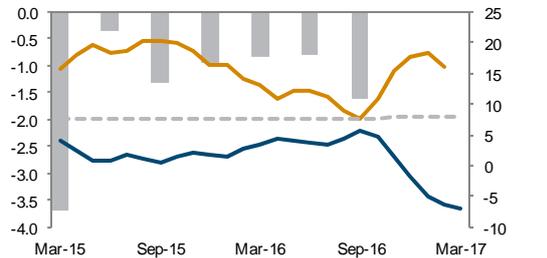
- Left scale:**
  - Consumer prices (HICP)
  - Producer prices in industry
- Right scale:**
  - Unemployment rate (LFS)



## Fiscal and monetary policy

in %

- Left scale:**
  - General gov. budget balance, cumulated, in % of GDP
- Right scale:**
  - Broad money, annual growth rate
  - Central bank policy rate (p.a.)
  - Central bank policy rate (p.a.), real, defl. with annual PPI



## External sector development

annual growth rate in %

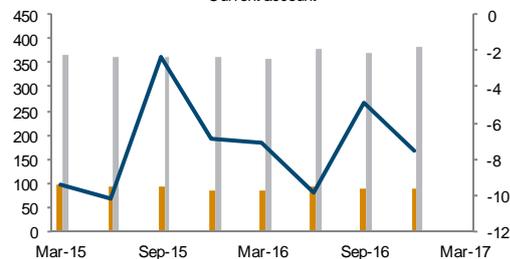
- Exports total, 3-month moving average (EUR based)
- Imports total, 3-month moving average (EUR based)
- Real exchange rate EUR/TRY, PPI deflated



## External finance

EUR bn

- Left scale:**
  - Gross reserves of NB excl. gold
  - Gross external debt
- Right scale:**
  - Current account



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

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

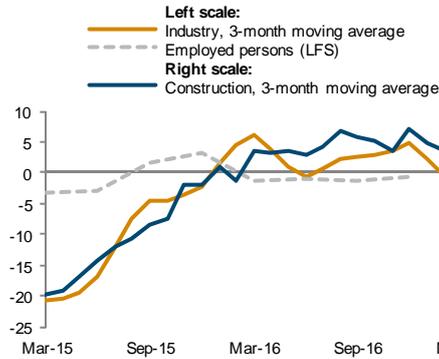
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# Ukraine

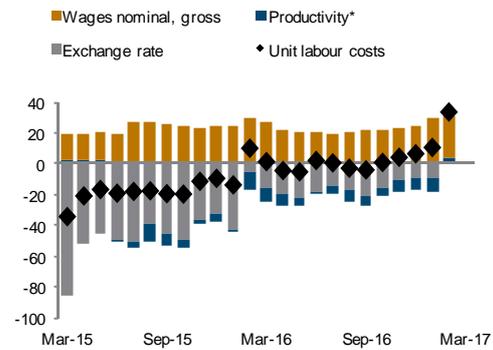
## Real sector development

annual growth rate in %



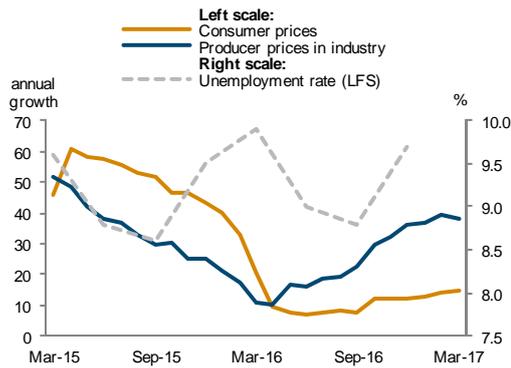
## Unit labour costs in industry

annual growth rate in %



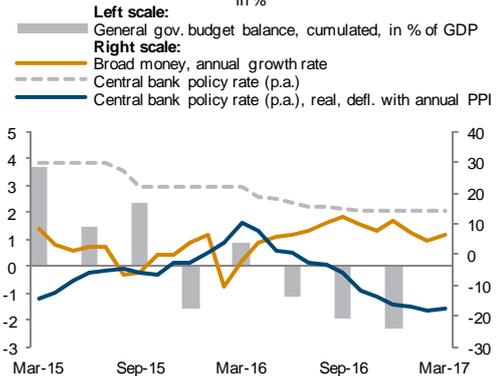
## Inflation and unemployment

in %



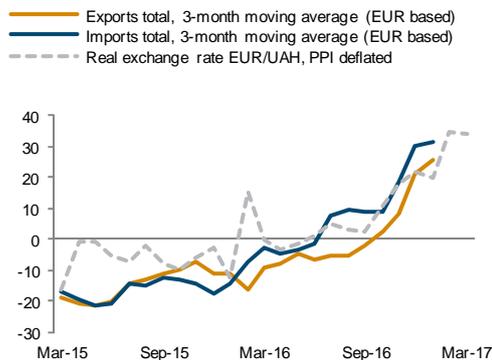
## Fiscal and monetary policy

in %



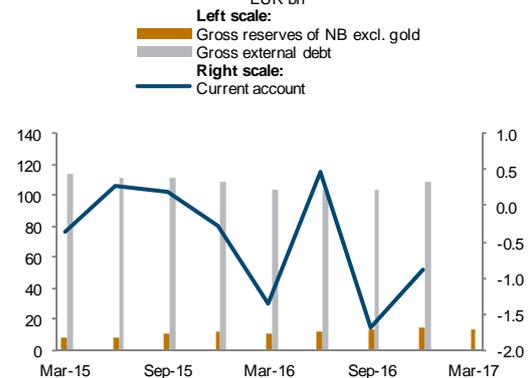
## External sector development

annual growth rate in %



## External finance

EUR bn



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