

**Three Notes on Earnings Levels,  
Inequality Coverage Rates of  
Collective Agreements, and  
Developments of the  
Gender Wage Gap**

**Presidential Elections  
in Romania**





# Three Notes on Earnings Levels, Inequality Coverage Rates of Collective Agreements, and Developments of the Gender Wage Gap

## Presidential Elections in Romania

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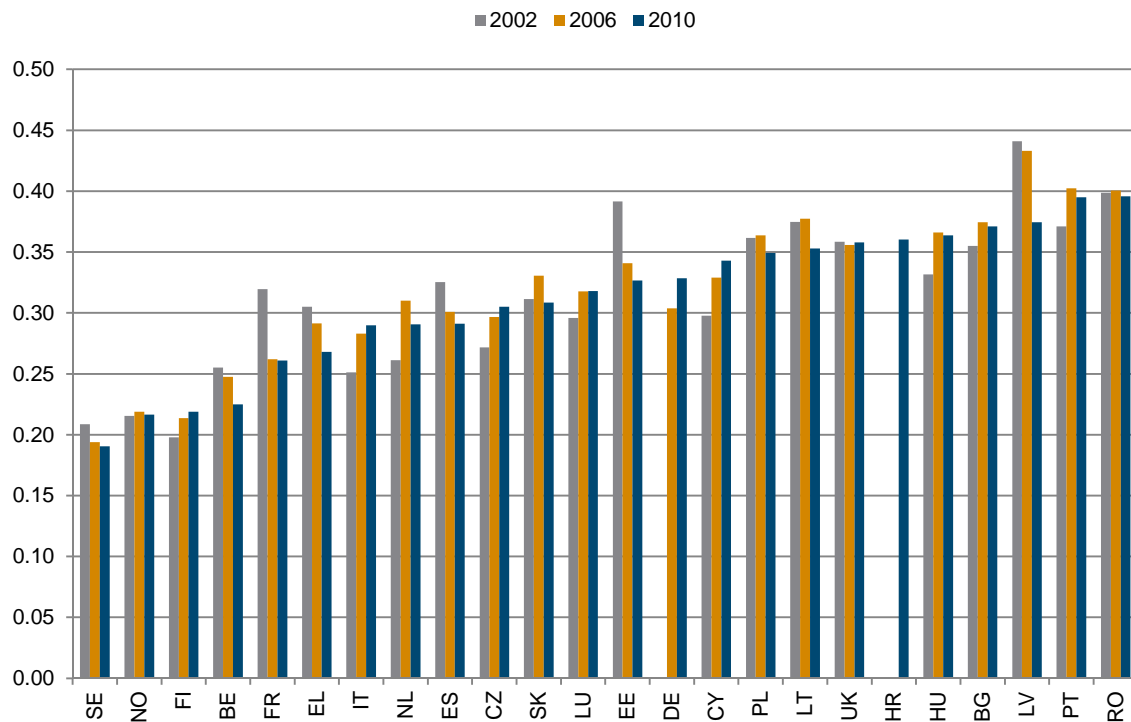


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## INEQUALITIES IN HOURLY EARNINGS AT PPP MEASURED BY THE GINI INDEX IN SELECTED EUROPEAN COUNTRIES, 2002-2010



Explanatory remark: The Gini index is a measure of inequality ranging from 0 to 1 with higher levels indicating more inequality. PPP: purchasing power parity

Note: Ranked according to Gini coefficient in 2010.

Source: Structure of Earnings Survey data; wiiw calculations.

## Opinion corner: Presidential elections in Romania: will the new broom sweep cleaner?

ANSWERED BY WIIW EXPERT GÁBOR HUNYA

Klaus Iohannis, the candidate of the Christian Liberal Alliance, got 54.5% of the vote in the second round of the presidential election on 16 November 2014, while Prime Minister Victor Ponta, the candidate of the left (the alliance formed between the Social Democratic Party, the National Union for Romania's Progress and the Conservative Party) received 45.5%. This result was the direct opposite of what had been expected after the first round of the election on 2 November 2014.

Romania's large diaspora has been widely seen behind turning around Mr Ponta's ten percentage points lead after the first election round when many voiced their anger over long queues and bureaucratic hurdles preventing them from voting. Some 380,000 Romanians voted abroad during the second round, more than double the number registered in the first round. But altogether 6.2 million citizens voted for Iohannis and 5.2 million for Ponta, meaning that even if all ballots cast outside Romania had gone to Iohannis, it would explain only one third of his lead. Most important was the rising participation rate to 64% from 51% and that votes against Ponta were no longer split between several candidates. The mobilisation for Iohannis was successful through the social media<sup>1</sup>, mainly in the urban regions and among younger people. Ponta has widely been associated with post-communist corrupt clientele, while Iohannis positioned himself as a champion of cleanness and European values.

With the inauguration of Mr Iohannis as president in December a new cohabitation will start. Political analysts are split over the consequences. Some say a victory for Ponta might have helped make Romania more stable, with the main strings of political power held by one bloc, while Iohannis' victory may trigger renewed political tensions hindering the fight against corruption. The centre-right president may face a hostile parliamentary majority that could cause more policy wrangling. Other analysts maintain that without the check on power, hitherto provided by President Basescu, Ponta, if being in control of both government and presidency, would have tightened political control over the judiciary, prosecutors and the media.

There is also a chance for a forward-looking cooperation between government and president. Despite having lost the elections, Mr Ponta seems firm in his seat and ruled out quitting as Prime Minister. He said his Social Democrat alliance would remain in power until the parliamentary elections due in 2016. In view of his defeat, Mr Ponta may look for reconciliation with the new president more than with Mr Basescu. Mr Iohannis may in turn be less combative than his predecessor and act more in line with his constitutional prerogatives.

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<sup>1</sup> See for an analysis: <http://csaladenes.wordpress.com/2014/11/17/how-social-media-won-the-2014-romanian-presidential-elections-for-klaus-iohannis/>



Romania has a semi-presidential political system. While the government takes most of the executive decisions, the president has several significant prerogatives, including the right to nominate the prime minister, the chiefs of the intelligence services and the heads of anti-corruption bodies. The president presides over the National Security Council and represents Romania abroad including at EU summits. He can also address the government with own initiatives and presides over the government session at such instances.

Klaus Iohannis declared that the Constitution does not need changes as regards the presidential prerogatives and, unlike his predecessor Traian Basescu, he would not push to the ultimate limits of the Constitution text. He promised to act as a mediator in political processes and as a guarantor of law and order. In foreign policy he will continue the strategic partnership with the United States and underpin Romania's role in NATO and the EU. He promised to fight endemic corruption and guarantee the independence of the judiciary. This latter power had often been misused by incumbent President Basescu to crack down on his enemies.

Romania reported relatively rapid economic growth in the third quarter of 2014; GDP growth will turn out above 2.5% for the year as a whole. Growth has been generated by private consumption, a fairly good harvest and the change in methodology (introduction of ESA10). Prime Minister Ponta tried to focus the election campaign on his government's economic success but this left the electorate unimpressed knowing that economic issues are not in the competence of the president. Iohannis, on the other hand, was successful in giving a reminder to the prime minister that he had neglected his duties by not presenting the 2015 budget to Parliament. In the course of the campaign, the prime minister promised various pay and pension rises which have now to be reconciled with the medium-term budget plan prescribing contracting deficits. A decision is also looming whether to quit the current precautionary agreement with the IMF, thus improving the room to manoeuvre in fiscal matters. Ownership over economic policy may turn out for the better if the new political leadership can build up trust. Investors have given preliminary credit to the success shown in firming currency and stable credit ratings.

Risks to political stability are also remarkable, such as the fragility of the governing coalition. The Hungarian party UDMR may soon leave the coalition seeing its constituency's preference for Iohannis, thus depriving the government of its two-third majority in Parliament. Also popular unrest may re-emerge, organised through social media, if the government proves unable to combat corruption. The new president may acquire a major role in supporting efficient governing and in channelling citizens' demands.

# Earnings levels, inequality and coverage rates of collective agreements<sup>\*</sup>

BY SEBASTIAN LEITNER

As indicated in the 'Graph of the month' (see p. 1) a wide range of inequalities in hourly earnings can be observed across countries. Not only the structure of earnings differs across countries, which is reflected in the wide range of the Gini index of inequality, but also the levels of hourly earnings differ across countries and over time. Drawing on data from the European Union's Structure of Earnings Survey (SES) this article provides evidence concerning the evolvement of wage levels and earnings inequality over time. The data used for the analysis stem from the anonymised dataset of the Structure of Earnings Survey conducted in the years 2002, 2006 and 2010 in most EU Member States<sup>2</sup> and Norway including comparable information on the level of earnings of employees and corresponding individual, job and employer characteristics. The main variable used in the analysis is gross hourly earnings at purchasing power parities (PPPs) per actually paid hour including earnings from irregular payments (e.g. annual bonuses, overtime payments, etc.).

## *Hourly earning across European countries*

Between 2002 and 2010, the median income levels (measured as gross hourly wages adjusted for PPPs) increased strongly in the Central and East European new EU Member States (CEE NMS), by 58% on average (see bars in Figure 1 – left scale). In the other EU countries, median wages rose by an average 18% over the same period; they increased particularly fast in South European countries, but also in others such as Sweden and Finland. Despite a catching-up process wage levels in 2010 still differ considerably between the East and West of the EU, ranging from below 5 euro (Bulgaria, Romania, Latvia and Lithuania) to 7 euro in Portugal and more than 15 euro in Germany, Belgium and the Netherlands, as well as Norway. However, median hourly wages have not increased in all countries covered in the period analysed; particularly, in Belgium a drop in hourly wages in 2010 as compared to 2002 can be observed; the wage level also declined in France, Germany and the United Kingdom between 2006 to 2010.

## *Earnings inequalities across European countries*

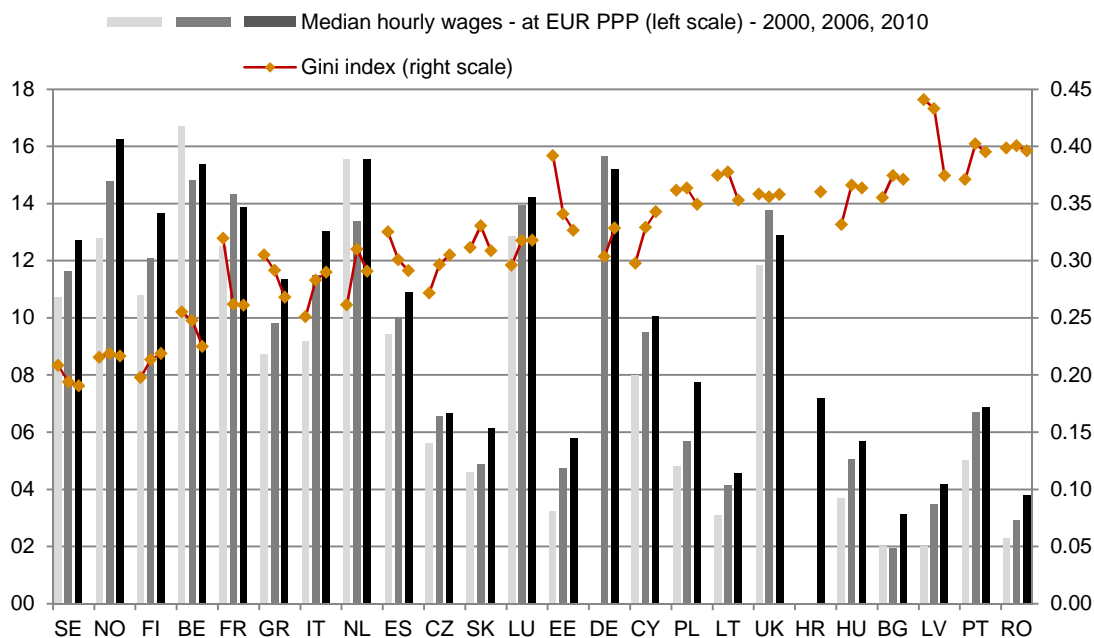
As presented in Figure 1, not only earnings but also inequality levels differ widely across Europe. The Gini index – a measure of inequality, with a value of 0 depicting total equality and a value of 1 the extreme case of only one person accruing all income of the population – ranges from 0.2 in countries such as Sweden, Norway and Finland to about 0.4 in Portugal and Romania in 2010. The CEE NMS

<sup>\*</sup> This and the following articles are based on results from the 'Study on various aspects of earnings distribution using micro-data from the European Structure of Earnings Survey' carried out for DG Employment, Social Affairs and Equal Opportunities, VC/2013/0019. The full report will be published in wiiw Research Report No. 399, forthcoming (R. Stehrer, N. Foster-McGregor, S. Leitner, S. M. Leitner and J. Pöschl, 'Determinants of Earnings Inequalities in the EU').

<sup>2</sup> EU countries not covered in the SES anonymised dataset are: Austria, Denmark, Ireland, Malta, Slovenia.

countries tend to have higher levels of wage inequality compared to the economically more advanced countries of the EU. Outliers in this respect are Germany and the UK, featuring Gini levels close to 0.35, and Portugal, as already mentioned. Trends across countries are heterogeneous over time: inequality decreased between 2002 and 2010, for example, in the Baltic States, France, Spain and Greece whereas it increased in Italy, Luxembourg, the Czech Republic, Cyprus and Germany. No particular impact of the crisis can be observed across countries from the 2010 data. However, in the Baltic countries, Spain and the UK employment rates of low- and medium-educated employees decreased strongest between 2002 and 2010, which may have had an effect on measured wage inequality for the total population sample. Moreover, in Latvia and Lithuania the cuts in wages particularly of high income earning public servants already had a reducing effect on inequality levels in 2010.

