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Analysis of the economic situation in the countries of Central and Eastern Europe

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The analysis of the economic situation in the countries of Central and Eastern Europe is a regular report published by Narodowy Bank Polski twice a year. This material presents the macroeconomic outlook for eleven economies of Central and Eastern Europe (Bulgaria, Czech Republic, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia and Slovenia). The material also contains extended thematic analyses devoted to selected economic issues.

In the current issue of the report, data available up to 6 July 2016 were taken into consideration.

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Summary

Following a period of robust economic recovery, economic growth in CEE countries slowed down at the beginning of 2016. The deceleration resulted mainly from a slump in investment, particularly in the construction sector. It was primarily a consequence of a temporary decline in inflows of EU funds, which had considerably boosted infrastructure investment in the preceding years. Growth in exports, in particular to the euro area, also slowed down. This resulted mainly from the decline in external demand of the euro area which triggered the slowdown in exports and production of intermediate goods in CEE countries. At the same time, external economic conditions in CEE countries have slightly deteriorated recently in connection with the results of the referendum in the United Kingdom to leave the European Union.

With the decline in fixed capital formation and a moderate foreign demand growth rate, private consumption remains the most important driver of growth. Private consumption continued to rise vigorously across the region, fostered by rising employment and nominal wages, particularly in countries where employment reached historically high levels (the Baltic states, Romania, Bulgaria). Households in CEE countries continued to benefit from the positive impact of low energy prices on the purchasing power of their income. Consumption was also supported by changes in economic policy aimed at strengthening growth of household disposable income growth. In economies where banks are in good shape and households are not excessively indebted, consumption growth is fostered by growing lending.

The decline in public investment, which is associated with a lower inflow of EU funds, will be the major reason for a slight deceleration of the growth rate in the forthcoming two years. Due to weaker global growth outlook, exports will also slow down and the contribution of external trade to GDP growth in CEE countries will remain negative. Private consumption will remain the major growth driver. Continued growth in employment is expected over the coming quarters. This, amidst the diminishing pool of available labour force, should support further wage growth. Despite the expected gradual growth, inflation will remain relatively low and will not affect household real disposable income. Major risks to growth include the uncertainty in European economies caused by the United Kingdom's exit from the European Union, the global economic slowdown triggered by weak economic conditions in the developing countries as well as the impediments to trade associated with the potential restrictions to free movement of goods and persons within the Schengen area.

This report also includes detailed analyses of important phenomena which had or may have an impact on the economic conditions in the CEE region. These analyses refer to:

- the estimation of the potential impact of the Transatlantic Trade and Investment Partnership (TTIP) on economies of the region,
- identifying the causes of the rising shares of CEE countries in world trade,
- the macroeconomic effects of a potential disintegration of the Schengen area.

Countries of Central and Eastern Europe – macroeconomic outlook

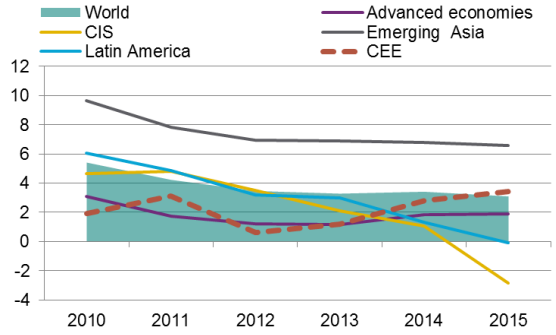
Analysis of current economic situation

Following a period of economic recovery, economic growth in CEE countries slowed down at the beginning of 2016. As of 2013, GDP growth in CEE countries picked up steadily, while other economies experienced a slowdown or stagnation (Figure 1. 1). After 2015, when GDP growth in CEE economies reached its highest level since 2008, 2016 Q1 brought a marked weakening of economic conditions. The decline in GDP growth rate occurred in particular in the largest CEE economies (Figure 1. 2) and resulted from both weaker growth of external demand and a slowdown - most likely transitional - in investment.

Economic conditions in the external environment of CEE countries have slightly deteriorated recently due to the United Kingdom's decision to leave the European Union. Although the flagging demand from emerging economies and the associated stagnation of the world trade had restrained CEE countries' exports outside the European Union already in 2015, a slowdown in overall exports was prevented by the recovery of domestic demand in the euro area. Yet, 2016 Q1 saw growth of CEE countries' exports weaken considerably (y/y) (Figure 1. 3). The euro area demand for final goods, in particular for consumer goods produced in CEE countries, continued to be relatively strong. However, the unfavourable impact of the weak global economic environment on the growth of euro area exports increased. This was reflected in a slower growth of demand for intermediate goods produced in CEE countries. Although business sentiment in the export sector in the euro area has started to improve over the last months due to, among others, growth of orders, the outlook for sector and, as a consequence, exporters from the CEE region, was again undermined by the outcome of the referendum concerning the United Kingdom's exit from the European Union (hereinafter referred to as *Brexit*).

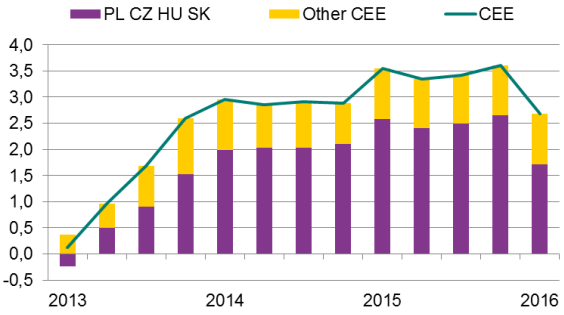
An increase in commodity prices over the recent months has also contributed to a decline in external economic conditions in the CEE countries to some extent. Low commodity prices stimulated economic conditions in the region in 2015. Not only did they

Figure 1. 1. Real GDP growth in selected groups of countries (%, y/y)



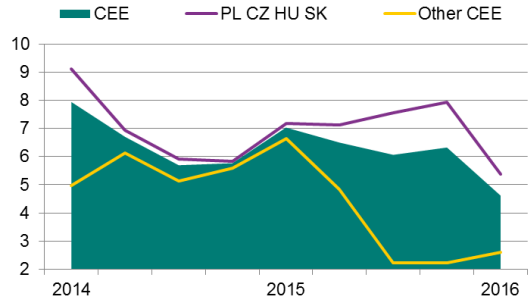
Source: Eurostat, IMF

Figure 1. 2. Contribution of various groups of CEE countries to GDP growth (% and percentage points, y/y)



Source: Eurostat.

Figure 1. 3. Exports of goods and services in groups of CEE countries (%, y/y)



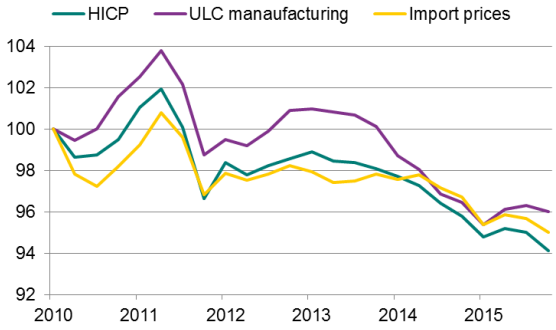
Source: Eurostat.

boost the purchasing power of consumers' income but they also fostered high competitiveness (Figure 1. 4). Due to the increase in oil prices of approx. 60% compared to January 2016, the positive impact of earlier declines in commodity prices on economic conditions in the euro area and the CEE region will be weaker than expected earlier.

At the same time, the CEE financial markets weathered the turbulences observed in the global financial markets relatively well. Prices of the CEE countries' assets remained relatively stable both during the significant market turmoil in January 2016 (associated with growing concerns about the state of the Chinese economy) as well as after the announcement of the *Brexit* referendum results (Figure 1. 5). In the past few quarters, the volatility of the CEE countries' asset prices has been considerably lower than in the developing countries of the CIS, Asia and Latin America as well as lower than in the periods of increased risk aversion in 2010-2012 (Figure 1. 6). At the beginning of 2016, increased volatility was observed only in Poland, which resulted from the downgrading of the credit rating by one of the rating agencies (see below). The limited volatility of asset prices in CEE countries is partly a consequence of the fact that this time their most important economic partner, i.e. the euro area, was not the source of heightened risk in the world.

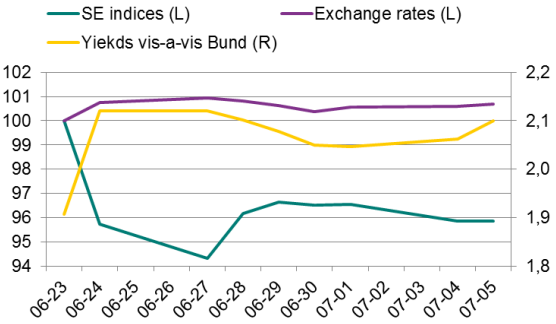
Additionally, the ECB's asset purchase programme could have been a factor stabilising the CEE financial markets. Changes in prices of financial instruments in the CEE region that occurred as a consequence of the announcement and the launch of the ECB's asset purchase programme (appreciation of currencies in economies with floating exchange rate regimes, a decline in Treasury bond yields, an increase in stock prices) have been mostly reversed due to the effects of various factors of global (such as the periodically growing concerns related to the outlook for the global economy) and local nature. Still, the experience of other emerging economies from the period of large-scale asset purchases by the Fed[1] shows that the ECB's asset purchases may affect asset prices in CEE countries, dampening the response of those prices to various shocks. NBP studies

Figure 1. 4. Real effective exchange rates deflated by various measures of price and cost changes (%, y/y)



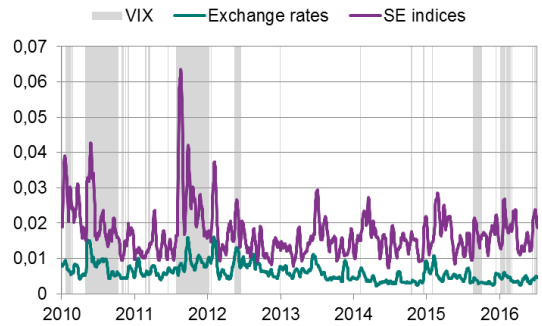
Source: Eurostat.

Figure 1. 5. Changes in financial asset prices in CEE countries after the *Brexit* referendum (index, 23 June 2016=100; percentage points)



Notes: Exchange rates – average indices of PLN, CZK, HUF and RON exchange rates against EUR, growth means depreciation; SE indices – average of main indices of CEE countries (excluding HR and LV); Yields – 10Y spread of Treasury bonds of the CEE against 10Y Bund.
Source: Reuters.

Figure 1. 6. Volatility of financial instrument prices in CEE countries in risk-off periods



Notes: Shaded areas indicate periods in which VIX exceeded 20 points. Exchange rates and stock exchange rates as in Figure 1.5.
Source: Reuters.

[1] J. Moore, S. Nam, M. Suh, A. Tepper, 2012, *Estimating the Impacts of U.S. LSAPs on Emerging Market Economies' Local Currency Bond Markets*, Federal Reserve Bank of New York Staff Reports No. 595.

show that the ECB's asset purchase programme resulted in a decrease in the term premium and hence a decline in Polish bond yields.

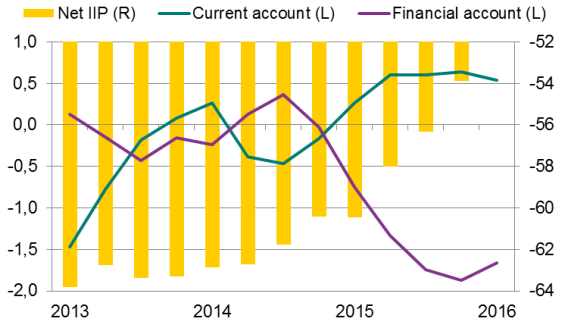
Increased resilience of CEE countries to conditions in global financial markets was also associated with a reduction of internal and external imbalances. This is demonstrated, for instance, by a significant decline in the number of imbalance indicators (analysed under the *Macroeconomic Imbalances Procedure*, MIP) with values for 2014 exceeding the signal thresholds adopted in the MIP, compared to 2005. An increase in the CEE countries' resilience originated, to a major extent, from the progress in private sector deleveraging and, in Hungary, also from the conversion of loans denominated in foreign currencies into forint. These developments are reflected in the steady decrease of local banks' liabilities towards foreign entities and a reduction of gross external debt. Despite some positive changes, a relatively high level of external and internal imbalances remained in Croatia and Bulgaria. For this reason, in March this year the European Commission confirmed the existence of excessive imbalances in both economies.

In the recent quarters, the process of external imbalances' reduction in CEE countries accelerated owing to current account surpluses (Figure 1. 7)**.** The emergence of current account surpluses is a consequence of a significant reduction in the deficit in trade in goods. Besides structural factors (see: the chapter on *Growth of Central and Eastern European countries' share in the world trade and its determinants*), lower goods trade deficit was supported by a sharp improvement in the terms of trade resulting from earlier declines in global commodity prices (Figure 1. 8).

Domestic demand was a driver of growth in 2016 Q1; yet, its structure changed. The decline in exports growth combined with the continued strong imports deepened the negative contribution of trade to GDP growth. At the same time, investment declined for the first time in three years. Consequently, GDP growth in all CEE countries was mainly based on rising consumption (Figure 1. 9)

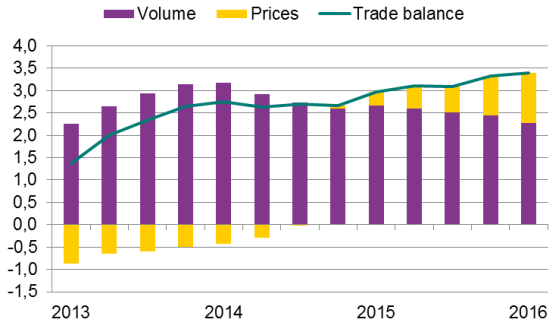
The slowdown in economic growth in CEE countries in 2016 Q1 highlighted the extent of their dependence on the inflows of EU funds. A major factor responsible for the slowdown of growth in CEE economies was the

Figure 1. 7. Current account and financial account balances and change in the net international investment position (% of GDP)



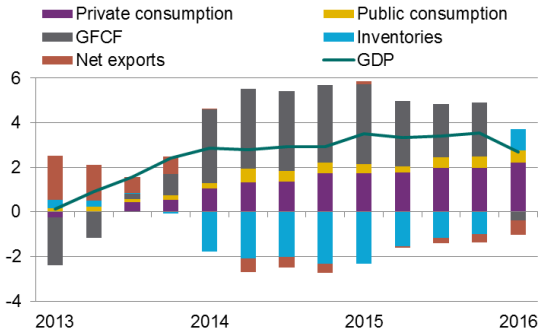
Source: Eurostat.