**Figure 1 / Earnings levels and inequality in selected EU Member States and Norway, 2002, 2006, 2010**

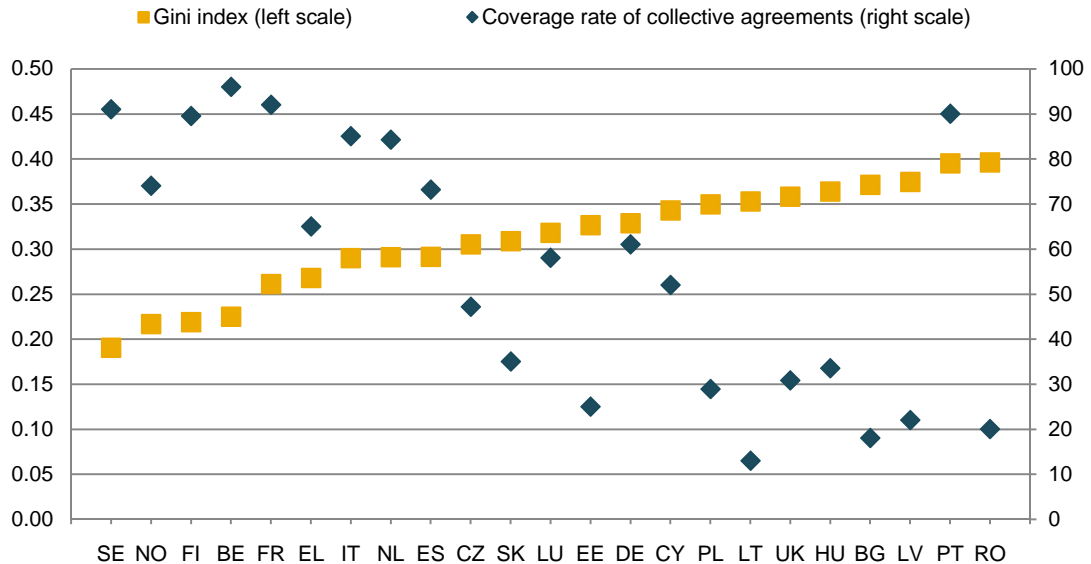


Source: Structure of Earnings Survey 2002, 2006, 2010; wiiw calculations.

### *Earnings inequalities and the role of labour market institutions*

The following article in this Report ('Determinants of earnings inequalities in Europe', see pp. 7 - 10) analyses to which extent personal, job and enterprise characteristics – variables offered in the SES dataset – may explain differences in inequality levels across countries. However, country characteristics – which are not available in the SES dataset – may have a remarkable influence on the wage structures and thus on earnings inequalities as measured by the Gini index. Here we therefore provide a snapshot on how the coverage rate of collective agreements<sup>3</sup> is related to the inequalities in hourly earnings across European economies.

<sup>3</sup> Employees covered by collective (wage) bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining, expressed as a percentage.

**Figure 2 / Collective agreements and earnings inequality**

Source: ICTWSS (Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts) Version 4.0; SES 2010; wiiw calculations.

In Figure 2 we plot the levels of earnings inequality (left scale) and the coverage rates of collective agreements (right scale). We can detect a strikingly high negative correlation between the two variables, with Portugal being the only outlier in this respect. While in the CEE NMS, which feature higher levels of inequality overall, on average only 24% of employees' contracts are based on collective agreements, in the rest of the EU countries the share amounts to 73% on average. From this we assume that the wage structures according to personal, job and enterprise characteristics are shaped by collective agreements.

As one can see from Figure 1, inequality is however also correlated negatively with levels of earnings. Thus we were running a cross-section regression with both coverage rates and earnings levels as explanatory for the Gini index in 2010. The result is that coverage rates remain negatively conditionally correlated with the Gini index at the 10% level, while the coefficient for earnings levels becomes insignificant. From that we can assume that higher levels of earnings inequality in the CEE NMS are not related to lower levels of wages but to the low share of workers covered by collective agreements in those countries.

# Determinants of earnings inequalities in Europe<sup>\*</sup>

BY SEBASTIAN LEITNER AND ROBERT STEHRER

## DRIVERS OF EARNINGS INEQUALITIES IN THE EU

Drawing on data from the European Union's Structure of Earnings Survey (EU SES), the Gini index – as a measure of inequality – ranges from high levels of 0.4 such as in Portugal and Romania to around 0.2 in the Nordic countries. More than half of the countries considered experience Gini levels of about 0.3 or more. These inequalities in hourly earnings are driven by differences in wage structures along several dimensions or characteristics of persons employed. The variety of characteristics of the employed persons examined here include various personal (e.g. gender, age, education), job (occupation, job duration) and enterprise characteristics (e.g. size, sector).

In order to analyse the factors that may influence the differences in earnings inequality we apply the Shapley value decomposition method which allows us to assess the relative importance of these various factors. The Shapley value approach is a regression-based decomposition method, allowing for the calculation of the contribution of each of the explanatory variables to a respective inequality measure – in our case the Gini index conditional on all other variables. Figure 3 presents the unweighted mean of the various contributions across countries for 2002 to 2010.

About 72% of the variation of individual hourly wages can be explained by the set of explanatory variables. It should be stated at the outset that a high or low relative importance of an individual variable obviously does not mean that the characteristic is of more or less policy relevance.<sup>4</sup> On average, *individual characteristics* (age, gender and education) accounted for some 21% of the measured wage differences in 2010, with the educational attainment of employees being the most important individual characteristic. This has even increased over time from 11% in 2002 to 13% in 2010. Differences between age groups account for about 5% of the Gini index, while conditional wage differences between males and females declined somewhat over the eight-year period, from 4% in 2002 to 3% in 2010.

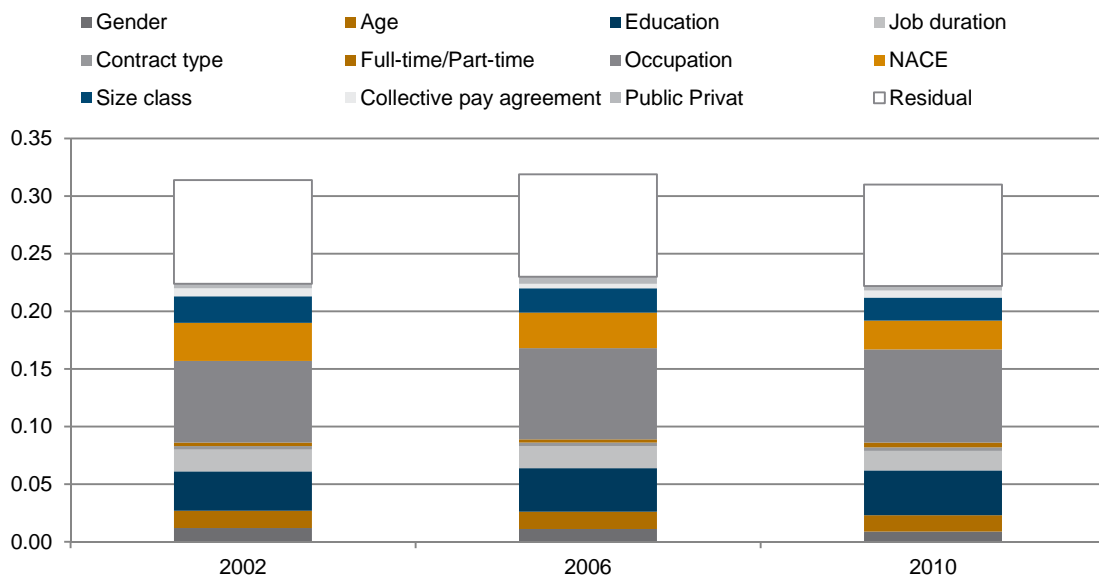
A second group of factors considered are the job characteristics. The most important one in explaining wage inequality is occupation, which accounts on average for 26% of the Gini index in 2010 (up from 24% in 2002). This result was expected as wage structures of firms are in general shaped by differences

<sup>\*</sup> This article is based on results from the 'Study on various aspects of earnings distribution using micro-data from the European Structure of Earnings Survey' carried out for DG Employment, Social Affairs and Equal Opportunities, VC/2013/0019. The full report will be published in wiiw Research Report No. 399, forthcoming (R. Stehrer, N. Foster-McGregor, S. Leitner, S. M. Leitner and J. Pöschl, 'Determinants of Earnings Inequalities in the EU').

<sup>4</sup> Moreover, the contributions to inequality are not only driven by the wage differences between groups of wage earners but also by the size of the population subgroups. Thus e.g. the contribution of education differences to the Gini index declines (together with the overall Gini) if, given unchanged wage differences between high- and low-educated employees, the employment rate of low-educated persons falls.

between occupational categories. The second most important factor of this group is the length of service of individual employees in the enterprise, which accounts for 6% of the total Gini index. Differences between full- and part-time employed and between types of employment contracts (indefinite duration, temporary/fixed duration or apprentice) both account for only about 1% of the average observed inequality. However, the importance of differences between full- and part-time employees, which had declined before the crisis, rose from 0.8% in 2006 to 1.2% in 2010.

**Figure 3 / Contribution of explanatory variables to the Gini index, average of EU countries**



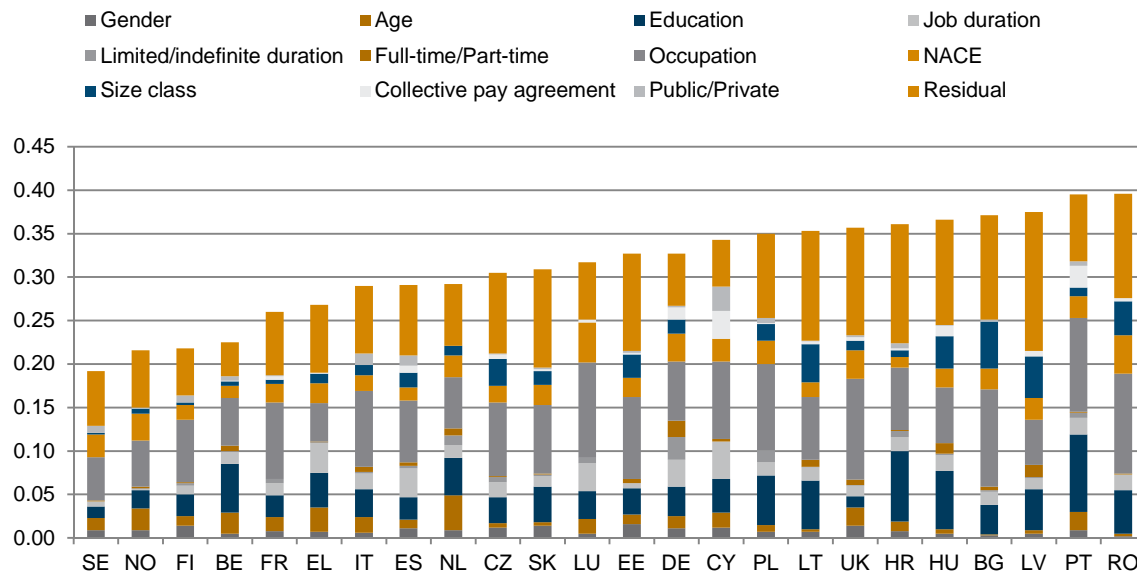
Note: Unweighted mean over available countries in individual years.

Source: SES; wiiw calculations.

Finally, enterprise characteristics account for 17% of the Gini index in 2010 on average; their importance declined from 20% in 2002. The second most important characteristic is the NACE sector of firms, which fell from 10% of the average Gini index in 2002 to 8% in 2010. Differences between larger and smaller enterprises explain 6% of overall wage inequality in 2010 while differences between public and private companies and between enterprise units that are non-covered or covered by different types of collective pay agreements both account for about 1.5% of total inequality.

## CONTRIBUTIONS TO EARNINGS INEQUALITIES BY COUNTRY

The above-mentioned structures are unweighted averages across countries. This allows one to consider whether there are substantial cross-country differences not only concerning the levels of inequality but also with respect to the characteristics contributing to these inequalities and how these might have changed over time. In the following we describe these conditional contributions by country as shown in Figure 4 for 2010; the changes over time are discussed in the text below.

**Figure 4 / Contributions of explanatory variables to the Gini index by country, 2010**

Source: SES 2010; wiiw calculations.

### *Personal characteristics*

The results point towards substantial differences in the contributions of educational attainment levels to inequality across countries. In Belgium, Portugal, Croatia and Hungary education accounts for about 20% of the Gini index in 2010, while in the United Kingdom and Sweden education explains only about 5% of inequality. With respect to developments over time, in 15 countries for which data are available education explained an increasing share of inequality. Particularly strong increases of the contribution of educational wage differences to the Gini index are found in Belgium, Portugal and Greece. By contrast, differences in educational attainment explained an ever decreasing share of inequality in the Czech Republic, Germany, France, Romania, Sweden and the United Kingdom. Considerable differences among countries can also be found in the case of the contributions of age-related wage differences to overall wage inequality. In 2010, the contribution of age to inequality was relatively high in the Netherlands (14%), Norway (12%), Belgium (10%) and Greece (10%). In the CEE NMS the contribution was below 2% on average.

### *Occupational characteristics*

*Length of service in the enterprise* contributes, averaged across all countries, about 6% to the Gini index. Here, however, a wide dispersion across countries becomes apparent. Particularly in the Mediterranean countries (i.e. Cyprus, Spain and Greece) wage differences are strongly influenced by this factor. Although there has been a substantial fall in the premium of job duration in Greece, the wage difference due to age and job duration combined still amounts to 22% of the Gini index in 2010. Above-average contributions of the 'length of service' characteristic can also be observed for Cyprus, Spain, Luxembourg and Germany. Below-average contributions are found for the Scandinavian countries and most CEE NMS. Wage differences between those employees that have *contracts with fixed duration* and those having a contract of indefinite duration explain about 8% of the Gini index in Germany due to the

high share of apprentice contracts in total employment. Above-average contributions of around 4% are also found in the Netherlands and Poland due to higher wage differentials, while in the rest of the EU the contribution of this variable is below 2%. The contribution of differences between *full- and part-time employees* is quite low for the majority of countries analysed. However, in 2010 a non-negligible contribution to inequality is found for Germany due to a strong rise in part-timers (with almost 6%), Latvia and Hungary (between 3% and 4%), and the Netherlands, Belgium and Lithuania (between 3% and 2%). Differences in type of contract explain less than 2% in the remaining countries.