Figure 1. 8. Decomposition of trade balance in goods and services (% of GDP)



Source: Eurostat.

Figure 1. 9. Decomposition of GDP growth (% and percentage points, y/y)



Source: Eurostat, EI NBP calculations.

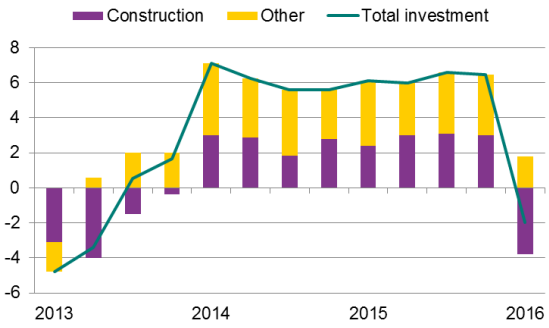
decline in fixed capital formation (Figure 1. 10). 2015 was the last year when the use of funds from the EU 2007-2013 financial perspective was possible, which was reflected in a significant acceleration of public investment in most countries of the region. Since the beginning of 2016, when only the 2014-2020 financial perspective applies, the absorption of EU funds has decreased, which is typical for the initial period of a new financial perspective. For example, during the two first years of the 2007-2013 financial perspective only 5.5% of the funds was spent whereas during the first four years - in total 21.5%. The automatic effect of the aforementioned tendencies regarding the absorption of EU funds was a sharp decline in investment in 2016 Q1. The strongest declines were recorded in construction investment (in Slovenia and Hungary they reached 30% y/y), in particular in infrastructure, which in the previous years was to the greatest extent co-financed with EU funds.

Other investment only partly compensated for the decline in investment co-financed with EU funds. Growth of investment in machinery and equipment dropped in almost all countries of the region. Apart from the reduced absorption of EU funds, the slowdown in the growth of expenditure on machinery and equipment most likely stemmed from growing uncertainty concerning foreign demand as well as, in Poland, the uncertainty associated with future economic policy. The weakening of private investment growth occurred despite high capacity utilisation (Figure 1. 11) and an increasingly easier access to bank lending.

The overall growth in investment was still only to a minor extent supported by the situation in housing markets. Only in the Baltic states, particularly in Estonia, real estate prices increased rapidly in the recent years and markedly exceeded the 2010 levels (Figure 1. 12). For this reason, in November 2015 the European Commission decided to carry out an in-depth review of Estonia in the scope of the Macroeconomic Imbalances Procedure. The number of new housing units under construction remained relatively low in the majority of CEE countries. Only in the Baltic states (and - to a lesser extent - in Poland) residential construction investment last year exceeded the 2010 level.

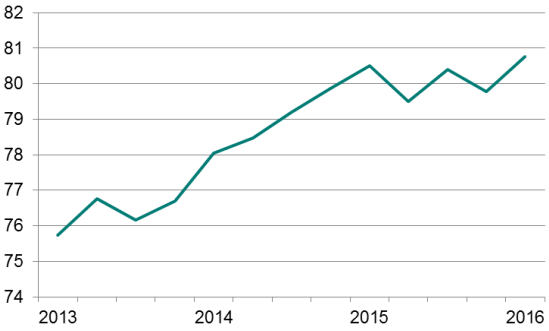
Falling investment demand and the weakening in demand from the euro area resulted in a deterioration

Figure 1. 10. Investment in CEE-8 (excluding HR, HU, RO) (% and percentage points, y/y)



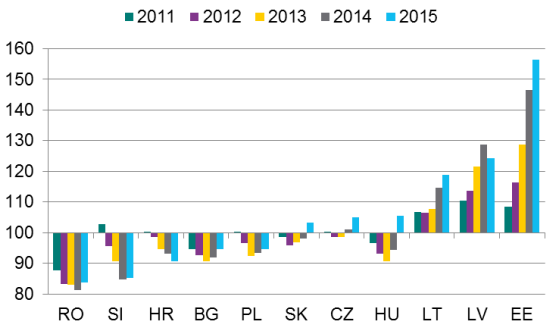
Source: Eurostat, EI NBP calculations.

Figure 1. 11. Capacity utilisation in the CEE countries (%)



Source: Eurostat.

Figure 1. 12. Prices of housing real estate (index, 2010=100)



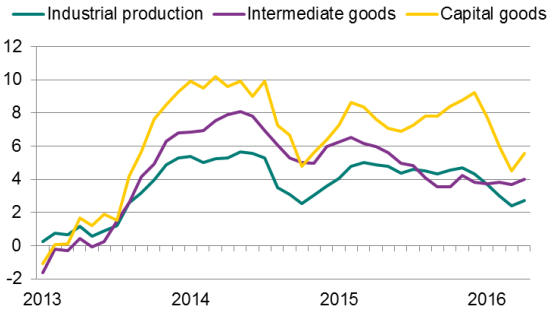
Source: Eurostat.

of the situation in industry in 2016 Q1. Since the beginning of 2016, the growth of industrial production has been clearly decreasing, in particular as regards investment goods (which mainly satisfied the strong domestic demand in the previous years). As of the beginning of 2015 also the growth of production and exports of intermediate goods were losing momentum, which may indicate a gradual reduction in the activity of European value chains in connection with the persistently weak economic conditions in the external environment of the euro area (Figure 1. 13). Those negative tendencies may continue in the next quarters, which is demonstrated by declining business confidence indicators, particularly those describing the inflow of new orders and the expected production volume (Figure 1. 14). However, those concerns do not apply to the automotive industry. Across the EU, high demand for cars has been sustained and automotive companies are planning further investment in CEE countries (among them, Land Rover/Jaguar is planning investment in Slovakia worth 2% of the country's GDP).

With investment declining and exports slowing gradually, the role of consumption as the source of growth in the region has been strengthened. Individual consumption expanded dynamically in all CEE countries (besides Slovenia), as in 2015. Romania recorded a particularly rapid growth of household expenditure, due to changes in economic policy (a reduction in the VAT rate and an increase in the minimum wage) that resulted in a sizeable growth of household disposable income. Growing turnover in retail trade as well as improving consumer sentiment indicators signal that the growth of private consumption should remain high in the following quarters. A positive signal concerning the sustainability of the current recovery in consumer demand is the fast growing share of sales of durable consumer goods, especially cars (Figure 1. 15).

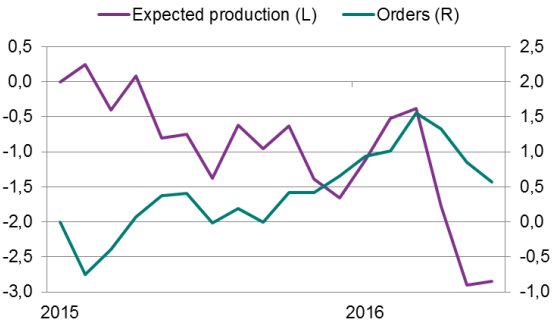
Higher growth rate of individual consumption, as compared to the estimated effects of increased purchasing power of income associated with the decline in commodity prices, is a signal of very good economic conditions. Estimates using methodology by Edelstein and Kilian's (2009)[2] indicate that the average

Figure 1. 13. Production of selected types of industrial goods (%, y/y)



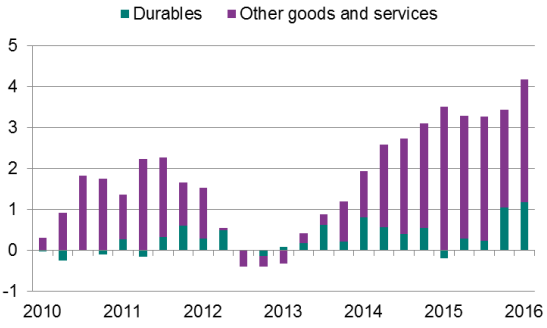
Source: Eurostat.

Figure 1. 14. Order books and expected production volumes in the next 12 months (points)



Source: EC.

Figure 1. 15. Structure of consumption growth (% and percentage points, y/y)



Source: Eurostat.

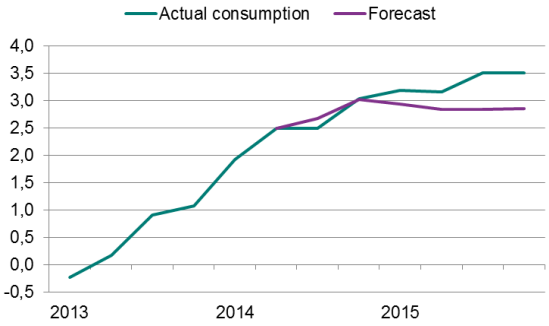
[2] Edelstein P., Kilian L., 2009, How sensitive are consumer expenditures to retail energy prices?, *Journal of Monetary Economics*, Vol. 56, Issue 6, pp. 766-779.

growth of private consumption in the CEE region between the second half of 2014 and the end of 2015 was 0.2 percentage points higher than the expected level based on the realised declines in energy prices (Figure 1. 16). Slower consumption growth as compared with the model projections was recorded only in Poland, Bulgaria and Latvia. In turn, in other CEE countries, Romania and Hungary in particular, growth in consumption substantially exceeded the expectations. Heightened growth of consumption in those countries may be explained by the fact that the decline in energy prices was accompanied by a marked improvement of the situation in labour markets, favourably translating into consumer sentiment, as well as accommodative fiscal and monetary policy stance.

Consumption growth is mainly supported by rising demand for labour in companies manufacturing goods and services for the domestic market. The improvement in consumer confidence and a growing propensity to consume are positively affected by the observed and expected further improvement in labour markets. In recent months the unemployment rate in some economies (Poland, Czech Republic, Romania and Hungary) has reached all-time lows or approached them considerably (Figure 1. 17). The decline has been mainly driven by employment growth in the market services' sector (Figure 1. 18), i.e. in sectors servicing primarily domestic demand, whose development may be associated with the convergence of CEE economies.

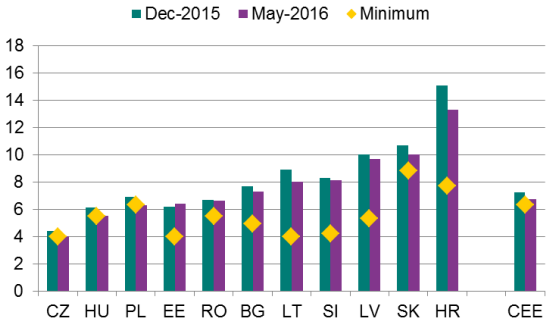
Despite the steady increase in labour force participation (Figure 1. 19)**, the labour market mismatches have been increasing in some CEE countries, exerting an upward pressure on wage growth.** Since 2014 a steady growth in the number of vacancies has been observed in CEE countries, although employment growth has not accelerated (Figure 1. 20). This discrepancy may indicate that companies have struggled to find qualified employees, especially bearing in mind the fact that the employment rate in the majority of CEE economies was exceptionally high at the end of 2015. Although the labour force participation rate has also been increasing, it still remains relatively low compared to developed economies. This is a consequence of, among others, significant differences in employment opportunities of different

Figure 1. 16. Private consumption – actual consumption and model forecast based on experience of previous periods of decline in energy prices (%, y/y)



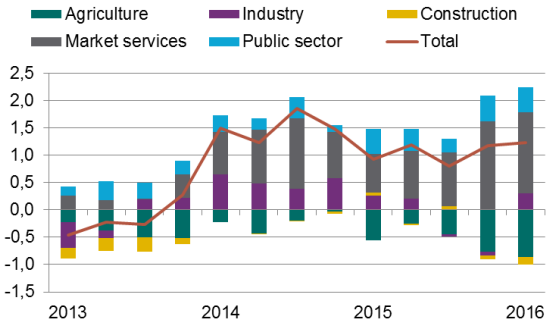
Source: EI NBP calculations.

Figure 1. 17. Unemployment rate against all-time lows (% of labour force)



Source: Eurostat.

Figure 1. 18. Structure of employment growth according to sectors (% and percentage points, y/y)



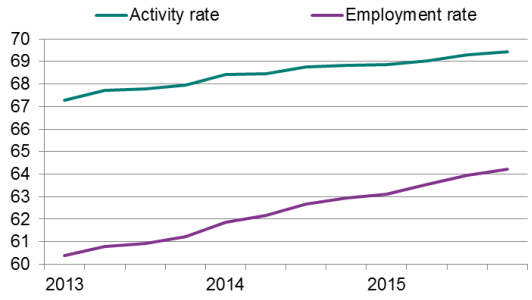
Source: Eurostat, EI NBP calculations.

social groups in CEE countries[3]. Additionally, in some countries the positive impact of the growing labour force participation on labour supply is offset by a decreasing number of employees, mainly due to emigration. Due to growing mismatches in the labour market, fast growth in nominal wages (7%-8% y/y) has been observed in the Baltic states, Romania and Bulgaria in the recent quarters. High wage growth in those economies is also a result of minimum wage increases, which were often suspended during the crisis. Wage growth in those economies, in particular in the Baltic states, has for a long time exceeded labour productivity growth, harming their competitiveness. On the other hand, wages in other economies of the region have been growing at a moderate pace, despite a significant decrease of the surplus of labour supply over labour demand (Figure 1. 21), without causing the risk of competitiveness loss. Rising wages are reflected in a high growth of the wage bill which in 2015 was the basic source of growth in household disposable income in the region (Figure 1. 22).

In addition, changes in revenue and expenditure of the general government sector have a positive impact on household income (Figure 1. 23). Measures such as reducing the tax wedge, withdrawal of wage cuts in public administration and social transfers introduced after the onset of the economic crisis contributed to those changes. Improved economic conditions and a significant reduction of the general government deficit in the previous years have created some space for fiscal loosening. In addition, in Croatia and in Hungary the conversion of foreign currency-denominated mortgage loans had a positive impact on household consumption capacity and improvement in sentiment.

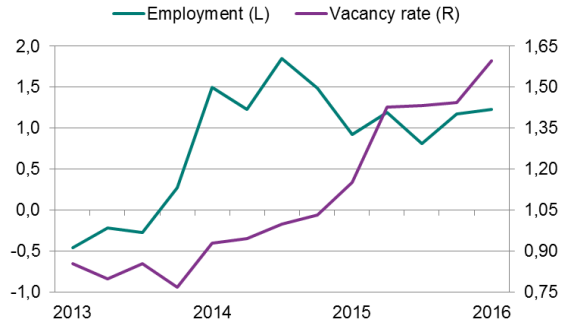
In some countries of the region, expansion in bank lending has additionally supported the growth of domestic demand. Taking into account the growth rate of loans to the private sector, a clear division into coun-

Figure 1. 19. Activity and employment rates (% of population aged 15-65)



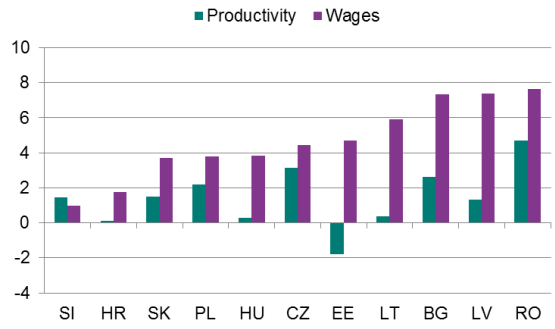
Source: Eurostat.