As expected, the contribution of differences between occupational categories accounts for up to 35% of inequality, being largest in Luxembourg, France, Finland, the UK and Bulgaria in 2010. By contrast, at less than 20%, the contribution of occupational category was lowest in Hungary, Greece and Latvia. As for changes over the time period 2002 to 2010, with the exception of Sweden, Norway, Spain and Hungary (for the latter two almost negligible reductions are observable), the contribution of occupation to inequality increased in all countries covered. The rise was most pronounced in Bulgaria, Italy, Romania, Estonia and Latvia.

#### *Firm characteristics*

Differences in firm size classes contribute relatively little to inequality on average. However for most CEE NMS, particularly Bulgaria, Latvia, Lithuania, the Czech Republic, Hungary, Romania and Estonia, the premium is high in 2010, ranging between 8% and 15% of the Gini index. Figure 2 also highlights that conditional wage differences between NACE sectors account for a substantial part of overall inequality, contributing on average 10% to the Gini index across all countries over the period 2002 to 2010. In 2010, the contribution of NACE sectors to inequality ranged from 5% (in Spain, Lithuania and Croatia) to almost 15% (in Luxembourg, Norway and Sweden). Between 2002 and 2010, the contribution of NACE sectors to inequality dropped in the majority of countries. In particular, it dropped the most in a set of countries with the initially highest contributions. By contrast, it increased in a small number of countries; mostly so in Sweden (from initially 4% to 13%), Norway (from initially 8% to 13%) and France (from around 5% to around 8%).

From the analysis we may conclude that the most important drivers of earnings inequality at the country level are the individual characteristics of education and occupation and, in addition, differences between size classes of enterprises. However, as pointed out in the first article of this Monthly Report on 'Earnings levels, inequality and coverage rates of collective agreements', country characteristics, particularly collective agreements, are found to be an important determinant of wage structures and inequality levels.



# Developments of the gender wage gap in the European Union – reason for hope?<sup>\*</sup>

BY SANDRA M. LEITNER AND ROBERT STEHRER

All over the world, irrespective of the country considered, women do not receive the same pay as men. For instance, OECD (2006) suggests that the pay gap between males and females is 16% for the average of OECD countries, with the gap being around 23% in the United States and between 10% and 25% in EU countries. Hence, women typically have to work longer to receive the same income as men, a fact marked by the Equal Pay Day many countries have come to initiate in the past few years. Equal Pay Day is defined differently across countries and either illustrates how far into the year a woman must work to earn the same amount made by a man in the previous year or it marks the day starting from which only men will be paid for their work until the end of the year. In Europe, Belgium was the first country to organise an Equal Pay Day in 2005, followed by others in subsequent years. Moreover, on 5 March 2011, the European Commission launched the first European Equal Pay Day. Since then, three European Equal Pay Days have taken place, and apart from the latest one, each slightly earlier than the previous one, illustrating that the average EU gender pay gap is slowly narrowing (based on the first of the two definitions mentioned above): the second European Equal Pay Day was held on 2 March 2012, the third one on 28 February 2013, whereas the fourth one again took place on 28 February 2014. Hence, in 2011, women in the EU worked 64 days extra until they had earned the same amount of money earned by men in 2010; in 2012 this number fell to 62 days, and in 2013 and 2014 alike, women in the EU worked 59 days extra until they had earned the same amount as men.

However, partly due to the lack of better data, such estimates of wage gaps are unconditional and therefore fail to control for differences between females and males in terms of, for instance, age, education level, hours worked, choice of job, etc., providing a biased picture of the true extent of prevailing gender wage gaps. Hence, questions concerning (i) the size of the gender wage gap and (ii) how gender wage gaps change over time when controlling for the above-mentioned characteristics remain.

## GENDER WAGE GAPS ACROSS EUROPEAN COUNTRIES

In order to provide an accurate measure of the true extent of gender wage gaps, so-called Mincer regressions (Mincer, 1974) have become standard in the literature, which explicitly account for observable differences between females and males. The standard approach is to regress the log of wages on a set of individual characteristics and possibly other characteristics as well. In a recent study (Stehrer et al., 2014) data from three consecutive waves of the Structure of Earnings Survey – for 2002,

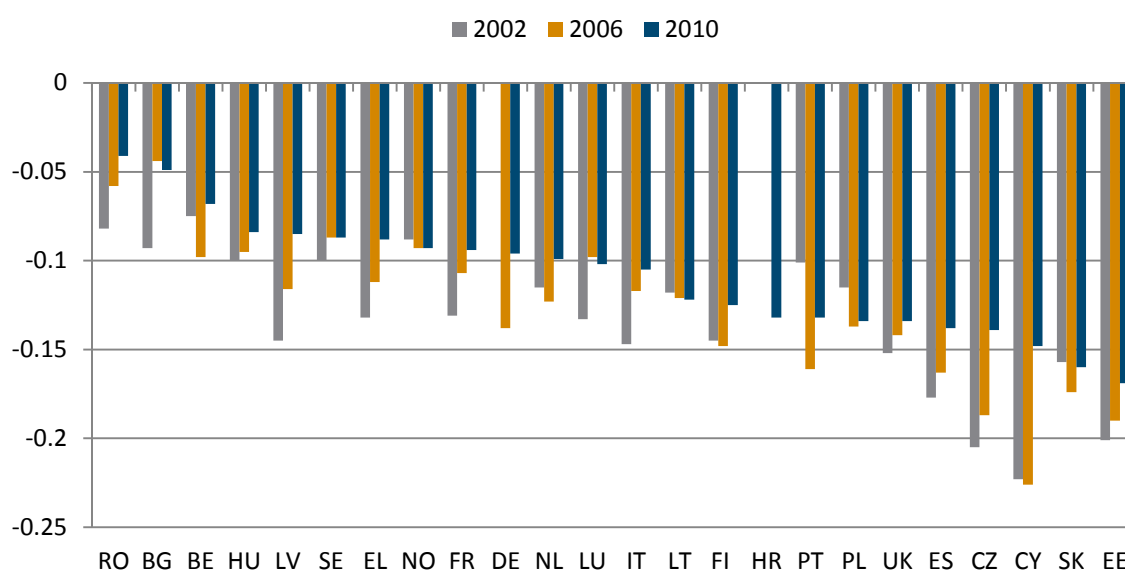
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<sup>\*</sup> This article is based on results from the 'Study on various aspects of earnings distribution using micro-data from the European Structure of Earnings Survey' carried out for DG Employment, Social Affairs and Equal Opportunities, VC/2013/0019. The full report will be published in wiiw Research Report No. 399, forthcoming (R. Stehrer, N. Foster-McGregor, S. Leitner, S. M. Leitner and J. Pöschl, 'Determinants of Earnings Inequalities in the EU').

2006 and 2010 – are used to assess the levels of and changes in the gender wage gap across European countries. In this study, gross hourly earnings were regressed on a set of personal characteristics such as sex, age and education, job characteristics such as job duration, part-time employment and contract type, and occupation and firm characteristics such as firm size, private control, collective pay agreements and sectors. One should bear in mind that here only the earnings of those persons remaining employed are considered, while income effects due to different patterns of job losses across males and females are not taken into account.

The results of such Mincer regressions for a number of EU countries (plus Norway) are presented in Figure 5. These highlight that in 2010, without exception, women earned less than men in each of the countries analysed. However, the true size of gender wage gaps differed widely across European countries. In particular, with less than 5%, gender wage gaps were lowest in Romania (4.1%) and Bulgaria (4.9%), followed by a larger group of countries with gender wage gaps of between 5% and 10% comprising Belgium (6.8%), Hungary (8.4%), Latvia (8.5%), Sweden (8.7%), Greece (8.8%), Norway (9.3%), France (9.4%), Germany (9.6%) and the Netherlands (9.9%). By contrast, with gender wage gaps of more than 13%, Estonia (16.9%), Slovakia (16%), Cyprus (14.8%) and the Czech Republic (13.9%) were at the bottom of the league.

**Figure 5 / Gender wage gaps, 2002-2010**



Note: The coefficients are taken from the full Mincer regressions estimated separately for each country. The reference category is male. Countries are ranked according to the gender wage gap in 2010.

Source: SES; wiiw calculations.

## DEVELOPMENTS OF GENDER WAGE GAPS IN EUROPE BETWEEN 2002 AND 2010

Moreover, a comparison of gender wage gaps across time also highlights that these narrowed over the years. For instance, for the EU as a whole, the unweighted average wage gap declined slightly from 13.2% in 2002 to 12.8% in 2006 and even further to 10.9% in 2010. This general downward trend in

gender wage gaps is also observable in the majority of EU Member States. Between 2002 and 2010, gender wage gaps declined in all but five European economies, namely Lithuania, Norway, Poland, Portugal and Slovakia. The most pronounced rise in gender wage gaps is observable in Portugal, where gender wage gaps increased from about 10.1% in 2002 to 13.2% in 2010, followed by Poland, where gender wage gaps widened from initially 11.5% in 2002 to 13.4% in 2010. By comparison, gender wage gaps increased relatively moderately in Norway, from 8.8% in 2002 to 9.3% in 2010, in Lithuania, from 11.8% in 2002 to 12.2% in 2010, and in Slovakia, from 15.7% in 2002 to 16.0% in 2010.

By contrast, gender wage gaps narrowed the most in the two EU member countries with the highest gender wage gaps in 2002, namely Cyprus (from 22% in 2002 to 15% in 2010) and the Czech Republic (from 21% in 2002 to 14% in 2010). Similarly strong declines in gender wage gaps are observed for Latvia (from 15% in 2002 to 9% in 2010), Greece (from 13% in 2002 to 9% in 2010) and Bulgaria. In this context, the pronounced drop in gender wage gaps in Bulgaria between 2002 and 2010 is particularly striking: in 2002, with only 9%, Bulgaria was among the four economies with the lowest gender wage gaps to start with, and it experienced further pronounced declines, eventually becoming the EU Member State with the second-lowest gender wage gap in 2010.<sup>5</sup>

Furthermore, in some European countries, gender wage gaps showed a tendency to increase prior to the global financial crisis, before falling again thereafter. In particular, between 2002 and 2006, gender wage gaps increased noticeably in Belgium and only slightly in the Netherlands or Finland, before falling below the initial 2002 levels in 2010.

## CONCLUSIONS

Summarising, results point towards continuously but partly slowly decreasing conditional gender wage gaps, i.e. when accounting for other individual, occupational and firm characteristics. In general, gender wage gaps are found to narrow in the majority of countries analysed – if to varying degrees – highlighting that women increasingly get similar pay as men. However, gender wage gaps remain a source of concern since despite numerous actions taken and initiatives and strategies introduced by individual countries as well as the EU, progress is fairly slow and a sizeable and persistent gap of about 11% remains on average across all countries here analysed. Hence, while progress is made, still more needs to be done to guarantee that pay equity will be achieved soon, rendering the Equal Pay Day a relic of the past.

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OECD (2006), *Women and men in OECD countries*, Organisation for Economic Cooperation and Development, Paris.

Stehrer, R., N. Foster-McGregor, S. M. Leitner, S. Leitner and J. Pöschl (2014), 'Determinants of Earnings Inequalities in the EU', wiiw Research Report, No. 399, forthcoming.

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<sup>5</sup> Moreover, a number of robustness checks were conducted to confirm both the existence and size of gender wage gaps. For instance, the inclusion of firm fixed effects, whose exclusion results in a downward bias of estimation results, or the inclusion of more detailed occupation groups leads to similar results.

## The editors recommend for further reading\*

Wren-Lewis on when to cut public debt:

<http://mainlymacro.blogspot.co.at/2014/10/do-we-need-crisis-to-reduce-deficit.html>.

Sovereign debt before and after Argentina: <http://bostonreview.net/world/lisa-lucile-owens-saskia-sassen-vulture-funds>; also <http://www.imf.org/external/np/pp/eng/2014/090214.pdf>

Alesina, Favero and Giavazzi on output effects of fiscal consolidations (spending cuts almost free, tax hikes costly): [http://scholar.harvard.edu/files/alesina/files/output\\_effect\\_fiscal\\_consolidations\\_oct\\_2014.pdf](http://scholar.harvard.edu/files/alesina/files/output_effect_fiscal_consolidations_oct_2014.pdf)

Buiter, Rahbari and Montilla on the banking union: <http://willembuiter.com/stumbling.pdf>

Stanley Fischer's talk at the IMF: <http://www.federalreserve.gov/newsevents/speech/fischer20141011a.htm>

Susan Schadler on the IMF's Ukraine programme:

<http://www.voxeu.org/article/ukraine-stress-test-imf-credibility>

On investment in infrastructure: <http://equitablegrowth.org/2014/10/13/infrastructure-investment-truly-brainer-tuesday-focus-october-14-2014/>

Martha Nussbaum reviews Angus Deaton's book on inequality:

<http://www.newrepublic.com/article/119589/great-escape-review-do-foreign-aid-donations-make-things-worse>

Janet Yellen on equality of opportunity:

<http://federalreserve.gov/newsevents/speech/yellen20141017a.pdf>

Ravi Kanbur on Pareto's Revenge, discussing compensated and uncompensated Pareto Principle from a development policy point of view: <http://www.arts.cornell.edu/poverty/kanbur/ParRev.pdf>

Goodhart and Ashworth on the shadow economy:

<http://www.voxeu.org/article/trying-glimpse-grey-economy>

Hammond on the three welfare theorems and credible liberalisations:

<http://web.stanford.edu/~hammond/CredLib.pdf>

Wren-Lewis about Keynesian theory: <http://mainlymacro.blogspot.co.at/2014/10/more-asymmetries-is-keynesian-economics.html>

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\* Recommendation is not necessarily endorsement.

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

Monthly and quarterly statistics for Central, East and Southeast Europe

**NEW: Starting from September 2014 the statistical annex has acquired a new look.**

The annex covers **19 countries** of the CESEE region. The new 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: <http://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
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:

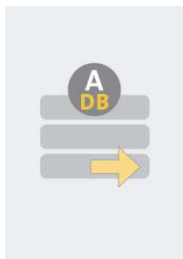
ALL	Albanian lek	HUF	Hungarian forint	RON	Romanian leu
BAM	Bosnian convertible mark	KZT	Kazakh tenge	RSD	Serbian dinar
BGN	Bulgarian lev	LTL	Lithuanian litas	RUB	Russian rouble
CZK	Czech koruna	MKD	Macedonian denar	UAH	Ukrainian
	hryvnia				
HRK	Croatian kuna	PLN	Polish zloty		

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), Slovakia (from January 2009, euro-fixed before) and Slovenia (from January 2007, euro-fixed before).

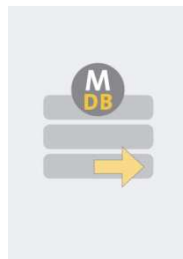
Sources of statistical data: Eurostat, National Statistical Offices, Central Banks and Public Employment Services; wiiw estimates.

Access: **New online database access!** (see overleaf)

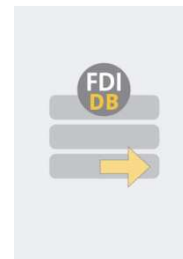
### New online database access



**wiiw Annual Database**



**wiiw Monthly Database**



**wiiw FDI Database**

The wiiw databases are now accessible via a simple web interface, with only one password needed to access all databases (and all wiiw publications). We have also relaunched our website with a number of improvements, making our services more easily available to you.

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

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

### New service package available

Starting in January 2014, 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.

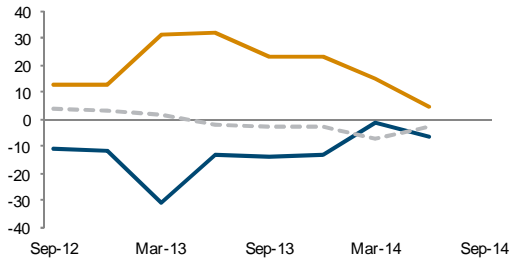
Text fertig von Statistikabteilung

# Albania

## Real sector development

cumulated annual growth rate in %

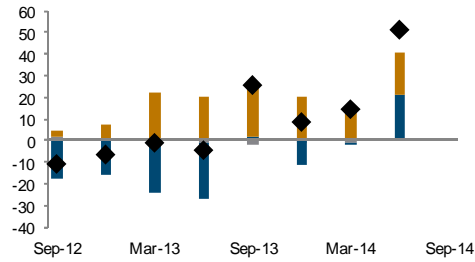
- Industry
- Construction
- Employed persons (reg.)



## Unit labour costs in industry

annual growth rate in %

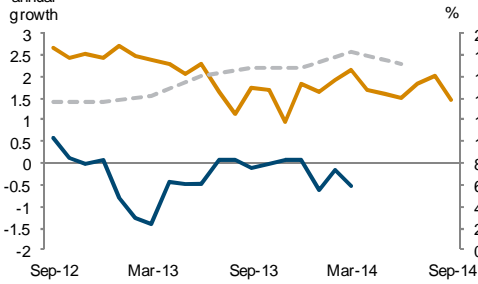
- Wages nominal, gross
- Exchange rate
- Productivity\*
- Unit labour costs



## Inflation and unemployment

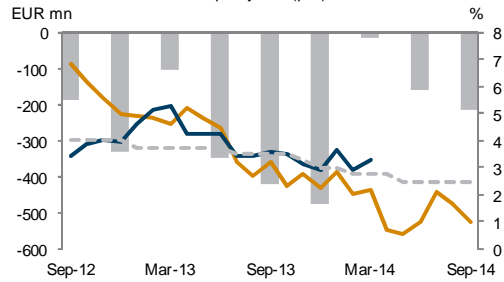
in %

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



## Fiscal and monetary policy

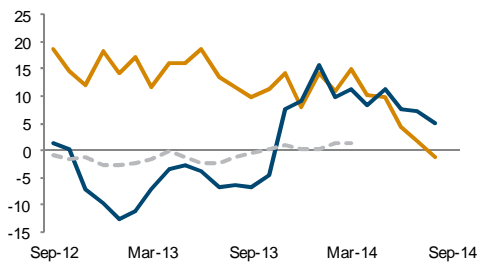
Left scale:  
General gov. budget balance, cumulated  
Right scale:  
M2, annual growth rate  
Central bank policy rate (p.a.), real, defl. with annual PPI  
Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

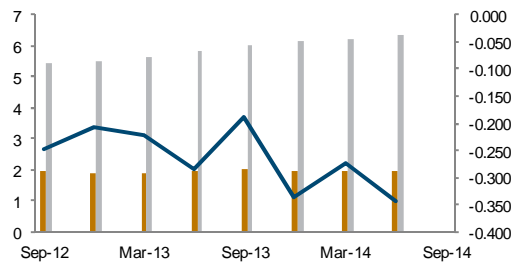
- Exports total, 3-month moving average
- Imports total, 3-month moving average
- Real exchange rate EUR/ALL, PPI deflated



## 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:

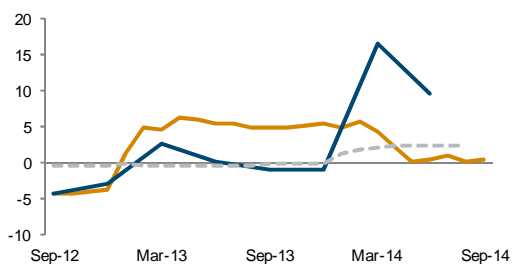
<http://data.wiiw.ac.at/monthly-database.html>

# Bosnia and Herzegovina

## Real sector development

cumulated annual growth rate in %

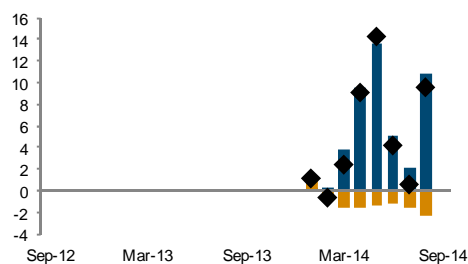
— Industry  
— Construction  
- - - Employed persons (reg.)



## Unit labour costs in industry

annual growth rate in %

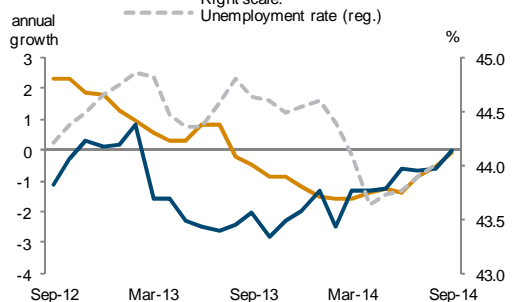
■ Wages nominal, gross ■ Productivity\*  
◆ Unit labour costs



## Inflation and unemployment

in %

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



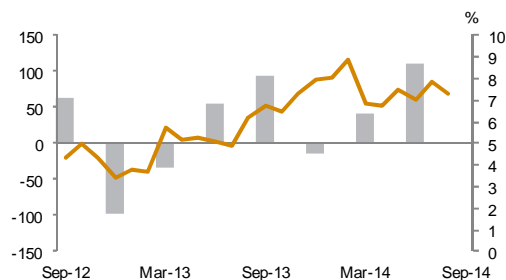
## Fiscal and monetary policy

Left scale:

■ General gov. budget balance, cumulated

Right scale:

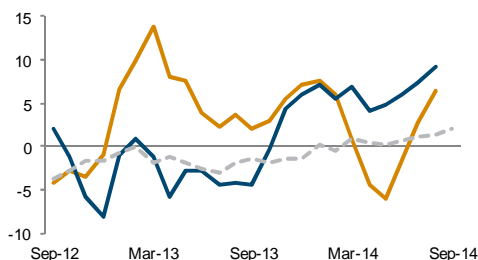
— M2, annual growth rate



## External sector development

annual growth rate in %

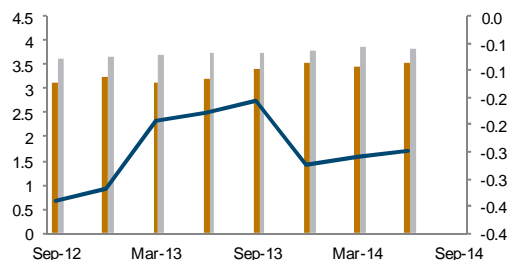
— Exports total, 3-month moving average  
— Imports total, 3-month moving average  
- - - Real exchange rate EUR/BAM, PPI deflated



## External finance

EUR bn

Left scale:  
■ Gross reserves of NB excl. gold  
■ Gross external debt (public)  
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:

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

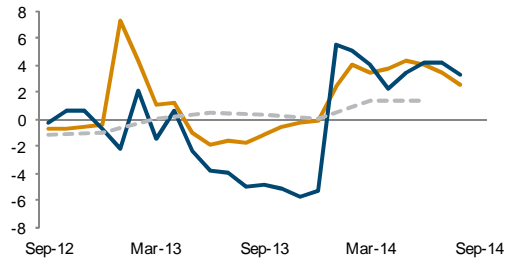


# Bulgaria

## Real sector development

cumulated annual growth rate in %

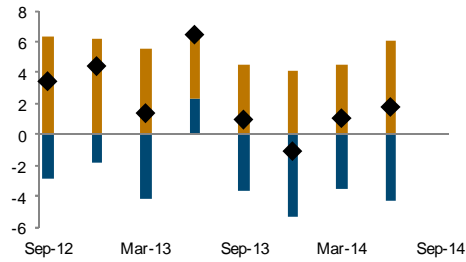
- Industry
- Construction
- Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

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



## Inflation and unemployment

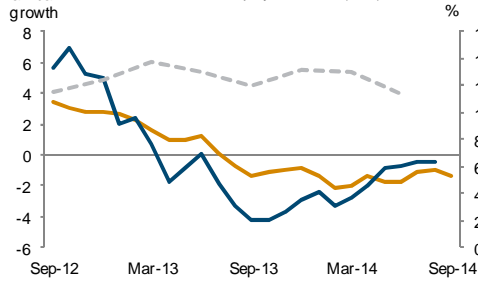
in %

Left scale:

- Consumer prices (HICP)
- Producer prices in industry

Right scale:

- Unemployment rate (LFS)



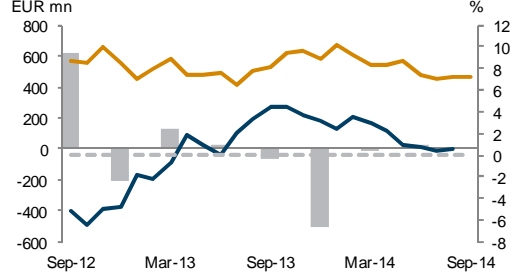
## Fiscal and monetary policy

Left scale:

- General gov. budget balance, cumulated

Right scale:

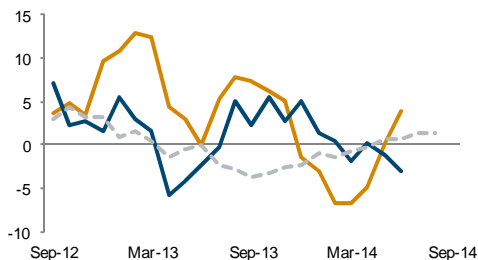
- Broad money, annual growth rate
- Central bank policy rate (p.a.), real, defl. with annual PPI
- Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

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



## External finance

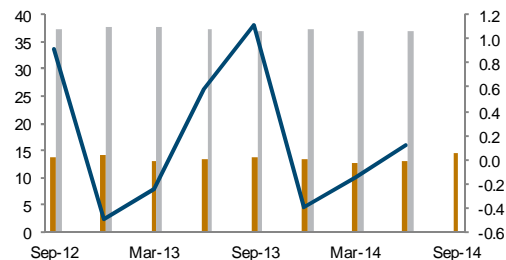
EUR bn

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.