Figure 1. 20. Employment growth (%, y/y) and vacancy rate (% of employees)



Source: Eurostat.

Figure 1. 21. Change in labour productivity and nominal wages in 2015 (%, y/y)



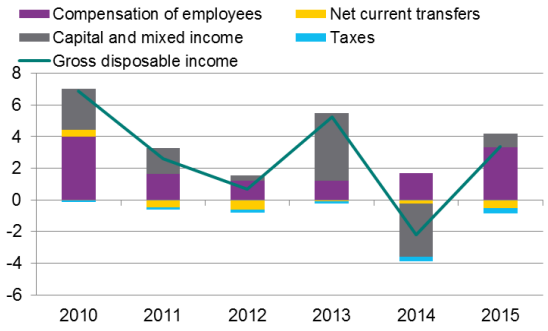
Source: Eurostat.

[3] Uneven playing field in employment is visible in various dimensions. First of all, besides the Baltic states, female employment rates in CEE countries are explicitly lower than in the European countries with best performing labour markets (Germany, the Netherlands, Sweden, United Kingdom). Secondly, employment opportunities for less qualified individuals (with education level below the vocational secondary or post-secondary non-tertiary) are clearly lower than in Western Europe. Third, in some countries of the region persons over 50 withdraw from the labour market sooner than their peers in the EU-15 countries. Fourth, in some CEE countries the range of the unemployment rate among regions (measured at a NUTS-2 level, i.e. the equivalent of a voivodship) is greater than in Western European countries. Variation in success in the labour market also has an ethnic dimension (Russians in the Baltic states; Roma in Bulgaria, Romania, Hungary and Slovakia).

tries of the "north" and the "south" appeared as early as 2014 in the CEE region (Figure 1. 24). Growth of lending, both to households and to enterprises, occurred in countries where the stability of the banking systems was not at risk (Poland, Czech Republic, Slovakia) or where banks had managed to overcome problems related to their insufficient capitalisation and portfolios of bad debt (the Baltic states, Romania). In other economies lending continued to shrink due to low demand from the highly indebted households and enterprises, still insufficient bank capitalisation, as well as a the high share of nonperforming loans in total assets of the banking system. In Croatia and in Hungary weak lending is also a consequence of the costs incurred by banks in connection with the programmes of conversion of loans denominated in foreign currencies.

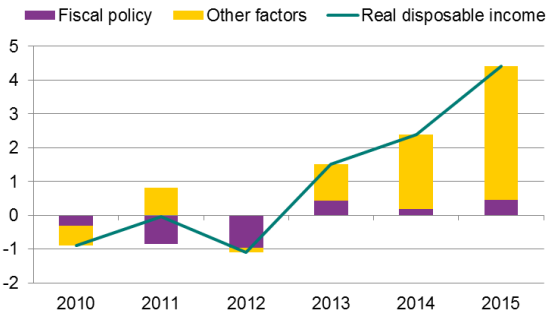
For the time being, no upward pressure on consumer prices has been observed in the region, which mainly results from the low level of energy prices. In the first half of 2016, as in the previous year, CEE countries experienced deflation. Moreover, its scale deepened in consecutive months. In May 2016, the HICP inflation dropped to -0.8%, i.e. an all-time low (Figure 1. 25); the decline in prices was recorded in most of countries in the region (in Bulgaria and in Romania the fall in prices was the highest among all EU member states). In 2016, the developments in global energy commodity prices constituted the main factor behind the price decline in all countries of the region. Although in the first half of 2016 those prices increased, following sharp slumps in the preceding quarters, they were still considerably lower than a year before, thus contributed to the decline in inflation. Low prices of oil and gas translated into lower energy and fuel prices. Indirectly, they also contributed to a decline in prices of other categories of goods and services through a reduction of production and import costs (Figure 1. 26), which was reflected in a low level of core inflation (0.5% in May this year). Price growth was also reduced by cuts in indirect tax rates. For instance, in January 2016 the basic VAT rate in Romania was lowered (from 24% to 20%) as well as the VAT rate for some foodstuffs in Slovakia (from 20% to 10%). In addition, besides the Baltic states, Bulgaria and Romania, the growth of labour costs has not significantly exceeded the growth of productivity and the output gap in many CEE countries remains negative (Figure 1. 27), which represents additional factors reducing price

Figure 1. 22. Decomposition of nominal gross disposable income growth (% and percentage points, y/y)



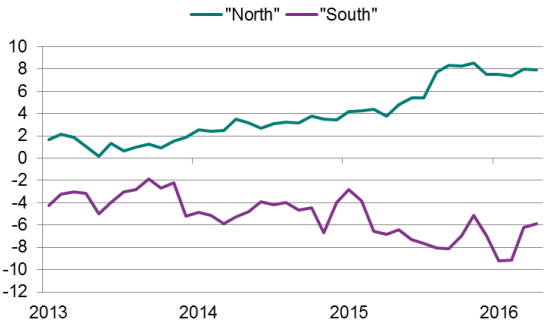
Source: BIS, EI NBP calculations.

Figure 1. 23. Contribution of fiscal policy to changes in household disposable income in 2010-2015 (% and percentage points, y/y)



Notes: 2010-2014, excluding BR and RO, 2015 excluding HR and LT
Source: EI NBP calculations.

Figure 1. 24. Bank credit to the private sector in CEE countries (%, y/y)



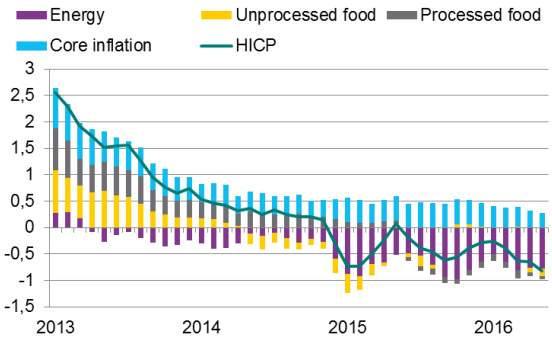
Source: Central banks.

pressures in the region.

Facing prolonged deflation, central banks in the region maintained accommodative monetary policy stance. Interest rates remained at their all-time lows and the National Bank of Hungary (MNB) even decided to further lower interest rates in the first half of 2016 (Figure 1. 28). Central banks of the Czech Republic (CNB) and Hungary continued to use unconventional monetary policy instruments. The CNB announced that it would not abandon the asymmetric exchange rate target policy at least until 2017. On the other hand, the MNB modified its programmes aimed at supporting lending and increasing the share of domestic financing of the public debt. As of the beginning of 2016, the *Funding for Growth Scheme* programme of preferential loans offered to banks, aimed at stimulating lending to small and medium-sized enterprises was replaced by the *Market-based Lending Scheme*, geared towards assisting banks in reviving their lending based on market financing[4]. The MNB also stated that the programme supporting purchases of Treasury securities by commercial banks since 2014, the *Self-financing Programme*, had achieved its intended goals (i.e. the share of residents in the Treasury bond market increased significantly) and would be gradually phased out[5]. In February this year the Croatian National Bank (HNB) launched a series of auctions with the aim of increasing the banking sector liquidity and stimulating growth in bank lending.

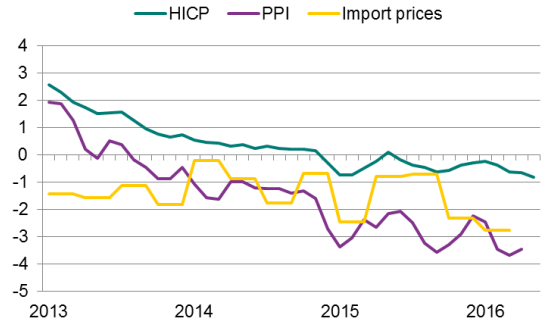
In the first half of 2016, the credit ratings of Poland, Croatia and Hungary changed. The S&P downgraded Poland's long-term sovereign debt rating, critically evaluating the ongoing institutional changes. Moody's downgraded Croatia's rating because of the high level of public debt and weak economic outlook. On the other hand, Fitch Agency upgraded the rating for Hungary, which, after five years, was restored to investment level. Fitch highlighted the reduction of external imbal-

Figure 1. 25. Structure of HICP growth (% and percentage points, y/y)



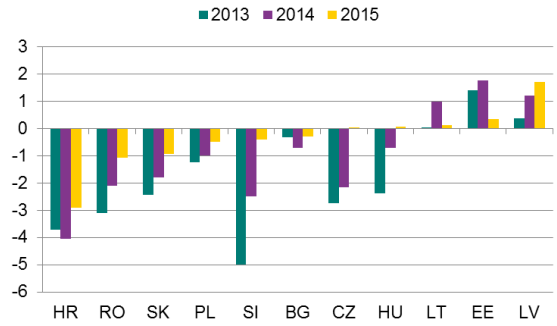
Source: Eurostat, EI NBP calculations.

Figure 1. 26. Various measures of inflation (%, y/y)



Source: Eurostat.

Figure 1. 27. Output gap (% of potential GDP)



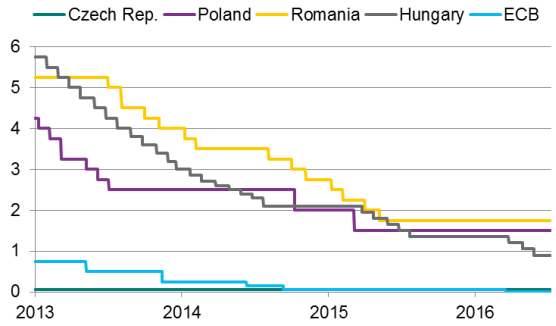
Source: AMECO.

[4] Under the *Funding for Growth Scheme* the MNB provided zero-interest refinancing to commercial banks which they lend to SMEs at an interest rate not exceeding 2.5%. Currently the MNB intends to encourage banks to grant loans offering them new instruments to facilitate interest rate risk and liquidity management - interest rate swaps conditional on lending activity and a preferential deposit facility. In addition, banks which would increase lending may expect reduction of the bank tax rate.

[5] Within the framework of the said programme, the MNB, inter alia, changed the main monetary policy instruments (the 2-week repo rate was replaced by the 3-month deposit rate) and offered favourable interest rate swaps to banks deciding to purchase Treasury bonds.

ances in Hungary, positively assessed the plan of foreign currency loan conversion as well as the MNB *Self-financing Programme*, which resulted in the decline of non-resident share in the market for Treasury bonds in Hungary.

Figure 1. 28. Central banks' main policy rates (in %)



Source: Central banks.

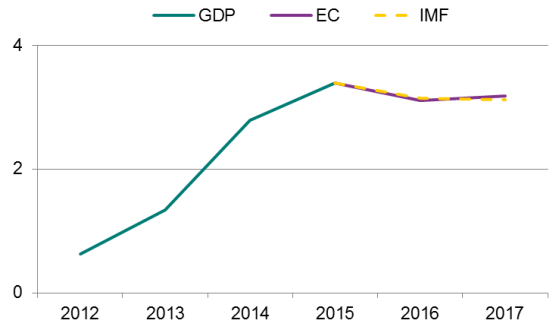
Forecasts

In 2016-2017 economic growth in the CEE region is likely to slow down. Even before the EU referendum in the United Kingdom, international institutions (the European Commission, the IMF, the OECD, the EBRD) projected a decline in GDP growth in the region to approx. 3% y/y, i.e. to the level only slightly lower than in the previous year and still higher than the growth rate of the global economy (Figure 1. 29). Among CEE countries, slowdown in growth is expected in the Czech Republic, Slovenia and Hungary. On the other hand, in the Baltic states GDP growth should accelerate due to a smaller decline of the demand from Russia. However, the slowdown in the economic growth in CEE countries is likely to be deeper than indicated above due to the consequences of *Brexit*.

According to the international institutions, the decline in fixed capital formation already observed in 2016 Q1 - in particular, in public construction investment - will be the major reason of the slowdown in GDP growth in all countries of the region in 2016 (Figure 1. 30). Growth in other types of investment will not be enough to compensate for the slower growth of investment co-financed with EU funds. However, in view of households' upbeat expectations, increasingly easier access to bank credit, a marked growth in the number of construction permits issued and, the reduction in the VAT rate for newly built housing units in Hungary, a certain acceleration of housing investment in the coming quarters may be expected. Corporate investment should also slightly accelerate, although its growth will be hampered by poor external demand outlook. An additional factor reducing businesses' inclination to invest is the outcome of the referendum in the UK, which amplified uncertainty, potentially increasing the cost of capital. In some economies (Poland, Hungary, Slovakia) this category of investment will be supported by the launch of large investment projects in the automotive sector in the near future. In the coming years, in line with the gradual increase in the absorption of EU funds from the current financial perspective, the recovery of investment growth in the CEE region is expected (Figure 1. 31).

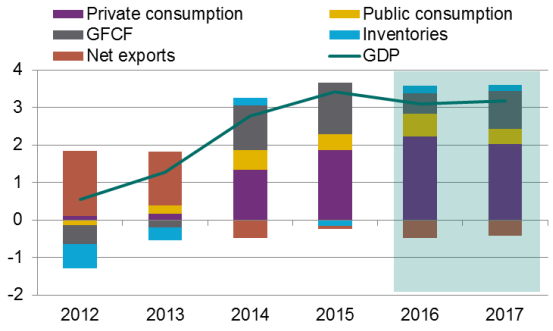
Considering the poor global growth prospects, exports of CEE countries will also slow down. Forecasts made before *Brexit* referendum indicated the decline in

Figure 1. 29. GDP growth rate forecasts (%, y/y)



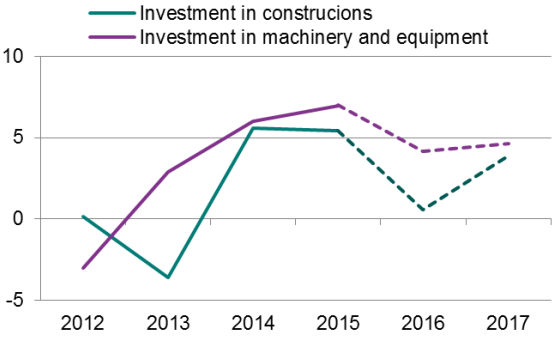
Source: EC, IMF.

Figure 1. 30. Projected structure of GDP growth (% and percentage points, y/y)



Source: EC.

Figure 1. 31. Investment growth forecast (%, y/y)



Source: EC.

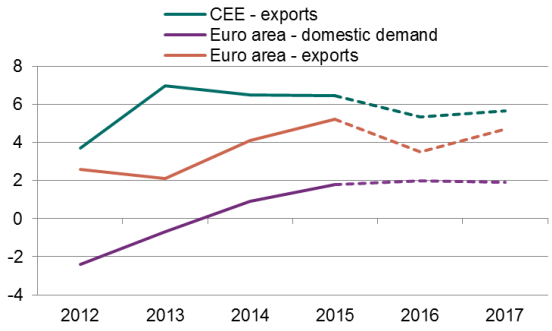
exports in 2016 in most of CEE economies, apart from the Baltic states. This slowdown was expected to result not so much from the decline in demand for final goods exported mainly to the euro area but from a slower growth in the demand for intermediate goods - traded within the European value chains - which, to a large extent, satisfy the demand from countries outside the EU (Figure 1. 32). *Brexit* is likely to deepen the decline in the growth of exports from CEE countries. At the same time, imports to CEE countries, in particular imports of consumer goods, will continue to grow rapidly, which will maintain the negative contribution of trade balance to GDP growth in the nearest two years.

Private consumption will remain the primary growth driver. In the coming quarters, continued growth in employment is expected, which, amid declining available labour force, should support growth of wages. However, the extent of wage acceleration may be jeopardised by a potential return migration associated with *Brexit*, although at present its extent is difficult to estimate. High growth of wage bill (Figure 1. 33) and low inflation boosting its purchasing power will foster continued high consumption growth (Figure 1. 34). Higher growth of credit to households is also expected, not only in countries of the "north" but also in other economies of the region.

Monetary and fiscal policy will continue to support domestic demand growth. Central banks of the region do not plan to raise interest rates in the nearest quarters. Moreover, the MNB intends to continue the programme aimed at supporting corporate lending. Fiscal policy will also support economic growth in 2016-2017 (Figure 1. 35). The strongest fiscal policy loosening is expected in Romania, Hungary (tax cuts, wage increases in public administration) and in Poland (increasing social transfers). On the other hand, fiscal tightening shall occur in Bulgaria and Slovakia.

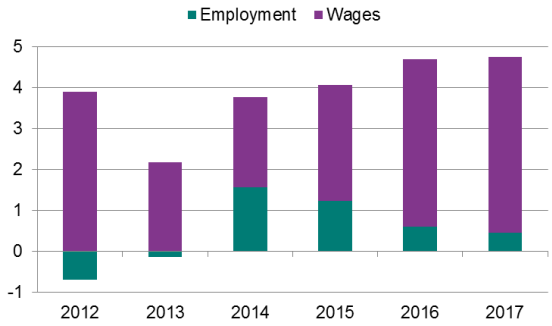
The extent of negative consequences of the United Kingdom's exit from the European Union is a significant risk factor for the economic growth in CEE countries. The main short-term consequence of *Brexit* is higher uncertainty in financial markets, which has led to an increase, albeit temporary and relatively moderate, in the volatility of financial asset prices in the region. The rise in uncertainty may translate into higher risk premiums and hence higher financing costs. In the

Figure 1. 32. Exports' forecast against domestic and foreign demand of the euro area (%, y/y)



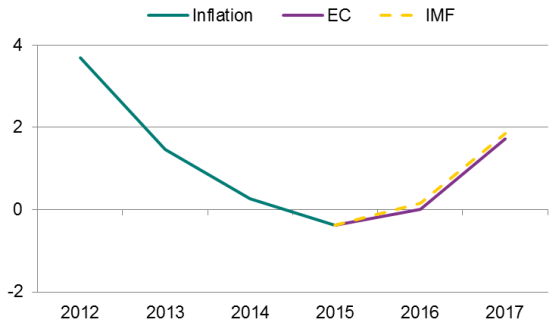
Source: EC.

Figure 1. 33. Decomposition of changes in wage bill (% and percentage points, y/y)



Source: EC.

Figure 1. 34. Inflation forecasts (in %, y/y)

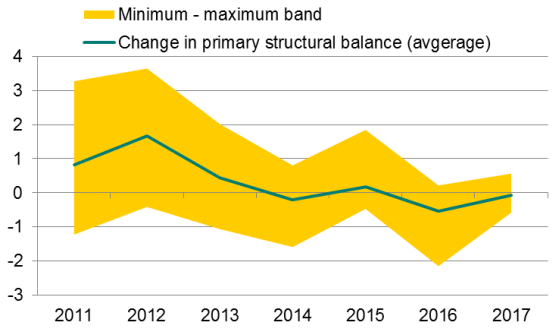


Source: EC, IMF.

real economy, the heightened uncertainty may contribute to a deterioration in household and business sentiment, which may translate into cutbacks to consumption expenditure and lower willingness to invest. However, according to the preliminary estimates, the potential impact of *Brexit* on CEE economies should be moderate owing to their limited financial relations with the United Kingdom. The OECD estimated that by 2018 GDP in the CEE region may decrease by approx. 1% against the scenario in which the United Kingdom stays in the EU (Figure 1. 36). The estimated loss is more the effect of the assumed increase in the cost of capital in CEE economies and other EU Member States than in the United Kingdom itself. On the other hand, the IMF expects a significantly weaker impact of *Brexit* on the countries of the region: GDP in Poland and the Czech Republic may decrease by approx. 0.1% by 2019.

The available long-term estimates indicate a minor impact of *Brexit* on CEE countries. Nevertheless, due to the uncertainty concerning the shape of the agreement defining the conditions of the United Kingdom's exit from the European Union, those estimates are subject to considerable uncertainty (on top of the uncertainty associated with the unprecedented nature of this event). In the long term CEE countries may be affected as a result of the decline in direct and indirect trade with the United Kingdom. Due to the strongest trade ties with the UK and a high openness, countries of the Visegrad Group seem to be the most vulnerable. The reduced inflow of money from the EU funds and transfers from emigrants may also have an adverse impact on long-term growth, although it should not be significant. On the other hand, the return of some of the emigrants may have a favourable impact on the supply of labour force in the region. The United Kingdom's exit from the EU may also increase FDI inflows to other EU member states, including CEE countries. The available long-term estimates of the impact of *Brexit* on CEE countries vary depending on the adopted scenario of further economic cooperation between the United Kingdom and the EU. If the cooperation should be based on the principles of the European Economic Area, i.e. similar as Norway's and Iceland's relationship with the EU (involving full access to the common market, external customs union, contributions to the common budget, lack of restrictions concerning the flow of migrants), the average decline in GDP in the countries

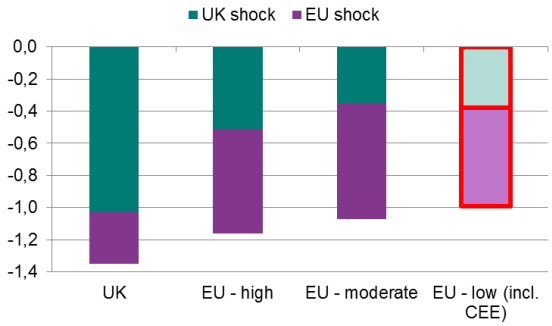
Figure 1. 35. Annual change in primary structural balance (% of potential GDP)



Notes: (+) – fiscal tightening / (-) fiscal loosening.

Source: AMECO.

Figure 1. 36. Estimates of the impact of *Brexit* on GDP of OECD member states up to 2018 (% of deviation against the scenario without *Brexit*)

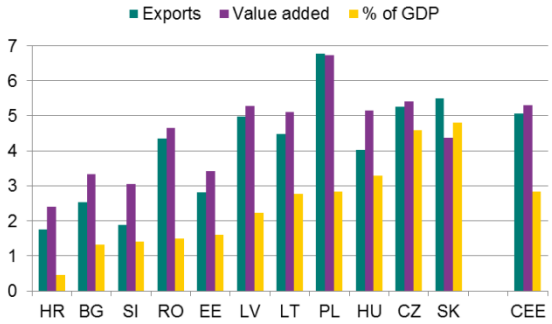


Source: OECD.

of the region would reach approx. 0.1% in the long term. On the other hand, in the case of far looser ties with the EU (with trade based on WTO rules), the adverse impact of *Brexit* on CEE economies might be even three times larger. The impact on individual countries of the region would not be the same and would depend on the extent of economic interdependence. The scale of economic slowdown in the Czech Republic would be twice as big as in Romania or in Latvia[6].

Other risk factors are also mostly related to the external environment. A deeper than expected slowdown in the global economy, triggered by the crisis in China or a considerable weakening of growth in the United States, remains an important risk factor. Considerable uncertainty is related to developments in energy commodity prices, whose decline had a positive impact on economic conditions in the CEE region. The potential restrictions on the free movement of goods within the Schengen area (cf. chapter on *Macroeconomic costs of potential Schengen area disintegration for the EU-15 and CEE countries*), as a consequence of the migration crisis or terrorist attacks, could also reduce economic growth in the CEE region. In some economies, risk factors of local nature also play an important role. In particular, the continued political deadlock in Croatia could inhibit the process of necessary macroeconomic adjustments which would pose the threat of losing the confidence of investors and financial markets.

Figure 1. 37. Exports (2015, % of total and % of GDP) and exports of value added (2011, % of total) to the United Kingdom



Source: OECD.

[6] Estimates of long-term costs of *Brexit* for CEE countries can be found, inter alia, in Bertelsmann Stiftung, (2015), *Costs and benefits of a United Kingdom exit from the European Union* and Centre of Economic Performance at London School of Economics (2016), *The consequences of Brexit for UK trade and living standards*.

Origins and potential effects of the Transatlantic Trade and Investment Partnership - TTIP. Impact on Central and Eastern European countries

Over the past few years the share of the EU and the US in each other's trade volume was markedly decreasing. A decline was also observed in those countries' share in the overall volume of global trade as a consequence of the growing importance of China and other emerging economies. In response to challenges of globalisation the decision has been made to begin work on a free trade agreement between both economies, i.e. the Transatlantic Trade and Investment Partnership – TTIP.

The TTIP negotiations involve the removal of tariff and non-tariff barriers, investment barriers and creation of uniform operating conditions for transnational corporations. In addition, they also comprise such areas as access of foreign companies to public procurement, adjustment of regulations and standards, or access to the market of services.

The available estimates indicate that the TTIP's entry into force will have rather minor economic effects for the EU member states. This refers, in particular, to CEE countries which are less integrated with the US economy than the EU-15 countries.

The trade between the EU and the US constitutes a significant part of the trade volume for both economies. According to Eurostat data, in 2014 the US accounted for almost 21% of EU-28 exports to third countries. Simultaneously, the European Union belongs to the most important trade partners of the United States. According to the US Census Bureau data, in 2015 EU member states accounted for 18% of US exports.

Relations between the economies of the EU and the US extend far beyond trade. Foreign direct investment (FDI) strongly affects intensification of economic relations between them as well. The European Union is the largest investor in the US and the United States represents the most important investor in the EU. American enterprises in the EU and the European enterprises in the US employ 14 million people in total.

The EU-US economic relations represent an example of the so-called positive integration, consisting in mutual adjustment of internal regulations (negative integration involves abolition of customs duties and non-tariff barriers). Customs duties in the US and the EU remain at low level. Therefore, trade restrictions are mainly associated with the existence of relatively high non-tariff barriers. According to the WTO data, the average non-agricultural market access (NAMA) rate is only 3.1%. Moreover, a significant part of imports takes place under duty-free conditions - in 2013, 51% of tariff lines were subject to zero-duty rate. Duty rates in the European Union are slightly higher - the average non-agricultural market access rate amounts to 4.2%. The number of tariff lines subject to zero duty rate is also lower by a half - 26%. Non-tariff barriers mainly derive from the application of different norms and standards, sanitary requirements, administrative restrictions, etc. Their scale may be estimated through comparing the trade flows between countries for which such barriers occur with the flows between countries for which such barriers are low (method of tariff equivalents, cf. Ecorys, 2009 and Hagemejer and Śledziewska, 2015). Table 2.1 shows that the non-tariff barriers to trade between the US and the EU are definitely greater than the tariff barriers. Considering the low level of tariff

protection to non-agricultural products (which dominate in the mutual trade exchange) and the structure of trade (a high share of intra-industry trade), liquidation of barriers to investment and creating uniform operating conditions for transnational corporations are issues much more important for both parties than trade liberalisation (mutual removal of technical and veterinary barriers, uniform competition rules, regulations concerning public procurement, protection of intellectual property rights, etc.).

Table 2.1. Tariff and non-tariff barriers in the US-EU trade

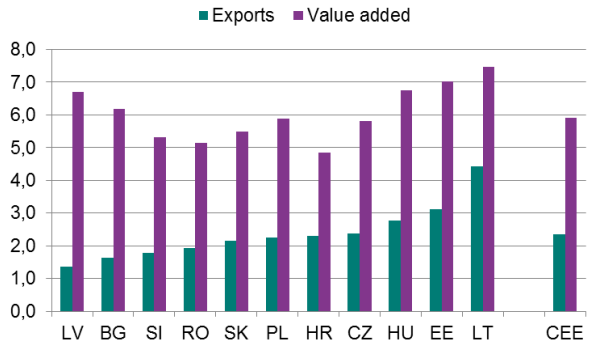
	Tariff barriers (%)				Non-tariff barriers (%, equivalent - estimates)			
	EU-15	Poland	CEE*	US	EU-15	Poland	CEE*	US
Total					21	26	18	23
Agriculture	3.5	5.2	5.6	2.9	31	33	36	44
Mining and quarrying	0.0	0.0	0.0	0.0	17	30	22	24
Food	13.7	11.8	24.7	3.0	36	46	46	25
Textiles	6.8	6.1	6.6	7.2	27	21	22	32
Clothing	10.0	10.7	10.3	9.5	33	26	27	42
Leather	3.8	6.2	4.4	7.4	30	28	23	43
Wood	1.5	3.1	1.6	0.5	25	33	27	21
Paper	0.0	0.0	0.0	0.0	37	47	32	46
Coke and refined petroleum products	1.9	0.9	2.1	1.3	73	133	91	0
Chemicals	2.1	2.7	2.9	1.1	19	19	17	23
Mineral industry products	3.0	2.3	3.5	5.0	35	32	26	28
Steel	0.4	0.5	0.6	0.1	40	54	45	37
Non-ferrous metals	1.4	4.1	3.5	1.4	40	44	35	46
Metal products	2.4	2.4	3.1	1.9	29	27	16	39
Motor vehicles	6.5	8.8	9.0	1.2	38	35	26	44
Other means of transport	1.3	1.4	1.4	0.1	21	23	23	29
Electrical equipment	0.6	0.5	0.5	0.3	35	29	18	51
Machines and equipment	1.2	1.2	1.4	0.8	27	25	15	38
Other industrial processing products	1.0	1.9	1.4	0.7	26	26	17	15

** excluding Poland.*

Source: Hagemejer and Śledziewska (2015).