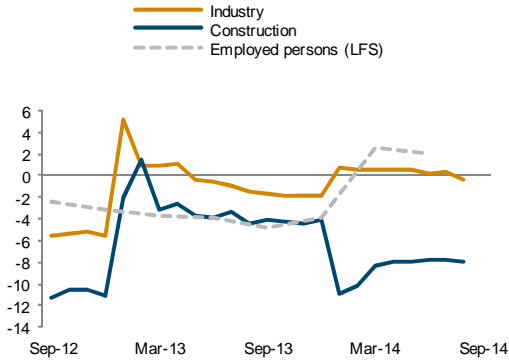
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

# Croatia

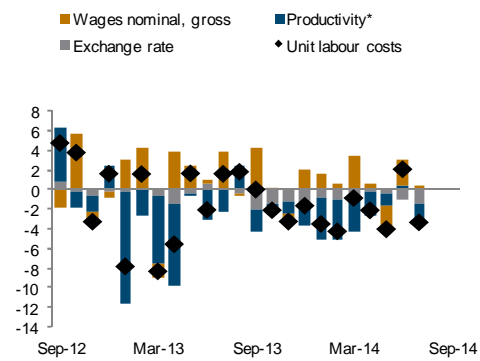
## Real sector development

cumulated annual growth rate in %



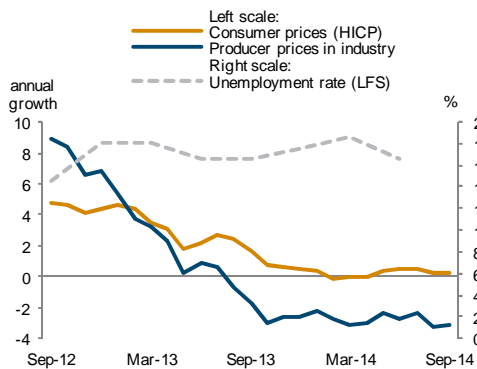
## Unit labour costs in industry

annual growth rate in %

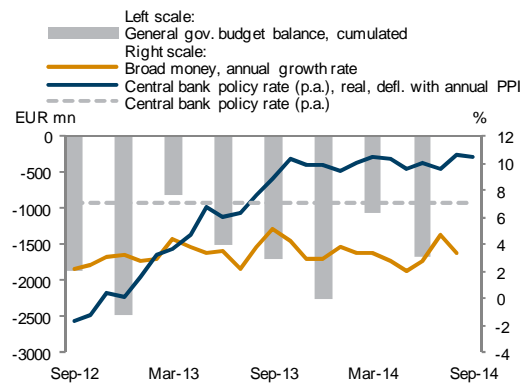


## Inflation and unemployment

in %

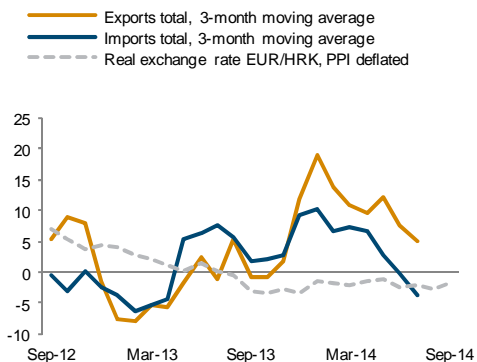


## Fiscal and monetary policy



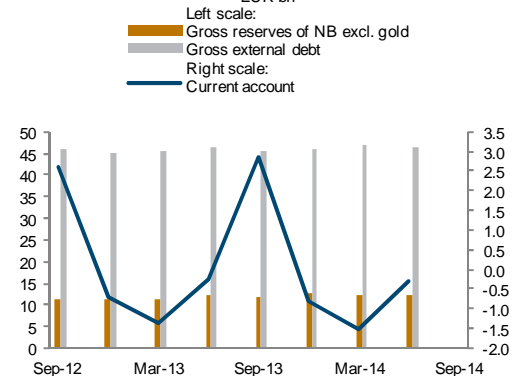
## External sector development

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:

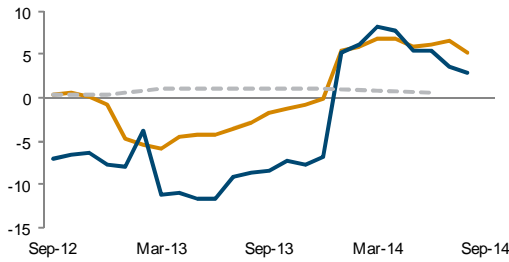
<http://data.wiiw.ac.at/monthly-database.html>

# Czech Republic

## Real sector development

cumulated annual growth rate in %

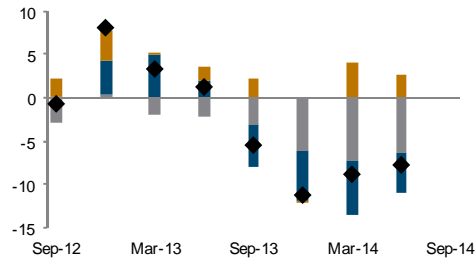
- Industry
- Construction
- Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

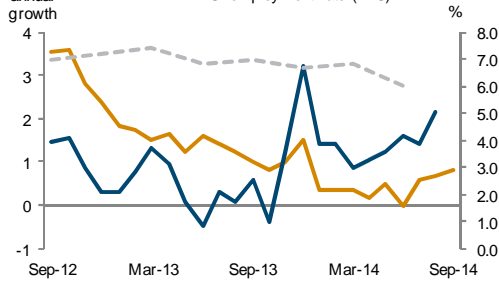
- Wages nominal, gross
- Exchange rate
- Productivity\*
- Unit labour costs



## Inflation and unemployment

in %

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



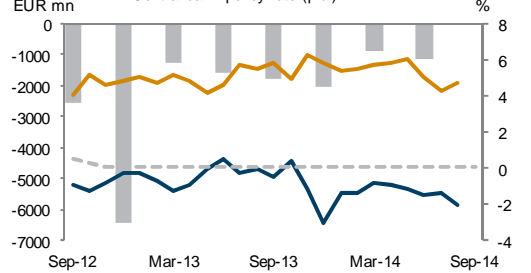
## Fiscal and monetary policy

Left scale: General gov. budget balance, cumulated

Right scale: Broad money, annual growth rate

Central bank policy rate (p.a.), real, defl. with annual PPI

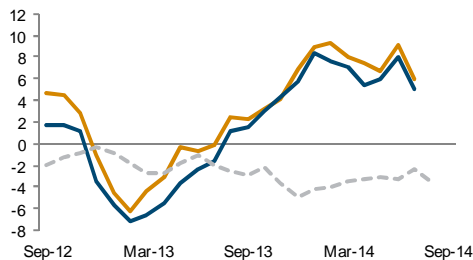
Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

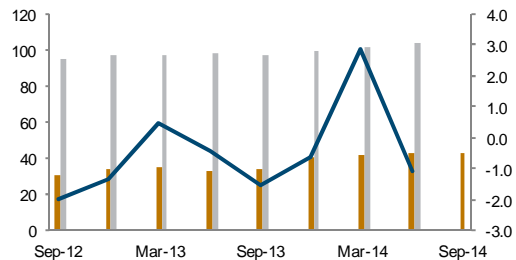
- Exports total, 3-month moving average
- Imports total, 3-month moving average
- Real exchange rate EUR/CZK, PPI deflated



## 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:

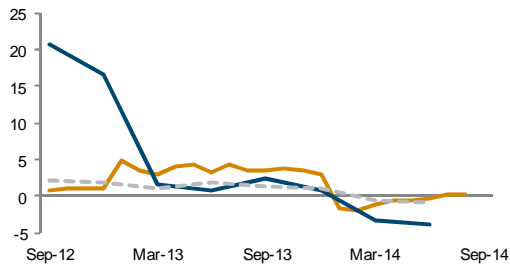
<http://data.wiiw.ac.at/monthly-database.html>

# Estonia

## Real sector development

cumulated annual growth rate in %

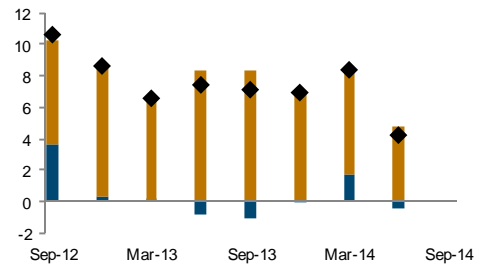
— Industry  
— Construction  
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

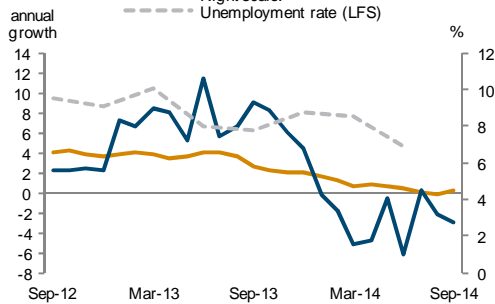
■ Wages nominal, gross ■ Productivity\*  
◆ Unit labour costs



## Inflation and unemployment

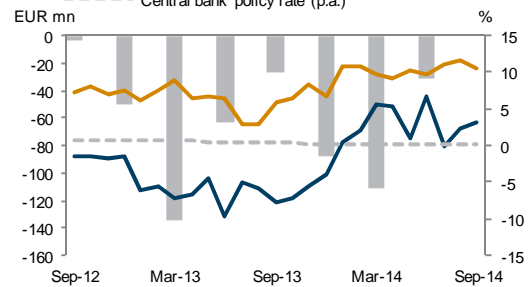
in %

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



## Fiscal and monetary policy

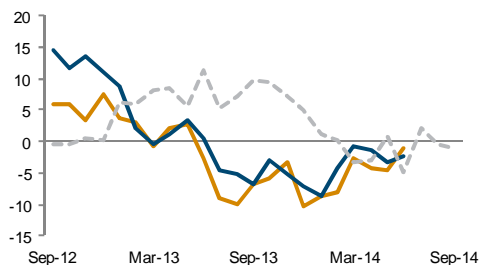
Left scale:  
— General gov. budget balance, cumulated  
Right scale:  
— Broad money, annual growth rate  
— Central bank policy rate (p.a.), real, defl. with annual PPI  
- - - Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

— Exports total, 3-month moving average  
— Imports total, 3-month moving average  
- - - 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.

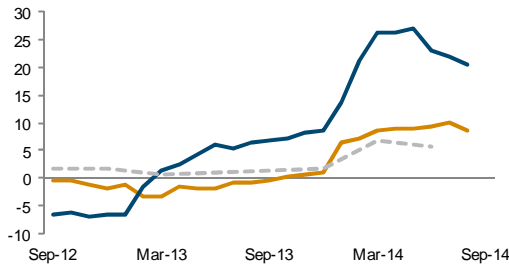
Baseline data, country-specific definitions and methodological breaks in time series are available under:  
<http://data.wiiw.ac.at/monthly-database.html>

# Hungary

## Real sector development

cumulated annual growth rate in %

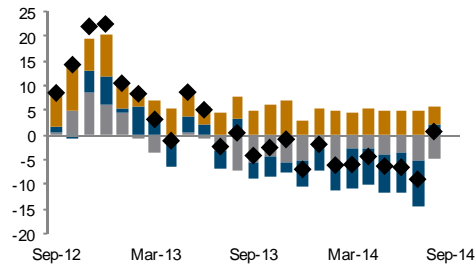
- Industry
- Construction
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

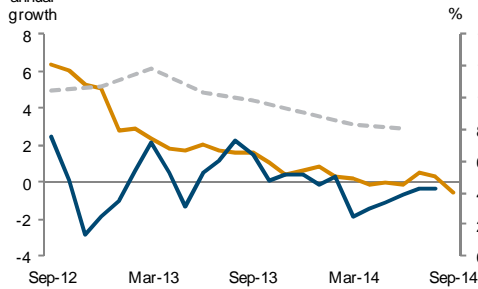
- Wages nominal, gross
- Exchange rate
- Productivity\*
- ◆ Unit labour costs



## Inflation and unemployment

in %

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



## Fiscal and monetary policy

Left scale:

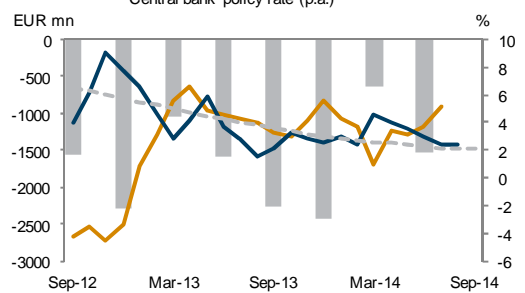
General gov. budget balance, cumulated

Right scale:

Broad money, annual growth rate

Central bank policy rate (p.a.), real, defl. with annual PPI

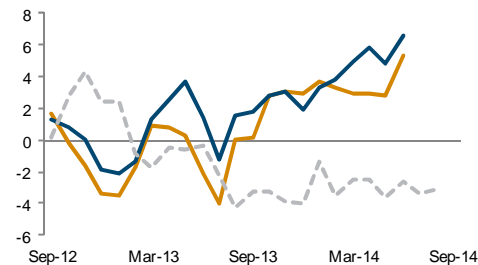
Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

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



## External finance

EUR bn

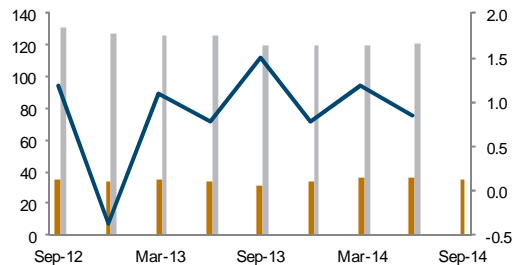
Left scale:

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:

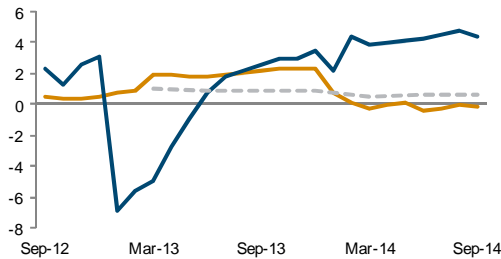
<http://data.wiiw.ac.at/monthly-database.html>

# Kazakhstan

## Real sector development

cumulated annual growth rate in %

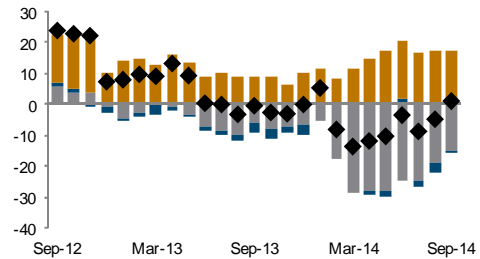
— Industry  
— Construction  
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