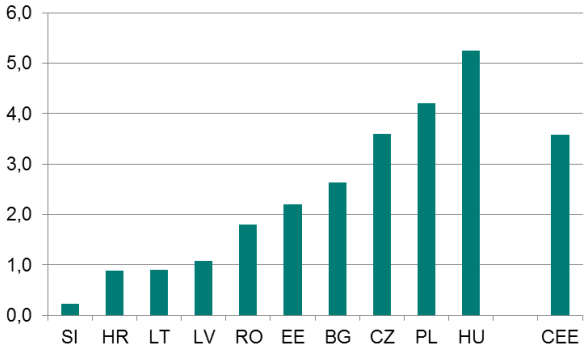
The scale of direct trade relations between the countries of Central and Eastern Europe (CEE) and the US is relatively lower than that between EU-15 countries and the US. The United States does not belong to the most important trade partners of CEE countries. The share of exports to the American market in 2015 in the total exports ranged from 1.4% in Latvia to 4.4% in Lithuania (Figure 2. 1). It reached 2.3% in the entire region. To compare - the share of the CEE countries' exports to EU member states in the same period reached 79% and to the euro area - 56%.

Figure 2. 1. Exports to the United States according to traditional foreign trade statistics (2015) and exports of value added (2011) (% of the total)



Source: Eurostat, TiVA, EI NBP calculations.

Figure 2. 2. Direct foreign investment from the United States, status as of 2014 (% of the total FDI)



Source: Eurostat.

The scale of trade relations between the economies of CEE and the US is higher if indirect relations are taken into account. CEE economies are, to a large extent, included in the European value chains, which means that even if goods and services produced there are not sent directly to the American market, they often significantly contribute indirectly to products exported to the US by other EU member states, including in particular Germany. Considering the value added generated in the CEE region within indirect exports to the US[7], the share of the American market doubles, increasing up to 5.9%. However, the United States still remains a significantly less important partner for CEE countries as compared to the EU-15 countries.

So far, American companies have not been among significant foreign investors in CEE countries. Foreign direct investment to CEE countries originated mainly from other European countries. Until 2014, over 80% of all FDI received was from Europe. Similarly to exports, the share of American investors was much lower. Hungary recorded the relatively highest share, exceeding 5% of all foreign investment. On the other hand, in Slovenia, Croatia and Lithuania the American investment accounted for less than 1% of all FDI (Figure 2. 2).

The origins of TTIP

Over the recent years, a steady decline in trade between the EU and the US has been observed. Similarly, their share in the international trade decreased. In 1960, the countries of the so-called old Union accounted for 31% of the American exports and 26% of imports. This share dropped gradually in the following years. This phenomenon has become more pronounced in the last two decades. However, it results more from the growing complexity of contemporary economic relations (which may be generally referred to as globalisation), rather than from an actual weakening of bilateral relations. The causes were as follows:

[7] The data are derived from the *Trade in Value Added* OECD/WTO base. They show the share of the domestic value added generated in CEE countries in the final demand of the United States in relation to the total domestic value added exported.

- the process of regional integration both in Europe and in North America caused relocation of production processes from the US to Canada and Mexico, and from countries of the old Union to CEE economies. Consequently, products of the same brands continued to reach consumers, however, their individual components originated from more countries;
- transfer of production by American and European corporations to the Far East, including mainly China, and the resulting rise in exports from this region to Europe and the US. As a consequence, the presence of American brands has increased in Europe, likewise, the presence of European brands has increased in the US, however, their place of production has less and less in common with the traditional place of origin;
- liberalisation of capital flows between the EU and the US, leading to an increase of value of foreign direct investment of the horizontal type (trade substitution effect of FDI).

Factors directly leading to the TTIP negotiations included the lack of progress in further multilateral trade liberalisation and stagnation trends in developed economies. In November 2011, during the EU-US summit, a decision was made to commence works on the agreement on free trade between both economies. The agreement was envisioned as a response to challenges associated with globalisation and competition with new economic powers.

The scope of the TTIP is much broader than lifting the barriers in trade. Negotiations comprise such areas as access of foreign companies to public procurement, adjustment of regulations and standards, or access to the services market. The changes are expected to lead to a significant enhancement of economic integration between the regions and *de facto* to an increase in their competitiveness. According to the European Commission, the TTIP should bring about an opening of the American market to the European enterprises, limiting of administrative export formalities and establishing new regulations to facilitate exports, imports and investing abroad.

Due to the broad scope of the agreement, it also raises concerns. The most important one is that the TTIP will lead to lower standards in the EU, mainly those related to the quality of food or environmental protection. On the other hand, in the US there are opinions that the TTIP will result in the growth of bureaucracy. Moreover, some indicate threats of privatisation of public services and changes in the rules of dispute resolution between global investors and governments of individual states arising from TTIP.

Macroeconomic effects of the TTIP

The basic channels through which the signing of the TTIP will affect economies of the EU and the US include, among others:

- bilateral trade growth,
- decline in prices as a result of increased competition,
- wage growth,
- investment growth related to increased FDI inflow,
- production growth (in particular, in export sectors).

The available estimates indicate that the elimination of barriers to international trade under the TTIP will probably have minor economic effects[8]. Calculations ordered by the European Commission and performed by CEPR (2013b) indicate that according to the optimistic scenario (assuming reduction of duties, non-tariff barriers and liberalisation of regulations concerning public procurement), the signing of the TTIP will contribute to the EU GDP growth by 0.5% by 2027. On the other hand, Fontagne et al. (2013) assess that even though the conclusion of the agreement will lead to a rise in bilateral trade between the US and the EU of approx. 50%, in the long-term it will translate into a minor GDP growth in the EU, amounting to as little as 0.3%.

CEE economies will also benefit from higher exports to the US. Foreign trade will be the main channel of impact of the agreement on CEE economies. Slovakia, whose exports to the United States are expected to double, definitely seems to be the greatest beneficiary (Figure 2. 3). This will mainly result from the increased demand for cars manufactured in Slovakia which are, to a large extent, sold in the American market even today. On the other hand, the lowest growth in exports will take place in countries with the weakest trade relations with the United States which are simultaneously the least integrated with the global value chains. This refers mainly to Croatia and the Baltic states.

In the majority of CEE economies investment growth will accelerate. According to the estimates of the World Trade Institute (2016), Lithuania will be the biggest beneficiary of investment growth (Figure 2. 4). The investment channel will not have a positive impact on the economies of all the countries. In the Czech Republic and Estonia, fixed capital formation may drop after the entry into force of the TTIP. This could result from the fact that part of investment, particularly foreign investment, may be re-directed to the neighbouring countries (Slovakia, Lithuania).

TTIP will have a positive impact on wage growth in the region[9], mainly for highly qualified employees. In all countries of the region wages of highly skilled employees should increase, although in the Czech Republic, Estonia and Romania this growth will be relatively low (Figure 2. 5). Wages of persons with low qualifications will grow at a markedly slower pace and they may even decrease in the three aforementioned economies. This poses a risk that the TTIP may result in the growth of income inequality in CEE countries.

The TTIP should generally have a positive impact on the economies of CEE countries, however, this impact will be smaller than for Western European countries. The extent of this impact will also be highly diversified in individual countries. According to the estimates of the World Trade Institute (2016) GDP growth in the region will increase by 0.3 percentage points per year by 2030, against 0.5 percentage points for the whole of the EU. Only in Lithuania the expected acceleration of the economic growth will be higher than the EU average (Figure 2. 6)[10]. On the other hand, the Czech Republic, Hungary, Estonia, Romania and Croatia will be the countries to benefit the least from the signing of the TTIP. Similar conclusions are indicated by Hagemajer (2015), who showed that the TTIP will affect

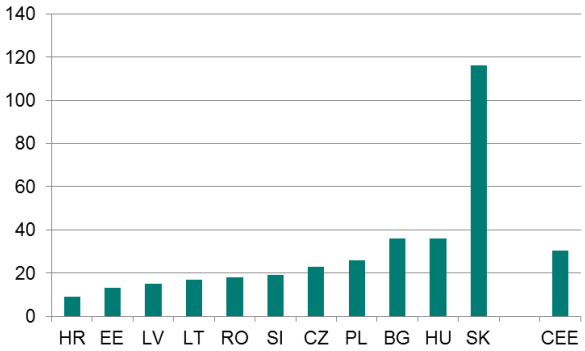
[8] Analyses described in the literature of the subject are usually subject to the application of CGE class models (*Computable General Equilibrium*) to estimate the impact of the reduction in trade barriers on GDP.

[9] The CGE model variant applied in the study assumes full-time employment, thus, adjustments in the labour market take place through wages.

[10] This shall mainly result from the expected decline in prices, which will influence the growth of households' expenditure in Lithuania.

the acceleration of GDP growth in the long-term by 0.4% in CEE countries against 0.7% in the EU-15 countries. Then again, Fontagne et al. indicate an even lower impact of the TTIP on CEE countries. According to the authors, GDP in new EU member states will only grow by 0.2% against a twofold growth in Germany or the United Kingdom.

Figure 2. 3. Estimated impact of the TTIP on exports of CEE countries to the US (in %)

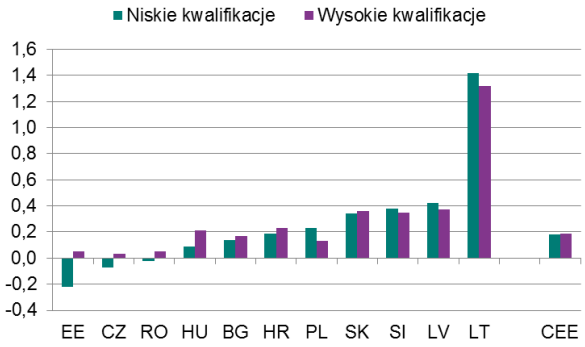


Source: World Trade Institute (2016).

Figure 2. 4. Estimated impact of the TTIP on investment in CEE countries (in %)

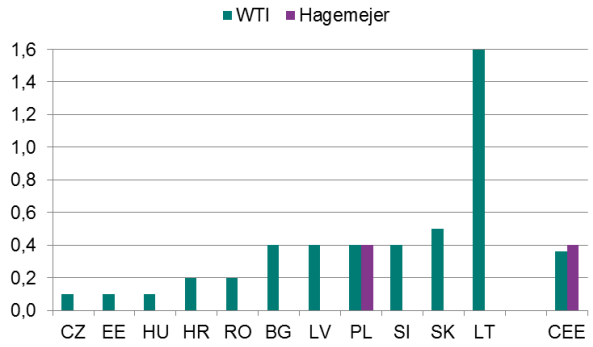
Source: World Trade Institute (2016).

Figure 2. 5. Estimated impact of the TTIP on wages in CEE countries (in %)



Source: World Trade Institute (2016).

Figure 2. 6. Estimated impact of the TTIP on GDP in CEE countries (in %)



Source: World Trade Institute (2016), Hagemejer (2015).

Other TTIP effects

The TTIP means not only the elimination of barriers to international trade but also a deeper economic integration in other areas. The most important of them include:

- The mechanism of dispute settlement between the states and international corporations by arbitration (*Investor-state dispute settlement*, ISDS),
- consumer protection standards,
- access of foreign companies to public tenders,
- protection of intellectual property rights.

One of the negotiated TTIP elements is ISDS. It is a mechanism enabling foreign investors to bring an action to the international arbitration tribunal against governments of the states where an investment is deployed. Currently the ISDS is usually an element of bilateral trade agreements between the

developed and developing countries and its purpose is to mitigate investment risk for international companies with reduced regulatory stability. Thus, introduction of the ISDS under the TTIP would be a new instrument since this type of solutions are rarely used in relations between highly developed countries. For instance, the guarantee of extrajudicial dispute settlement with foreign investors exists only in the energy sector between Germany and the US. In the face of huge scepticism against the ISDS instrument in the TTIP, the European Commission believes that the dispute settlement mechanism should: (i) guarantee the right of the specific state to introduce domestic regulations in the area of health, safety and environmental protection; (ii) ensure impartiality and independence of arbitrators; (iii) contain an appeal mechanism. Considering a broad scope of the ISDS in the bilateral agreement between Poland and the US of 1990, signing of the TTIP will lead to the reduction of the ISDS scope in relations with the US, irrespectively of the final shape of the agreement.

The TTIP may result in changes of consumer protection standards, in particular relating to agri-food products, medical and pharmaceutical products as well as in the mining and quarrying sector. One of the TTIP elements is the principle of mutual recognition of rules and standards. In the case of agri-food products, the material difference between the US and the EU refers to issues of safety. In the EU the principle of prudence applies, pursuant to which a manufacturer or importer is bound to demonstrate that the product will not pose any adverse health effects. On the other hand, in the US, by principle, only demonstrating that a given product poses health hazard results in its withdrawal from the market. In the case of medical devices the improvement of the process of their approval in the EU and US markets is planned (e.g. through a common reporting form), however, without any harmonisation of the regulations. In terms of pharmaceuticals, the TTIP will not affect a possibility offered to EU member states to take decisions in the scope of administrative prices or reimbursement. The policy of public communication of information concerning studies on new drugs will remain unchanged. TTIP negotiations comprise the entire energy sector, whereas the promotion of renewable energy and energy efficiency is assumed. The issue of access to raw materials is still unclear. One of the objectives of the TTIP is to create a collection of regulations facilitating extraction of raw materials, simultaneously maintaining the countries' right to take sovereign decisions in the scope of issuing licenses for extraction (e.g. shale gas by fracturing).

Problems in the assessment of the TTIP effects also relate to the protection of intellectual property. Under the TTIP full harmonisation of the EU and US law in this regard is not planned, but cooperation in selected areas will be pursued. The TTIP will most probably lead to strengthening of the intellectual property rights. It may be expected that it will cover, inter alia, the segment of internet services, computer programmes or musical works. For example, the regulations may cover the rights of musical works' authors to remuneration for making their works available on the radio, granting patents to computer programmes or use of press materials by Internet services providers.

Another significant aspect of the TTIP is the issue related to opening of the public procurement market in the US to European companies. Under the TTIP mutual access to public procurement at a local, regional and national level to companies from the EU and the US will be ensured. It means that foreign enterprises will have the opportunity to participate in public procurement based on rules equal to those applied to domestic companies. This part of the TTIP will lead to growth of competition as well as the improvement of transparency in the public procurement market. However, this change will cause a weakening of the real influence of states on the public procurement process and will

hamper the control of the contracts of strategic nature for the state (which is associated with discrimination problems). It is worth mentioning that this element of the TTIP raises strong objections among supporters of the "*Buy American*" programme, which ensures preferential access to public procurement for American companies.

Schedule of the TTIP's introduction

At the moment it is impossible to indicate the date of the signing of the TTIP. In February 2013, the President of the US Barack Obama, as well as the Chairman of the European Commission and the President of the European Council, Jose Manuel Barroso and Herman Van Rompuy, announced their readiness to sign the TTIP, which triggered the process of negotiations concerning the final shape of the agreement. Representatives of the European Commission and the Government of the United States continuously hold negotiations. The thirteenth round took place in April 2016. The official date of signing the agreement has not been communicated. However, both parties stated their intention to conclude the negotiations by January 2017, when the change of the government administration takes place in the United States. Nevertheless, based on previous experience, it is difficult to judge how feasible the announced date is. For instance, negotiations on the agreement between the US and Korea took five years, ended in 2012, and the provisions will enter into force by 2013. A similar situation occurred in case of the *Comprehensive Economic and Trade Agreement* (CETA) between the EU and Canada: the negotiations started in 2009 and were concluded in August 2014. The CETA is currently the subject of consultations of the Council of the European Union and the European Parliament. On the other hand, the negotiations concerning the Trans-Pacific Partnership (TPP) started in February 2008 and finished after over seven years, in October 2015. Still, it is worth noticing that the TTIP is much more complex than the aforementioned examples of trade pacts negotiations.

Signing of the TPP is a factor that may accelerate conclusion of the agreement. Similarly to the TTIP, the TPP comprises not only trade liberalisation but also other significant issues, such as, inter alia, intellectual property rights, environmental protection, agri-food market. Due to the negative impact of the TPP agreement on trade between the US and the EU, signing of the TPP may be a factor increasing the pressure on the EU member states to accelerate the negotiation process.

A factor delaying the TTIP negotiations is the lack of a common position of European countries, arising from the conflict of interests in relation to some issues covered by the agreement. For example, the positions related to the pace of the negotiations and the scope of the agreement vary: should the agreement restricted by the scope of liberalisation be adopted relatively promptly (the United Kingdom's position), or should a broad, consensus-based position of the EU be developed within long-term negations. The firm stance of Germany may also serve as an example: the country rejected the arbitration mechanism under the TTIP, which resulted in the European Parliament adopting a resolution by the in July this year, calling for abandoning the ISDS in the TTIP and replacing this mechanism of dispute resolution by a different system developed by the European Commission. On the other hand, France is deeply concerned about the issues related to food quality. Therefore, the lack of consensus within the EU may be an important factor slowing the pace of TTIP negotiations.

Summary and conclusions

The agreement on the Transatlantic Trade and Investment Partnership is aimed at inhibiting the decline of the EU's and the US role in the global economy and trade. The progress of globalisation and the growing role of China and other emerging markets as well as the stagnation observed in developed economies in the recent years were the main premises to commence negotiations of the agreement on trade liberalisation between the largest economies of the world. Besides the removal of trade barriers the agreement also covers liberalisation of investment barriers, harmonisation of administrative regulations or opening of markets to foreign enterprises. Due to a very broad scope of the negotiated agreement, it raises many concerns and objections of individual EU member states, which makes it difficult to define the date of the TTIP's entry into force and its scope precisely.

According to the available estimates, signing of the TTIP should have a beneficial, although relatively limited, impact on economies of both the United States and the European Union. It seems that among the EU countries, the most integrated economies with the United States through trade as well as other channels will be the major beneficiaries, i.e. mainly the EU-15 countries. In case of CEE countries, the extent of those relations, especially the direct ones, is definitely smaller. Exports to the US make slightly over 2% of the total exports of CEE countries, whereas the American investment accounts for only 3.5% of the total FDI inflow to the region. Therefore, it is estimated that the potential effects of signing of the agreement for CEE countries will be relatively limited, yet beneficial. According to various reports, the TTIP should affect GDP growth in the long term by approx. 0.2-0.4%.

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Growth of Central and Eastern European countries' share in world trade and its determinants

In the recent decades, particularly in the beginning of the 21st century, the shares of the Central and Eastern European countries in the global exports increased significantly. In some respects, the pace and causes of this increase varied in each country. Nevertheless, they usually included an improvement in the competitiveness of the region's economies and, to a lesser extent, a change of geographical or product structure of exports. The improvement of technological competitiveness was also an important factor. The expansion of the domestic production potential was observed in all CEE countries.

The growing share in the world exports may be mostly attributed to the expansion of international corporations and inclusion of CEE countries in global value chains. This was associated with the inflow of foreign direct investment (FDI), and the transfer of cutting-edge technologies and know-how. This process has contributed to changes in the geographical and product structure of exports, expansion of production capacity and increased competitiveness of CEE countries.

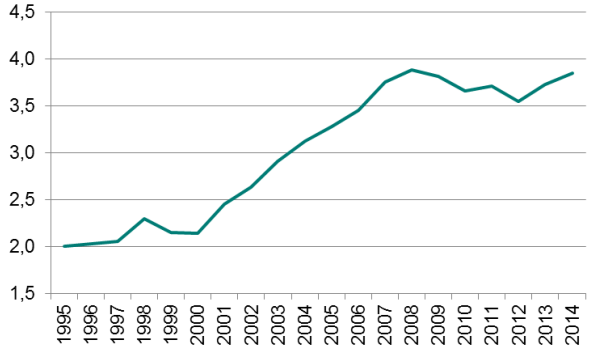
In the post-crisis period, the growth rate of the CEE countries' share in the world trade slowed down. It resulted not only from the weaker external demand but also from a considerable slump in foreign investment inflow, thusa slower growth in competitiveness of those economies. This experience shows that the growth model in CEE countries, based on FDI inflow and exports growth may be difficult to maintain in view of a sustained slowdown in the global economy.

The share of CEE countries in the world trade has significantly increased over the recent decades, although this growth was not uniform. Using the beginning of the previous decade as a reference point, two periods may be distinguished. Firstly, the period of 2000-2009 demonstrated a high growth in exports, which resulted in almost a doubling of the region's share in the world exports. After 2009, a significant slowdown of this process occurred (Figure 3.1 and Figure 3.2), and in some economies (Croatia, Slovenia, Hungary) - even its reversal.

Although in the first decade of the 21st century the shares of all CEE countries in the global exports increased markedly, the pace and causes of this growth varied in the case of individual countries. The *Constant Market Shares* analysis[11] shows that in some countries of the region (Czech Republic, Poland, Romania, Slovakia, Hungary), rising competitiveness was the major factor responsible for the growth, whereas the structural effects (the geographical effect and the product effect) were relatively less significant (Figure 3.3). On the other hand, in other CEE countries (Bulgaria, Croatia, Slovenia, the Baltic states) the growth of their participation in the world exports was lower and resulted, to a greater extent, from structural factors (Figure 3.4). This referred mainly to changes in direction of exports and, to a lesser extent, changes in the product structure. The impact of the rise in competitiveness on the increase in those economies' share in the world sector was relatively lower.

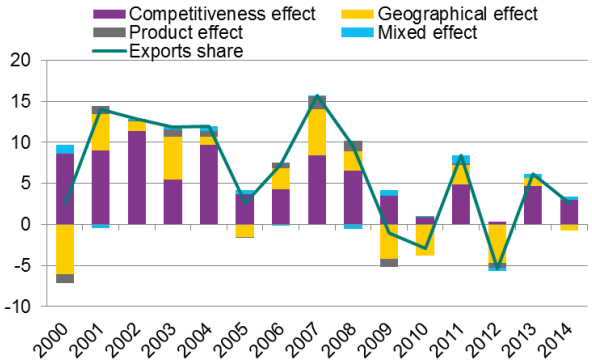
[11] The *Constant Market Shares* (CMS) analysis allows for estimation of changes in shares of a given country in the world exports and their decomposition. It enables to distinguish two structural factors, i.e. the rate of demand growth in exports markets of a given country (geographical effect) and exports product structure (product effect), as well as the impact of price and non-price change of a country's competitiveness (competitiveness effect) and a mixed effect which represents the residual value of changes in the share in the world exports.

Figure 3.1. Share of CEE countries in the world exports (%)



Source: World Bank.

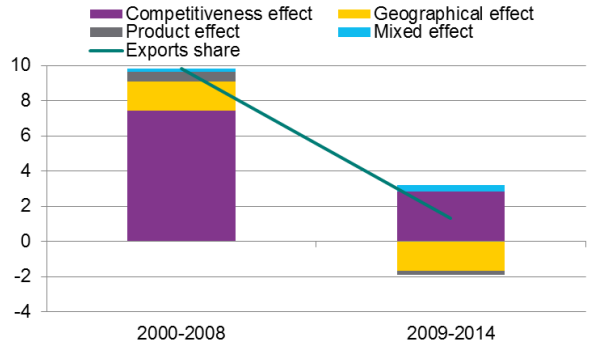
Figure 3.2. Decomposition of growth of the CEE countries' share in world exports (percentage points, y/y)



Source: EI NBP calculations.

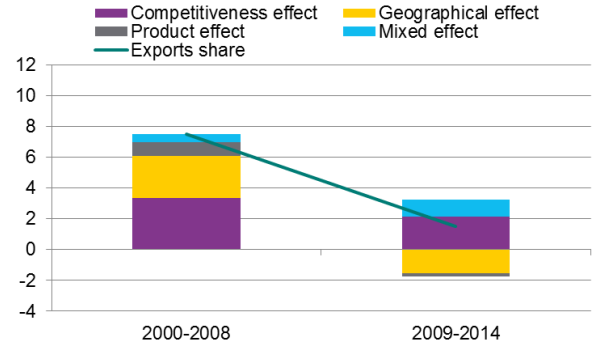
The product and geographical structure of the CEE countries' exports has clearly changed. In 1990s raw-material- and labour-intensive goods prevailed, such as textiles and clothing, metallurgical products and wood products. In the subsequent years their significance decreased, whereas the share of machinery and equipment increased, including, in particular, vehicles (Figure 3.5). Changes in geographical structure of exports were associated with the growth in trade volume in the CEE region (Figure 3.6). Simultaneously, the role of the EU-15 countries as exports recipients relatively decreased in line with global tendencies, i.e. with the decreasing role of developed economies in the global demand. Although the role of distant non-European markets, including the BRIC countries, has increased, it remains relatively minor and considerably smaller than in case of the EU-15 exports.

Figure 3.3. Decomposition of growth of the share in the world exports for the Czech Republic, Romania, Slovakia and Hungary (y/y, average in a given period, percentage points)



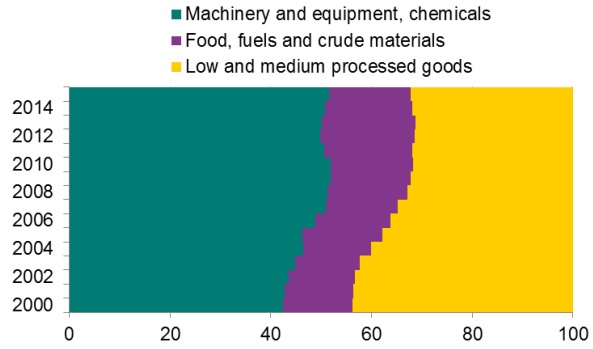
Source: EI NBP calculations.

Figure 3.4. Decomposition of growth of the share in the world exports for Bulgaria, Croatia, Estonia, Lithuania, Latvia and Slovenia (y/y, average in a given period, percentage points)



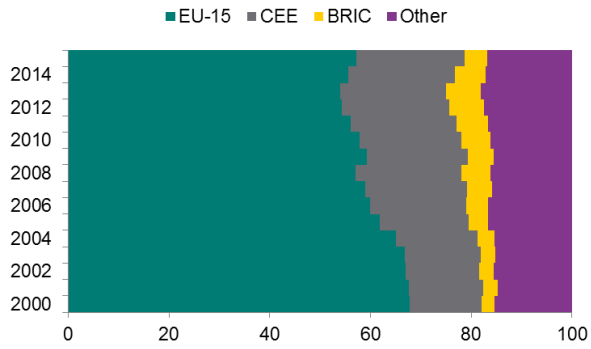
Source: EI NBP calculations.

Figure 3.5. Product structure of the CEE countries' exports (%)



Source: Eurostat.

Figure 3.6. Geographical structure of the CEE countries' exports (%)



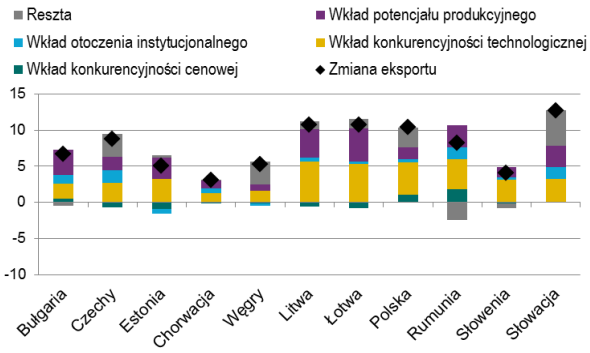
Source: Eurostat.

The alternative decomposition, based on a model comprising measures of various aspects of competitiveness[12], shows that the technological competitiveness (Figure 3.7) **was an important factor supporting the growth in the share of the CEE countries' exports[13].** In the case of Bulgaria, the Czech Republic, Romania and Slovakia, the growth of institutional competitiveness was also a significant driver of exports growth. The improvement in the institutional framework in CEE countries may be associated, inter alia, with the accession to the European Union which obliged these countries to adapt to the EU regulations already in place. CEE countries have traditionally demonstrated high price and cost competitiveness. It stems mainly from low labour costs which, despite having risen over the recent years, remain much below the EU-28 level (Figure 3.9). Nevertheless, over the period 2001-2008 the noticeable beneficial impact of cost-price competitiveness was recorded only in Poland and Romania, which is associated with the fact that those countries recorded the highest surplus of labour productivity growth over wage growth per employee. In all countries of the region, growth in the domestic production potential has also contributed to the increase in exports growth, which may be, to a large extent, attributed to investment, including the FDI inflow.

[12] Based on the model presented in: Bierut and Kuziemska-Pawlak (2016). The model enables a decomposition (of change) in exports level in individual countries against the European Union into contributions associated with the relative level of price competitiveness (measured by the level of unit labour costs), technological competitiveness (measured by the number of patent applications per million inhabitants), institutional competitiveness (measured by the index of the general level of regulation in the economy) and the contribution of the relative production capacity level (measured by the potential GDP level).