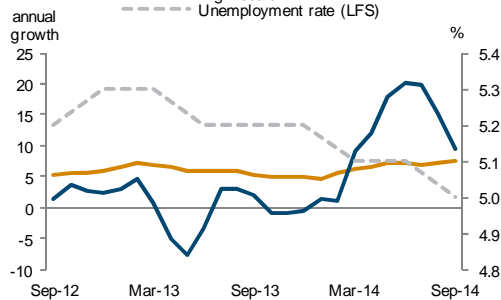
■ Wages nominal, gross    ■ Productivity\*  
■ Exchange rate    ◆ Unit labour costs



## Inflation and unemployment

in %

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



## Fiscal and monetary policy

Left scale:

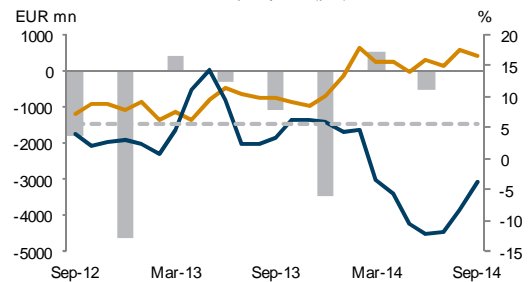
■ General gov. budget balance, cumulated

Right scale:

— Broad money, annual growth rate

— Central bank policy rate (p.a.), real, defl. with annual PPI

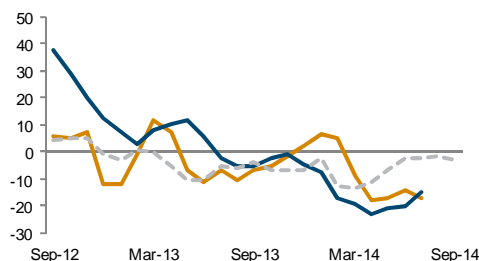
- - - Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

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



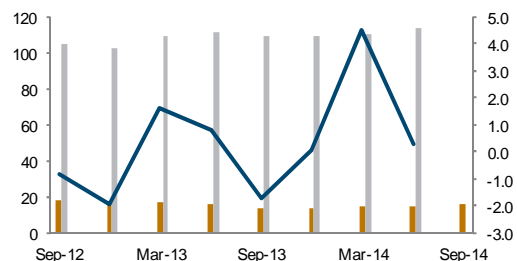
## External finance

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:

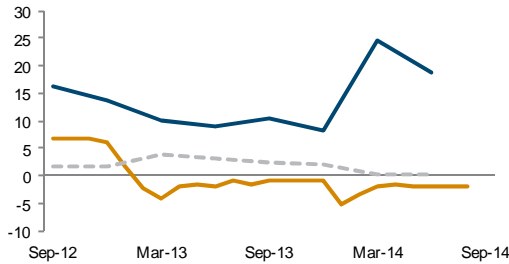
<http://data.wiiw.ac.at/monthly-database.html>

# Latvia

## Real sector development

cumulated annual growth rate in %

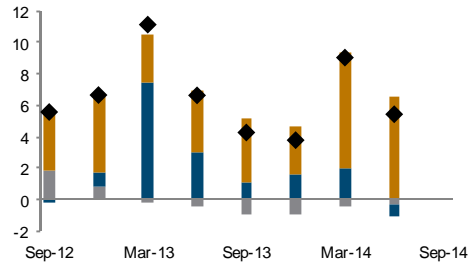
- Industry
- Construction
- Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

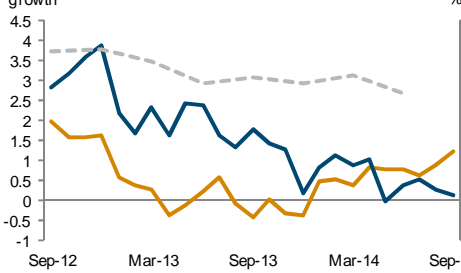
- Wages nominal, gross
- Productivity\*
- Exchange rate
- Unit labour costs



## Inflation and unemployment

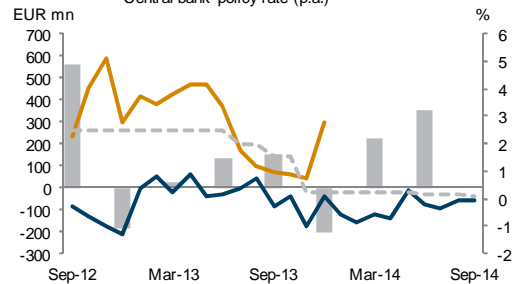
in %

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



## Fiscal and monetary policy

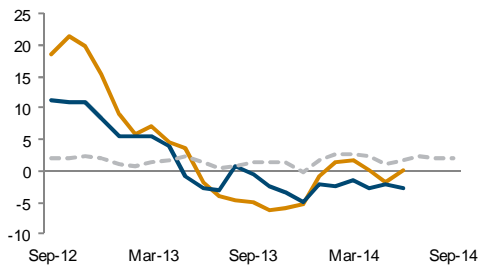
- Left scale: General gov. budget balance, cumulated
- Right scale: Broad money, annual growth rate
- Central bank policy rate (p.a.), real, defl. with annual PPI
- Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

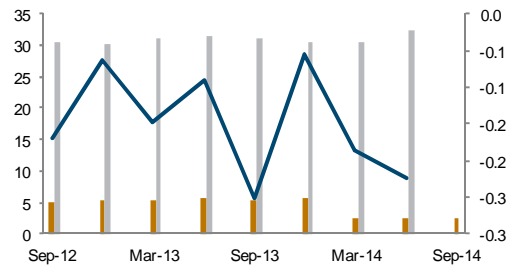
- Exports total, 3-month moving average
- Imports total, 3-month moving average
- Real exchange rate EUR/EUR-LVL, PPI deflated



## 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.

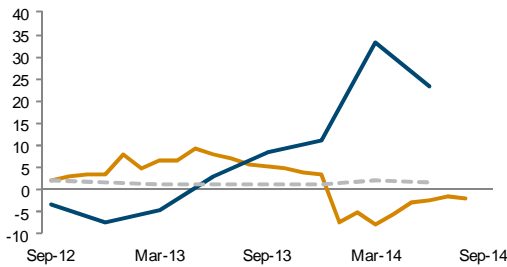
Baseline data, country-specific definitions and methodological breaks in time series are available under: <http://data.wiiw.ac.at/monthly-database.html>

# Lithuania

## Real sector development

cumulated annual growth rate in %

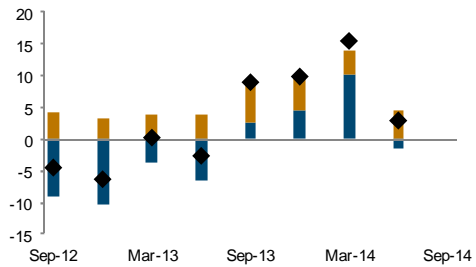
- Industry
- Construction
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

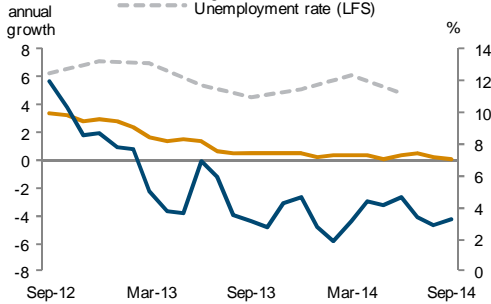
- Wages nominal, gross
- Productivity\*
- Exchange rate
- ◆ Unit labour costs



## Inflation and unemployment

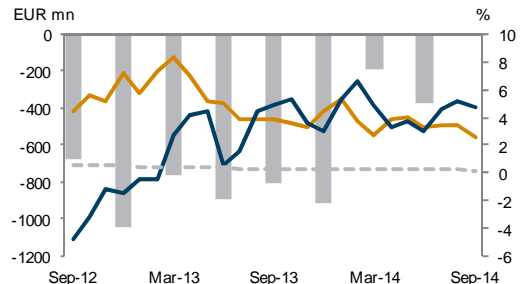
in %

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



## Fiscal and monetary policy

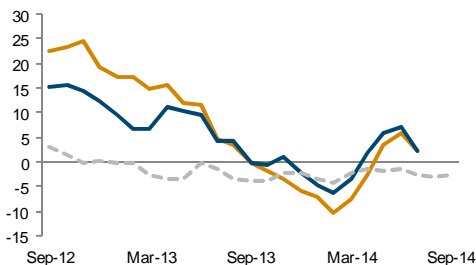
- Left scale:
- General gov. budget balance, cumulated
- Right scale:
- Broad money, annual growth rate
- Central bank policy rate (p.a.), real, defl. with annual PPI
- - - Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

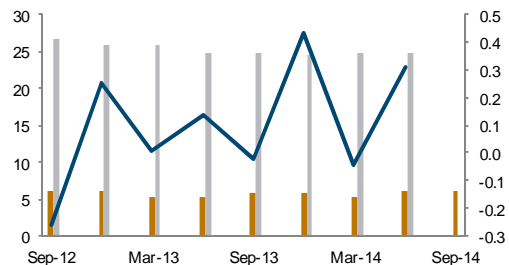
- Exports total, 3-month moving average
- Imports total, 3-month moving average
- - - Real exchange rate EUR/LTL, PPI deflated



## 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.

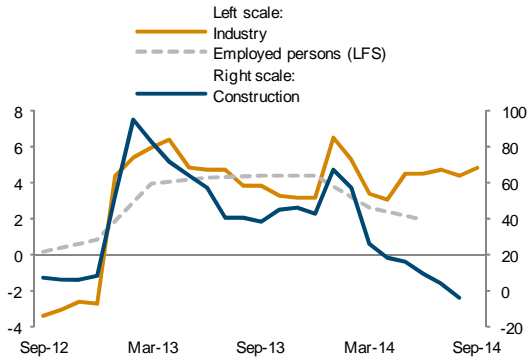
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

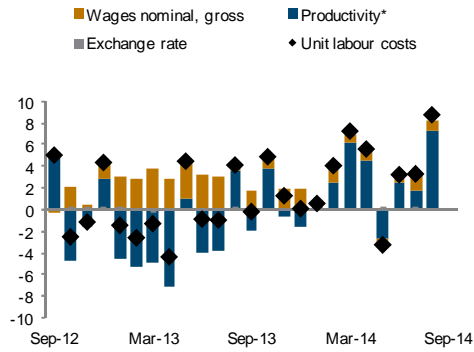


# Macedonia

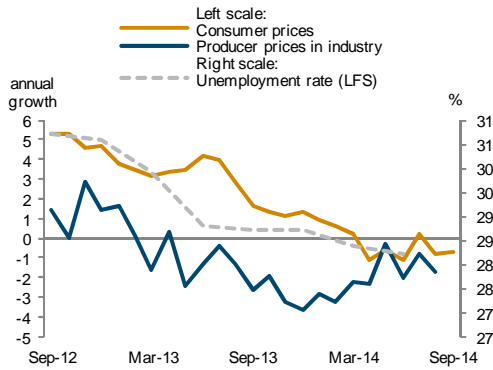
**Real sector development**  
cumulated annual growth rate in %



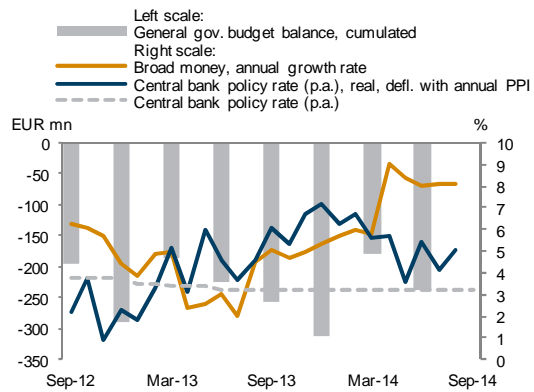
**Unit labour costs in industry**  
annual growth rate in %



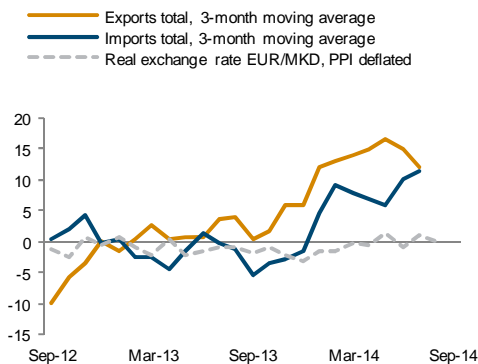
**Inflation and unemployment**  
in %



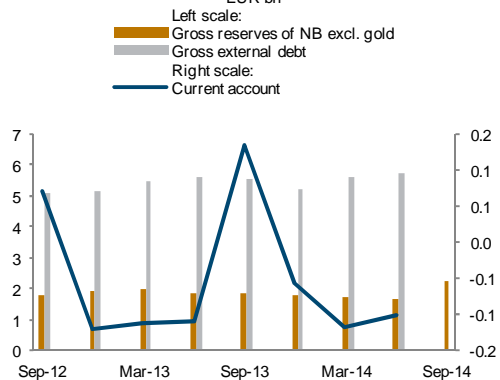
**Fiscal and monetary policy**



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



**External finance**  
EUR bn



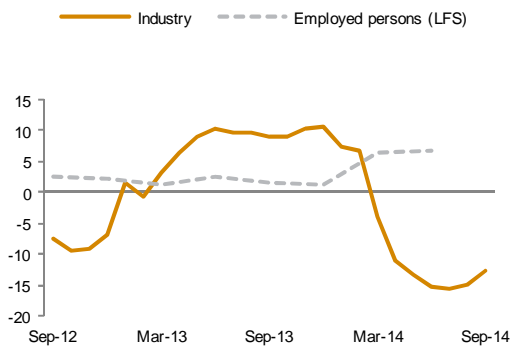
\*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