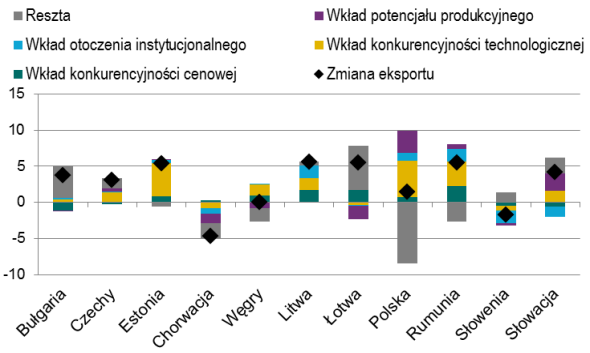
[13] In the EU-28 exports.

Figure 3.7. Decomposition of the difference in the growth rates of the CEE countries' exports and EU-28 exports in 2001-2008 (y/y, average, percentage points)



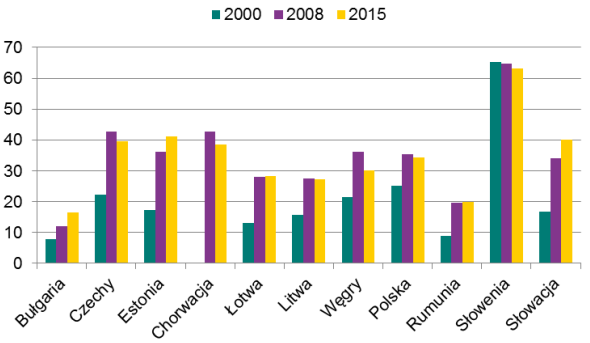
Source: EI NBP calculations.

Figure 3.8. Decomposition of the difference in the growth rates of the CEE countries' exports and EU-28 exports in 2009-2012 (y/y, average, percentage points)



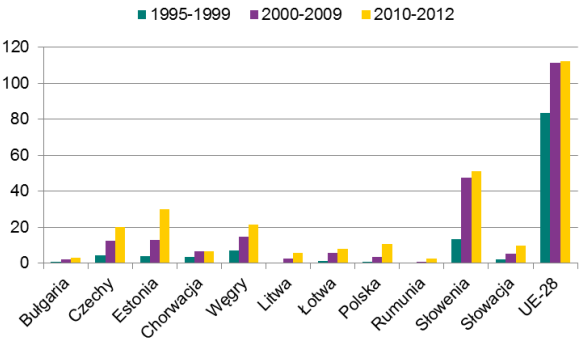
Source: EI NBP calculations.

Figure 3.9. Hourly labour costs in industry, construction and services in CEE countries (% of costs in EU-28)



Source: Eurostat, EI NBP calculations.

Figure 3.10. Number of patents submitted to the European Patent Office (EPO) per million inhabitants (average in a given period)



Source: Eurostat, EI NBP calculations.

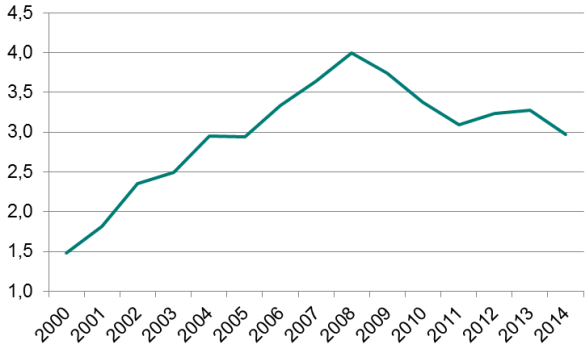
Thus, the growing share of CEE countries in the world exports may mostly be attributed to the expansion of international corporations, which incorporated CEE countries into their value chains. This process has contributed to: (i) the change in the geographical and product structure of exports, (ii) the extension of the production capacity; and (iii) the growth of production competitiveness. Production fragmentation within Global Value Chains (GVC) resulted in a marked growth in intermediate goods trade, which (if generated within the GVC) cross borders multiple times – going through consecutive production stages. Value chains in which CEE countries participate are mostly of regional - European - nature, which has contributed to a significant growth in intra-EU trade in the region. Although producers from CEE countries managed to reach, mainly indirectly through the contribution to the EU-15 exports production, more distant markets – among others, the markets of the United States and Asian countries, the share of those markets in exports of the CEE region remains insignificant[14].

The rising share of CEE countries in the GVCs was associated with an increased inflow of foreign direct investment. As a result of fast opening of economies, CEE countries experienced considerable

[14] More on the impact of the GVCs on the structure of the CEE countries' foreign trade can be found in the NBP report (2014b).

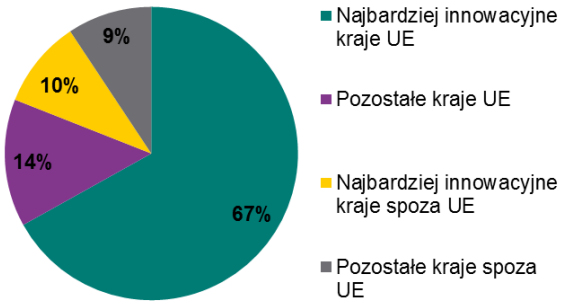
inflows of foreign capital (Figure 3.11). These were direct investments of foreign enterprises to a large extent. Taking into consideration the geographical and sectorial structure of FDI (Figure 3.12 and Figure 3.13), investment were predominantly associated with the extension of GVCs. The inflow of investment enabled the extension and modernisation of the manufacturing base in the region. FDI inflow fostered not only capital accumulation but also growth in total factor productivity (TFP)[15]. The main investors in CEE countries include companies from Western Europe, typically the most technologically advanced world-class firms. The majority of direct investment in the region was received by the most technologically advanced and innovative sectors. In countries where FDI inflows were mostly recorded in sectors generating the technological progress, i.e. the Czech Republic, Estonia, Slovenia and Hungary, relatively fast increase in the number of patents has occurred, which fostered rising technological competitiveness (although the number of patents remains low as compared to the entire European Union, Figure 3.10)[16]. The inflow of foreign investors to CEE countries was also associated with the modernisation and improvement of production processes[17]. Consequently, it has also induced the improvement in labour productivity and increased price competitiveness.

Figure 3.11. Share of CEE countries in global FDI inflows (%, status as at the end of the year)



Source: UNCTAD.

Figure 3.12. Geographical structure of FDI inflows to CEE countries (%, status as at the end of 2014).



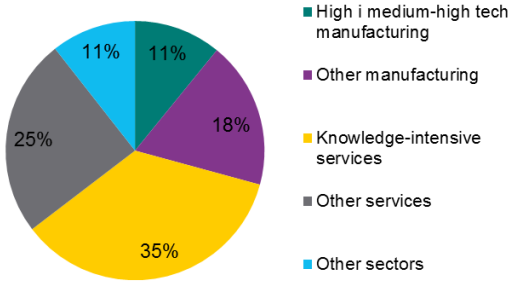
Notes: The most innovative countries according to the ranking of the Global Innovation Index 2015.
Source: Eurostat.

[15] See, e.g. Mühlberger and Körner (2014).

[16] See, e.g. Vincenzi (2010). The literature on the FDI impact on the economic growth in the host country indicates that FDI contributes to an acceleration of economic growth only if the level of human capital in the host country (which determines the advanced technology absorption capacity) exceeds a certain threshold (Borensztein et al., 1998).

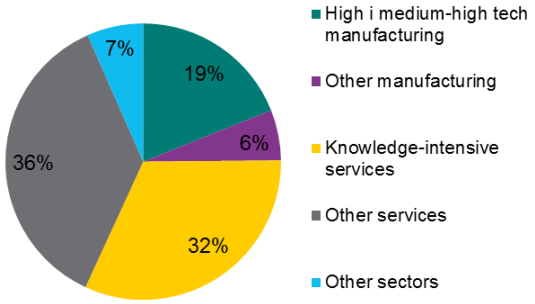
[17] The impact of GVCs on the growth of production innovativeness was described, inter alia in NBP (2016).

Figure 3.13. Sectoral structure of FDI in CEE countries (in %, status as at the end of 2008).



Notes: Structure of FDI in Poland and Croatia in 2008 based on EI NBP estimates. Distribution of sectors according to technological advancement based on Eurostat classification.
Source: Eurostat, EI NBP calculations.

Figure 3.14. Sectoral structure of FDI inflows to CEE countries in 2009-2012 (in %).



Source: Eurostat, EI NBP calculations.

In the post-crisis period (2009-2014) a slowdown in the growth of the CEE countries' share in world trade was observed, mainly due to weaker demand from major trading partners. The outbreak of the global financial crisis resulted in a marked slowdown in the growth of the share of countries of the region in world trade (Figure 3.1). A CMS analysis indicates that the major factor of this slowdown was the negative contribution of the geographical effect observed in all CEE countries. It was the consequence of close economic ties with EU-15 countries, which proved to be the weakest element of global demand in the post-crisis period. Several factors contributed to low demand from those countries, notably to low investment demand, such as: concerns about the future economic growth, more difficult and more expensive access to financing and the adverse impact of deleveraging of enterprises and households on the demand in European economies.

Besides the structural factors, the slowdown in the competitiveness improvement in CEE countries also slackened the growth rate in their share in the world trade. It manifested itself mainly in the economies where the exports competitiveness recorded the fastest growth in the previous years, i.e. in the Czech Republic, Poland, Romania, Slovakia and Hungary.

The alternative decomposition shows that the decline in exports growth rate in the post-crisis period was mainly driven by the slowdown in the potential GDP growth rate as well as by a slower growth in the number of patents. Both phenomena may be explained by the decline in (the growth of) investment due to the crisis, lower inflow of FDI and the simultaneous change in their sectorial structure, in particular, the decrease in the relative inflow of investment to the manufacturing sector (Figure 3.14).

Summary and conclusions

The factors responsible for the growing role of CEE countries in the world's exports in the post-transformation period included not only structural (geographical and product) changes but also the rise in competitiveness. This may be associated with the expansion of multinational corporations that integrated companies located in CEE countries into their value chains. The GVC development was related to the FDI inflow as well as technology and know-how flow, which affected the growth in technological competitiveness of countries of the region. After the 2008 crisis, the trade expansion of

CEE countries slowed down markedly. This resulted not only from a weaker external demand but also from the a considerable slowdown in foreign investment and, simultaneously, a slower growth in competitiveness of those economies. The experiences of the recent years have shown that the growth model of CEE countries based on FDI inflow and exports growth may be difficult to maintain in case of a sustained slowdown in the global economy.

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Macroeconomic costs of potential Schengen area disintegration for the EU-15 and CEE countries

The uncontrolled massive inflow of immigrants from the Middle East and North Africa resulted in reintroduction of border control by a number of European countries. Maintained controlsin the subsequent years is a risk factor for growth in the countries of Central and Eastern Europe charachterised by small open economies, strong integration with the European GVCs, which generates intensive intra-EU flows of goods, services and employees. Materialisation of the risk of border control reintroduction will depend, inter alia, on the effectiveness of the European Commission's measures aimed at restoring the normal functioning of the Schengen area by the end of 2016. In this report, channels of impact of suspending the functioning of the Schengen area on GDP growth in Europe and CEE countries are presented, together with the estimates of this impact prepared by various institutions. According to the most conservative estimates, the cumulative costs of reintroduction of border control within the Schengen area might exceed 1% of the current EU-28 GDP during the nearest decade. However, for CEE economies, Germany as well as the Benelux countries disruptions in the functioning of the Schengen area would mean several times higher losses than the average loss for the EU-28.

Introduction

Due to the massive immigration from Middle Eastern and North African countries, the risk of disintegration of the Schengen area or partial suspension of the Schengen rules has recently increased. As of September 2015 approximately one third of the countries belonging to the area introduced temporary border controls in order to limit inflows of immigrants and for public security reasons. The major destination countries for migrants (Austria, Denmark, Germany, Norway, Sweden) as well as Hungary and Slovenia as the transit countries decided to adopt such measures. Moreover, in the face of a terrorist attack threat, control on the French and Belgian border was reintroduced in autumn last year. In accordance with the Schengen Borders Code, the reintroduction of control is of extraordinary nature and may jointly last up to 8 months. However, in May this year the Council of the European Union supported the EC recommendation concerning the extension of control on Austria's borders with Hungary and Slovenia, the German-Austrian border, the Danish-German border (land and sea) and Swedish-Danish border (land and sea) until November this year.

According to the European Commission's *Back to Schengen* roadmap, presented on 4 March this year, border controls within the Schengen area should be ultimately waived by the end of the current year. The main factor facilitating this process should be the implementation of the agreement with Turkey of 18 March this year. The objective of the agreement is to limit the inflow of migrants from Turkey to Greece by sea through increasing the responsibility of Turkey for the protection of the EU border and sending the migrants crossing the Greek-Turkish border illegally back to Turkey. In return, the EU member states committed to receiving the same number of persons from refugee camps in Turkey and to provide material and financial aid to Turkey for supporting the refugees. Furthermore, the EU action plan comprises sending qualified personnel to Greece from the member states

and Frontex[18], ongoing financial support for asylum seekers in Greece, reintroduction of refugee registration in the transit countries and relocation of registered refugees from Greece. The unilateral decisions of Schengen area countries concerning additional border controls shall be replaced by coordinated measures at the EU level.

The effectiveness of measures aiming at restoring a normal functioning of the Schengen area may affect the economic outlook of CEE economies. A long period of impeded functioning of the Schengen area poses a risk for countries of Central and Eastern Europe - small open economies strongly engaged in intra-EU trade in goods, services and employees. Below the potential channels of impact of disturbances in the functioning of the Schengen area on CEE economies are discussed and estimates, allowing for the assessment of the extent of the Schengen area disintegration consequences for the economic growth in the CEE region, are presented.

Transmission channels

The potential disintegration of the Schengen area could affect economies of CEE countries through four basic channels.[19] First of all, border controls increase the cost of land transport of goods. In the short term, this lowers the carriers' profits and raises the prices for end-consumers. The probability of disruptions in just-in-time production also increases. In the long term, higher cost of transport would decrease the profitability of production optimisation and diversification within global supply chains, curb the growth of trade within the Schengen area and reduce the competitiveness of the EU economy in the global markets. The second negative effect of border control is a longer journey to work by cross-border commuters. A decline in cross-border commuting to work attractiveness would also contribute to a decrease in labour profitability and, consequently, to a deterioration of labour market matching and growth of unemployment in some regions near the borders. Thirdly, the introduction of border controls would result in reduced revenues from tourism. In particular, this would apply to the income from short stays of tourists from the Schengen area countries. Lastly, the disintegration of the Schengen area would lead to increased expenditure on border control, including the infrastructure[20].