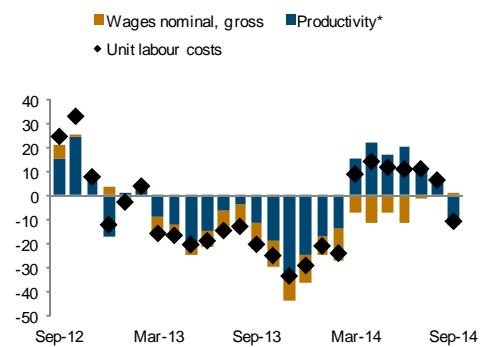
Baseline data, country-specific definitions and methodological breaks in time series are available under:  
<http://data.wiiw.ac.at/monthly-database.html>

# Montenegro

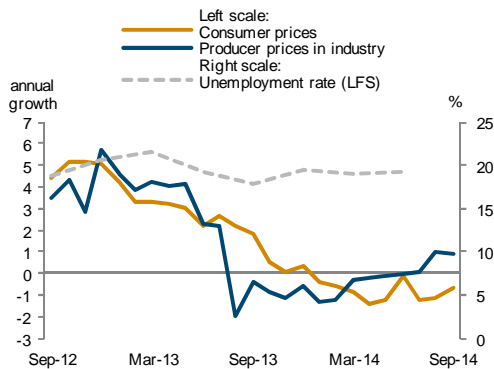
**Real sector development**  
cumulated annual growth rate in %



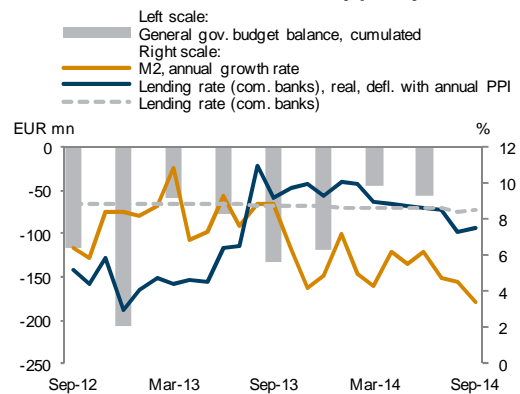
**Unit labour costs in industry**  
annual growth rate in %



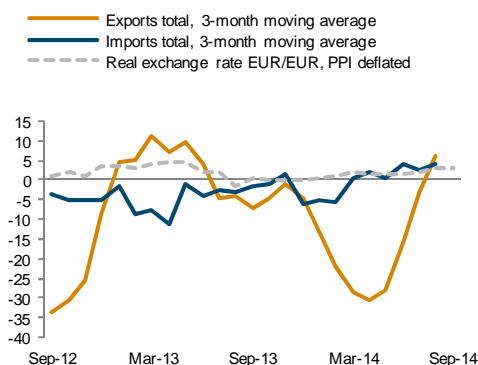
**Inflation and unemployment**  
in %



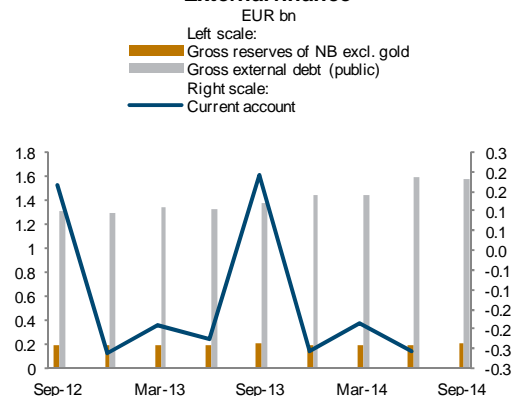
**Fiscal and monetary policy**



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



**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:

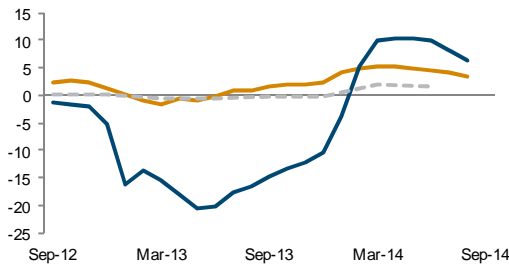
<http://data.wiiw.ac.at/monthly-database.html>

# Poland

## Real sector development

cumulated annual growth rate in %

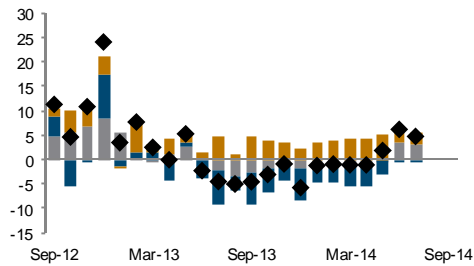
- Industry
- Construction
- Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

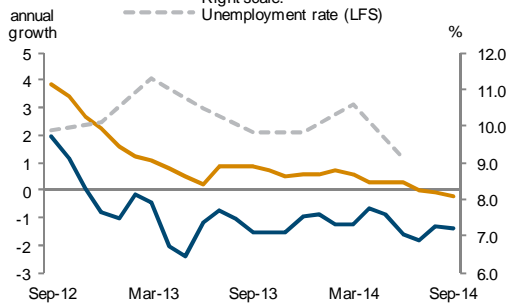
- Wages nominal, gross
- Exchange rate
- Productivity\*
- Unit labour costs



## Inflation and unemployment

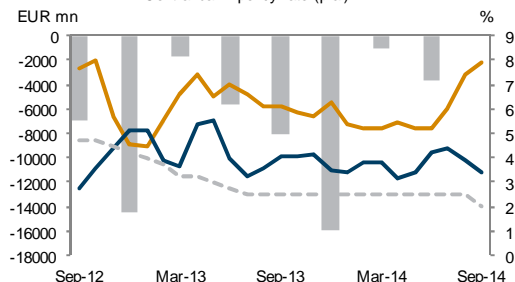
in %

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



## Fiscal and monetary policy

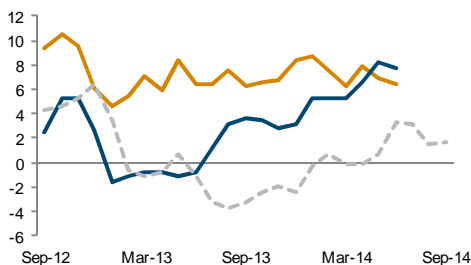
- Left scale:
  - General gov. budget balance, cumulated
- Right scale:
  - Broad money, annual growth rate
  - Central bank policy rate (p.a.), real, defl. with annual PPI
  - Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

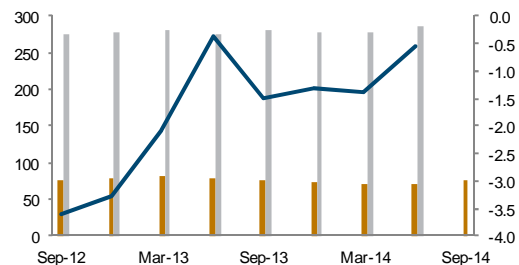
- Exports total, 3-month moving average
- Imports total, 3-month moving average
- Real exchange rate EUR/PLN, PPI deflated



## 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.

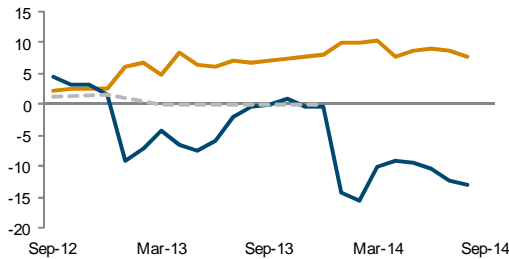
Baseline data, country-specific definitions and methodological breaks in time series are available under:  
<http://data.wiiw.ac.at/monthly-database.html>

# Romania

## Real sector development

cumulated annual growth rate in %

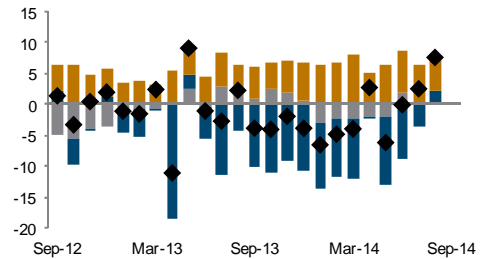
— Industry  
— Construction  
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

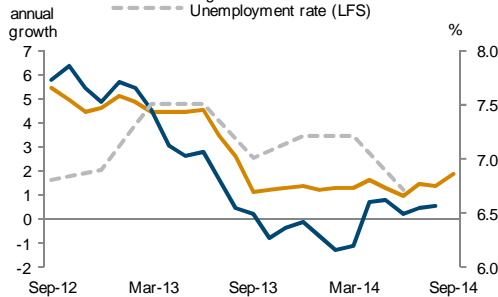
■ Wages nominal, gross  
■ Exchange rate  
■ Productivity\*  
◆ Unit labour costs



## Inflation and unemployment

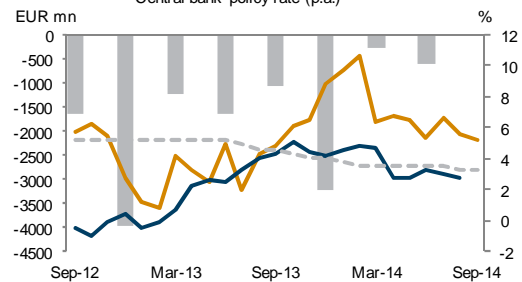
in %

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



## Fiscal and monetary policy

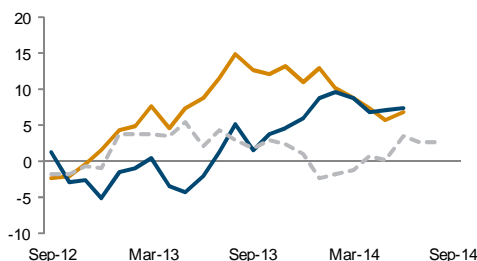
Left scale:  
■ General gov. budget balance, cumulated  
Right scale:  
— Broad money, annual growth rate  
— Central bank policy rate (p.a.), real, defl. with annual PPI  
- - - Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

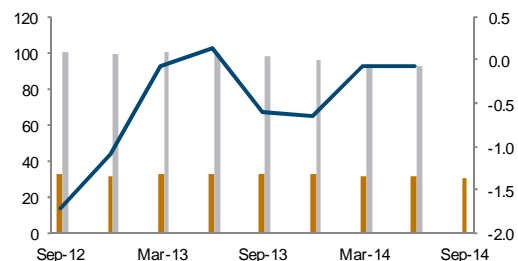
— Exports total, 3-month moving average  
— Imports total, 3-month moving average  
- - - Real exchange rate EUR/RON, PPI deflated



## 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:

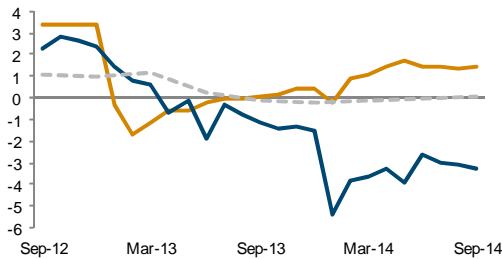
<http://data.wiiw.ac.at/monthly-database.html>

# Russia

## Real sector development

cumulated annual growth rate in %

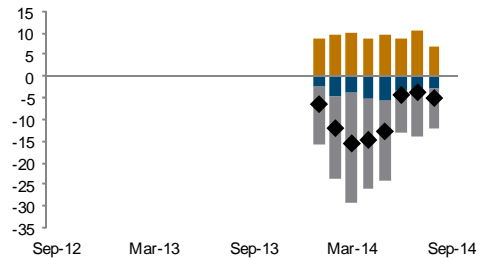
- Industry
- Construction
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

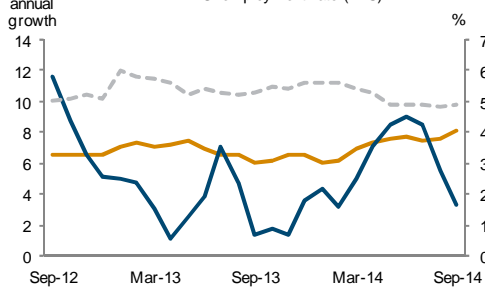
- Exchange rate
- Productivity\*
- Wages nominal, manuf., gross
- ◆ Unit labour costs



## Inflation and unemployment

in %

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



## Fiscal and monetary policy

Left scale:

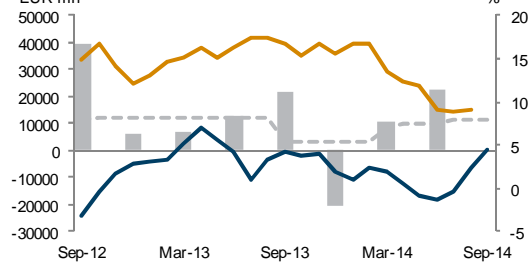
General gov. budget balance, cumulated

Right scale:

M2, annual growth rate

Central bank policy rate (p.a.), real, defl. with annual PPI

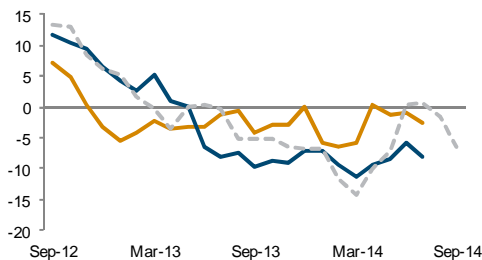
Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

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



## External finance

EUR bn

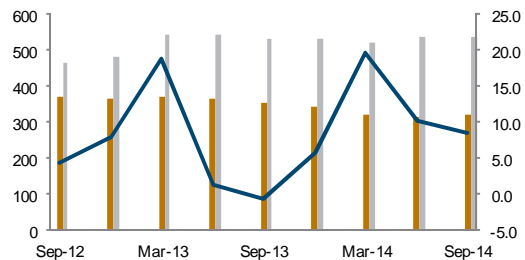
Left scale:

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.

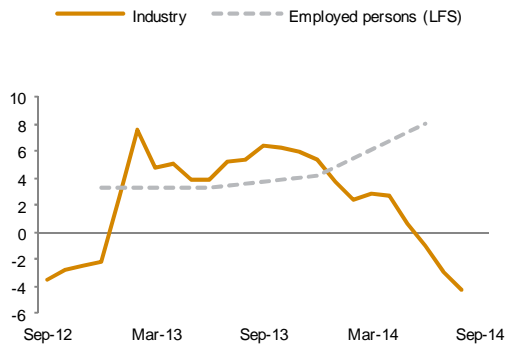
Baseline data, country-specific definitions and methodological breaks in time series are available under:

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

# Serbia

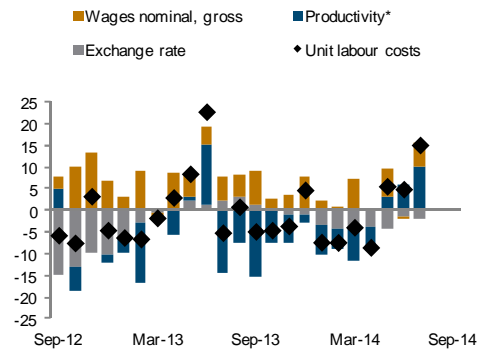
## Real sector development

cumulated annual growth rate in %



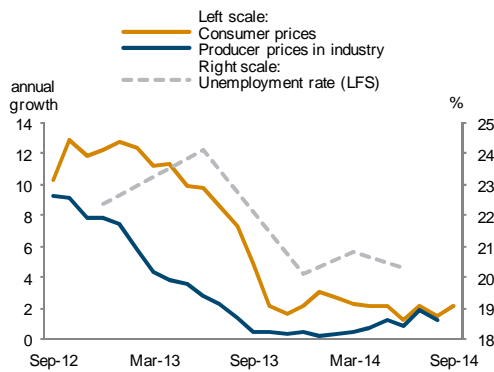
## Unit labour costs in industry

annual growth rate in %

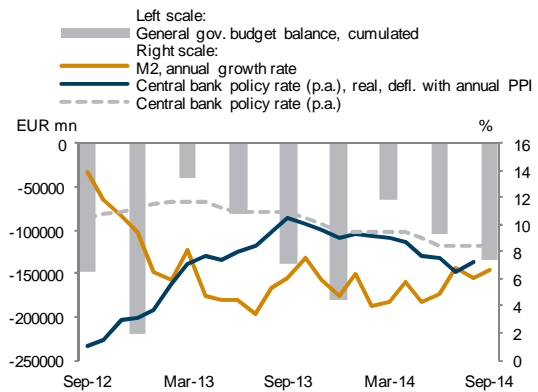


## Inflation and unemployment

in %

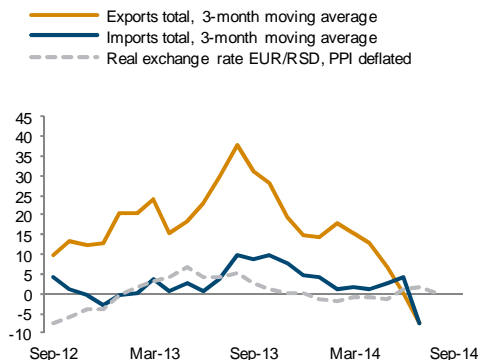


## Fiscal and monetary policy



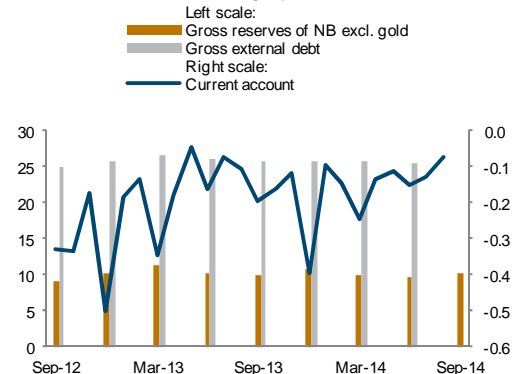
## External sector development

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:

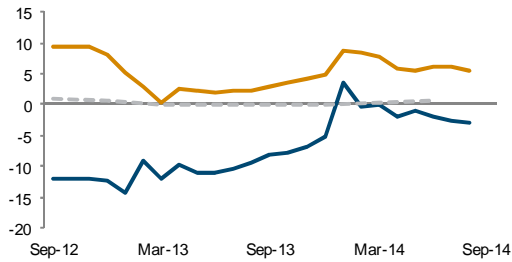
<http://data.wiiw.ac.at/monthly-database.html>

# Slovakia

## Real sector development

cumulated annual growth rate in %

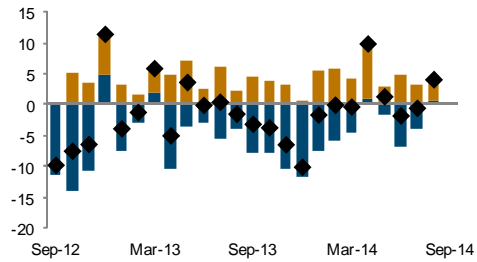
- Industry
- Construction
- Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

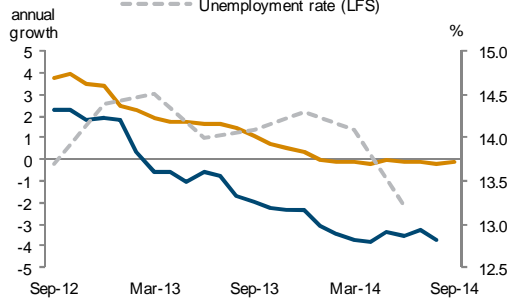
- Wages nominal, gross
- Productivity\*
- Unit labour costs



## Inflation and unemployment

in %

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



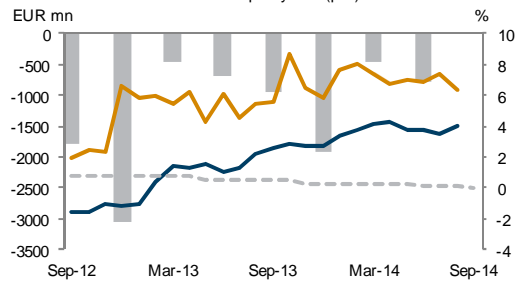
## Fiscal and monetary policy

Left scale:

General gov. budget balance, cumulated

Right scale:

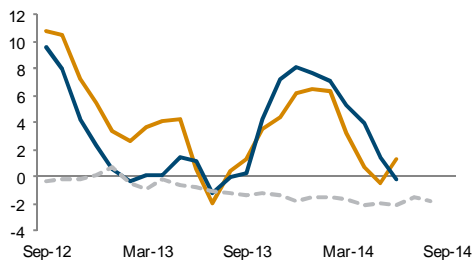
- Broad money, annual growth rate
- Central bank policy rate (p.a.), real, defl. with annual PPI
- Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

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



## External finance

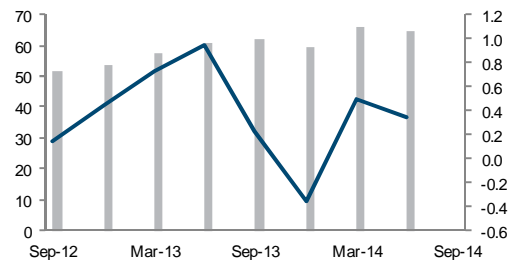
EUR bn

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.

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

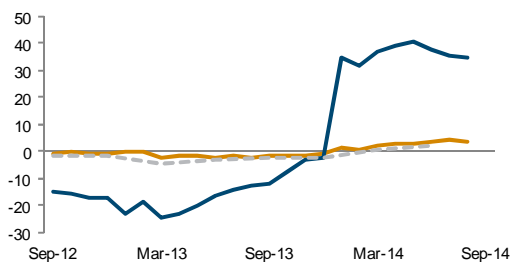
<http://data.wiiw.ac.at/monthly-database.html>

# Slovenia

## Real sector development

cumulated annual growth rate in %

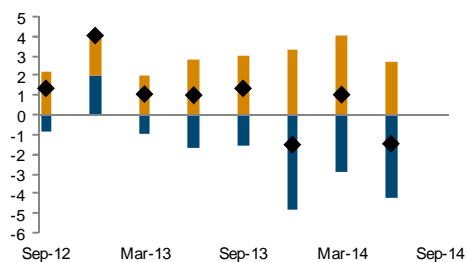
— Industry  
— Construction  
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

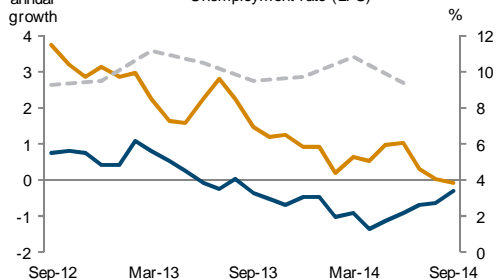
■ Wages nominal, gross ■ Productivity\*  
◆ Unit labour costs



## Inflation and unemployment

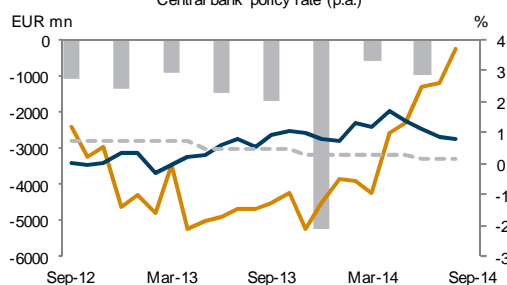
in %

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



## Fiscal and monetary policy

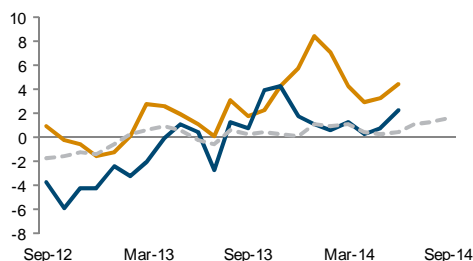
Left scale:  
— General gov. budget balance, cumulated  
Right scale:  
— Broad money, annual growth rate  
— Central bank policy rate (p.a.), real, defl. with annual PPI  
- - - Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

— Exports total, 3-month moving average  
— Imports total, 3-month moving average  
- - - 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.

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

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

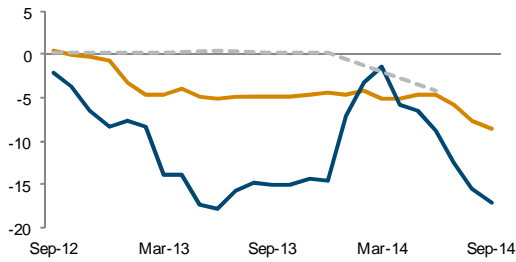


# Ukraine

## Real sector development

cumulated annual growth rate in %

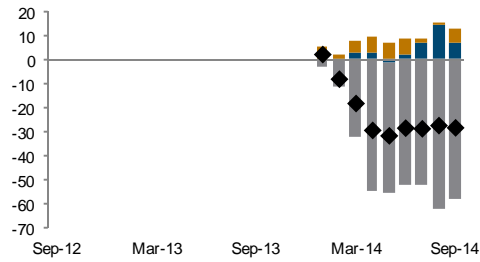
- Industry
- Construction
- - - Employed persons (LFS)



## Unit labour costs in industry

annual growth rate in %

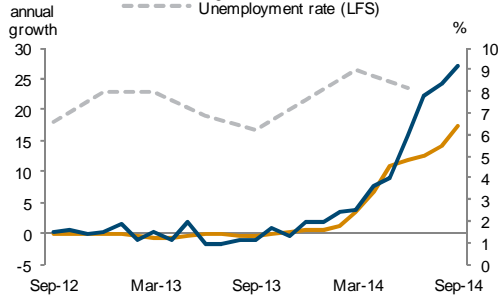
- Exchange rate
- Wages nominal, gross
- Productivity\*
- ◆ Unit labour costs



## Inflation and unemployment

in %

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



## Fiscal and monetary policy

Left scale:

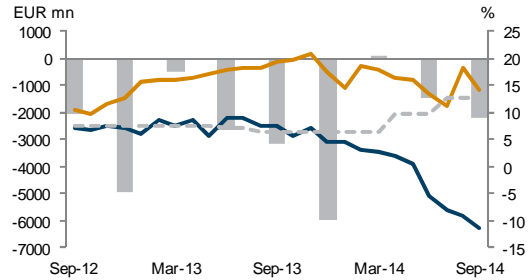
General gov. budget balance, cumulated

Right scale:

Broad money, annual growth rate

Central bank policy rate (p.a.), real, defl. with annual PPI

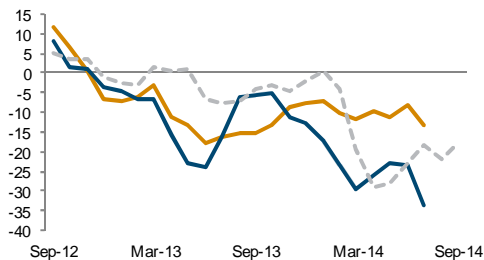
Central bank policy rate (p.a.)



## External sector development

annual growth rate in %

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



## External finance

EUR bn

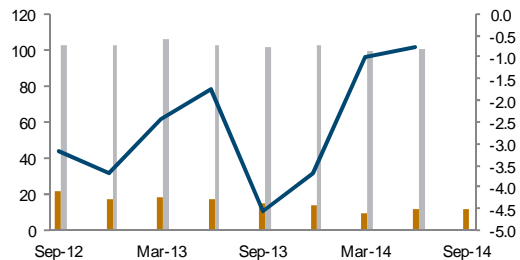
Left scale:

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:

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



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