The extent of negative consequences of a potential Schengen area disintegration is highly diversified for economic growth in individual EU member states.

Due to the significant role of international trade and the European value chains, Germany, Austria, the Netherlands and the Visegrad Group countries seem particularly exposed to the risk of manufacturing and transport costs increase. For the last group of countries, impediments to road transport are particularly severe, inter alia, due to the high share in the European freight services market. In 2014, countries of the Visegrad Group provided over 40% of cabotage[21] in the EU-28 (measured ac-

[18] Frontex (European Agency for the Management of Operational Cooperation at the External Borders) is the agency coordinating the protection of EU external borders, including the operational management of the support to the EU member states affected by the migration crisis.
[19] European Commission, *Back to Schengen. A Roadmap* of 4 March 2016.
[20] However, costs of border protection are also likely to increase in case of maintaining the Schengen area. At this point, the necessity of further control of the situation in the Aegean Sea should be indicated, as well as EC plans concerning the extension of databases on citizens of third countries staying in the EU and the depletion of a considerable part of EU financial reserves envisaged in the 2014-2020 financial perspective.
[21] Cabotage is the transport of goods inside the country in which the economic operator is not established (e.g. transport from Munich to Berlin by a company registered in Poland).

cording to tonne-kilometres). The road transport and warehousing sector generates simultaneously a markedly larger part of the gross value added in NMS-8[22] than in Western Europe (Figure 4. 1). Since 2008 (i.e. after accession of eight CEE countries to the Schengen area) its importance has even grown and employment within this sector increased faster than the total employment in the economy (Figure 4. 2).

Figure 4. 1. Share of land transport and warehousing in generation of gross value added in NMS-8, compared to EA-12 (%)

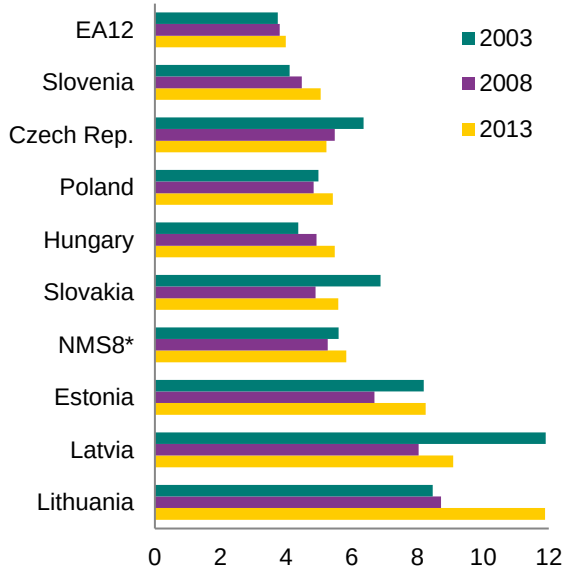
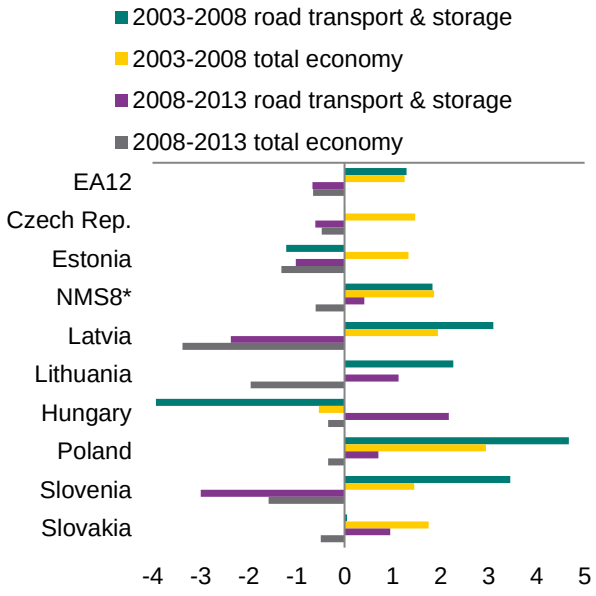


Figure 4. 2. Average growth of employment in land transport and warehousing and in total economy in NMS-8, compared to EA-12 (%)



Notes: The total share of Land transport and transport via pipelines and Warehousing and support activities for transportation in gross value added. The NMS-8 stands for eight CEE countries - members of the Schengen area (listed in the figure) and the EA-12 stands for countries of the "old Union" - members of the euro area.

Source: Eurostat.

Some CEE countries could be significantly affected by impediments to cross-border provision of (work) services, because the share of cross-border employees among residents of those countries is relatively high. Cross-border commuting to work is almost twice more frequent among inhabitants of NMS-8 than in other members of the Schengen area, and the number of cross-border commuters has doubled over the last decade (Figure 4. 3 and Figure 4. 4). The role of cross-border commuting in CEE countries becomes even more pronounced if the regional aspect is taken into account. For example, although the share of regular cross-border commuters in Poland does not exceed 1%, in western provinces of Poland this percentage is high, reaching a level comparable to that observed in smaller countries of the region (in Slovakia or in Estonia).

[22]In this material, eight CEE countries which are members of the Schengen area as of 21 December 2007 (land border-crossing points) are designated as NMS-8, i.e. the Czech Republic, Estonia, Lithuania, Latvia, Poland, Slovakia, Slovenia, Hungary.

Figure 4. 3. Number of cross-border commuters in 2014, according to countries (% of employees)

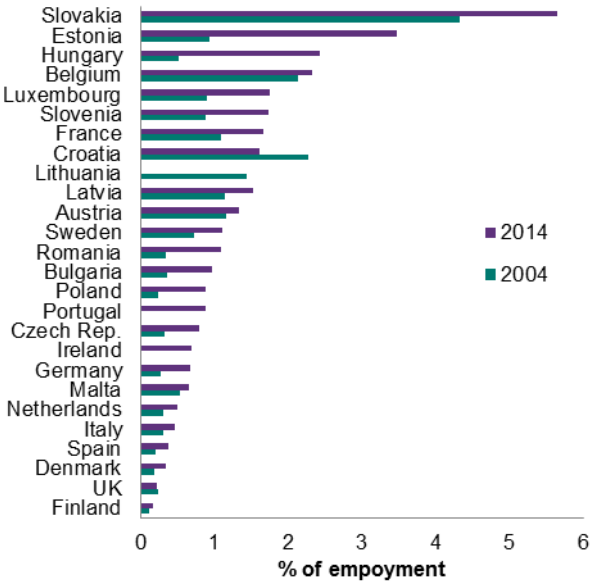
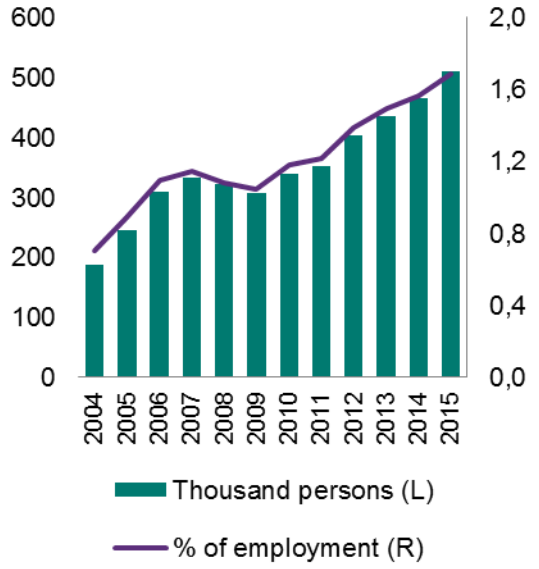


Figure 4. 4. Number of cross-border commuters from NMS-8 in 2004-2015 and their share in employment (%)



Source: Eurostat.

The risk associated with the decline in tourist traffic is insignificant for CEE economies. The hotel and restaurant sector is less important for employment and creation of value added in CEE countries than in the EU-15 (Figure 4. 5). Moreover, domestic tourism is a major part of tourism in CEE countries (Figure 4. 6). The only CEE country exposed to losses in the tourist sector to the extent greater than the average is Croatia. In the EU-15, the greatest risk associated with the decline in the tourist traffic concerns the Mediterranean countries, the British Isles as well as Austria and the Benelux.

Figure 4. 5. Role of the tourism sector for the economy in the EU member states in 2014

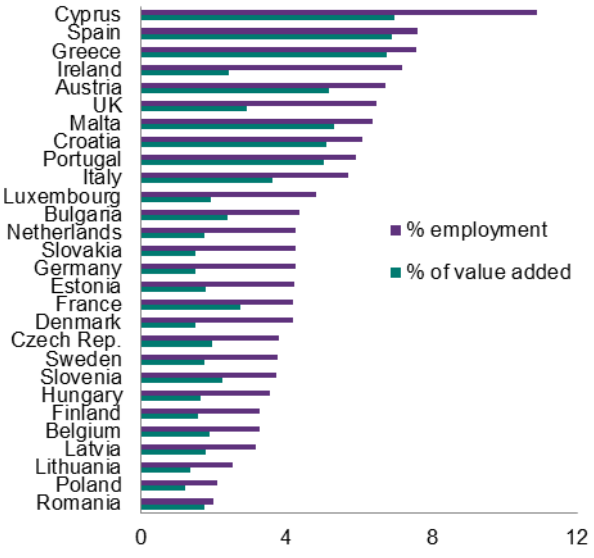
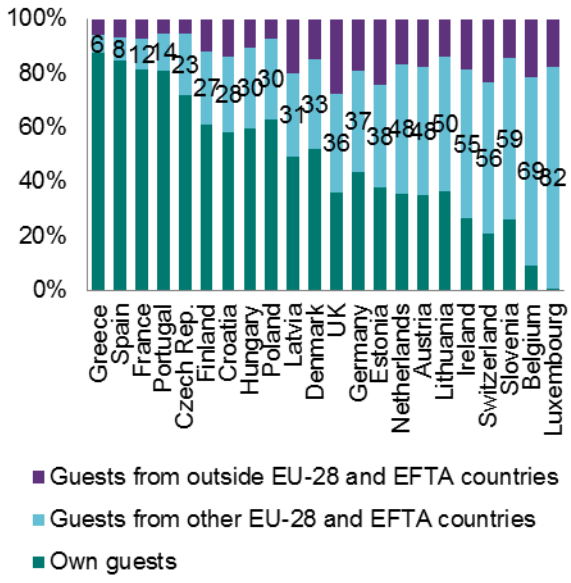


Figure 4. 6. Countries with inflow of tourists staying at least one night in a given country in 2014 (%)

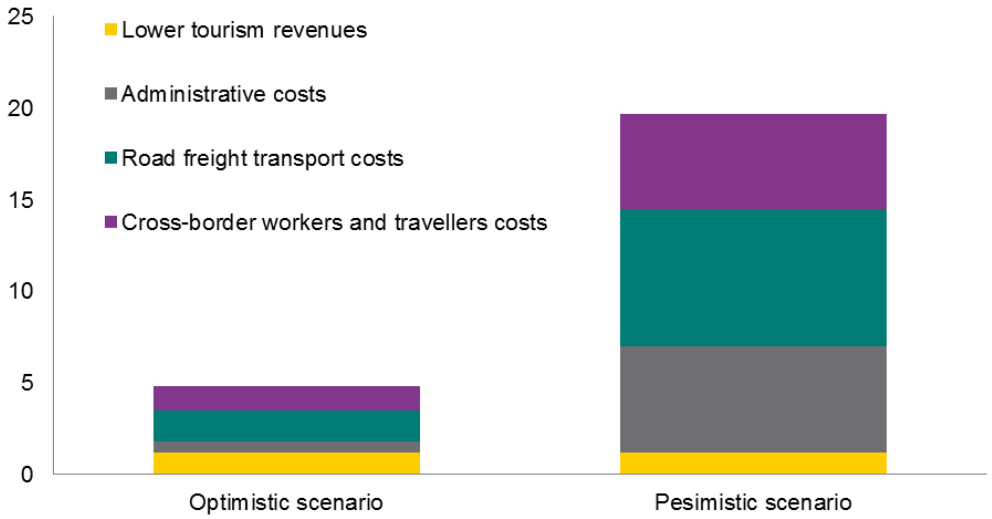


Source: Eurostat.

Estimates of the consequences of Schengen area disintegration

The available estimates indicate a moderate adverse impact of border control reintroduction in the entire Schengen area on the economic activity in the EU. The European Commission estimates that losses may range from 0.03% to 0.12% of EU-28 GDP annually (i.e. EUR 5-18 billion, Figure 4. 7)[23]. It should be stressed that the EC estimates refer mainly to short-term disruptions in the performance of the selected sectors of the economy (transport, tourism) as well as the flow of employees and the administrative costs. They do not comprise potential consequences of the common visa policy dismantling, the long-term effects of increased unemployment arising from difficulties of the transportation and tourism sectors, of a decline in trade growth or deteriorating competitiveness of the EU economy. According to the analysts of the French government (France Strategie), the short-term cost of border control reintroduction in the Schengen area for France would range from EUR 0.86 to 1.75 billion (0.04-0.08% of GDP). Half of the losses would result from the reduced tourist traffic, 38% - from the extended commuting time for cross-border commuters and 12% - from delays in the transport of goods.

Figure 4. 7. Estimated average annual costs of the Schengen area disintegration according to the European Commission (EUR billion)



Source: European Commission.

In the long term, the permanent Schengen area disintegration would also have a strong adverse impact on the trade exchange. Based on literature review, France Strategie indicates that the membership in the Schengen area increases long-term trade volume by 10 to 20%. Such a significant impact on the trade exchange corresponds to the decline in exchange costs (expressed as a fraction of goods transported, so-called *iceberg cos*t) by 3 percentage points. The reintroduction of border control can be compared to imposing a 3% *ad valorem* tax on goods traded within the EU. Results derived from the CGE *(Computational General Equilibrium*) MIRAGE model indicate that the resulting decrease in intra-

[23] Thus, the estimates presented in the *Back to Schengen* roadmap are much higher than suggested by Jean-Claude Juncker in his speech in the European Parliament in January this year (EUR 3-4 billion due to extended waiting time of trucks at border-crossing points). Assuming the cost of an hour of waiting at a level of EUR 55, high losses may be expected, in particular, at the Austrian-German border-crossing points or at the Danish-Swedish border-crossing point on the Öresund Bridge.

Community trade profitability would lead to losses of approx. 0.8% of Schengen area GDP as of 2015 over a decade. Another impact scenario of border control is indicated by Bertelsman Stiftung, which assumes that control reintroduction would raise prices of imports inside the EU by 1% (optimistic variant) or by 3% (pessimistic scenario). In the VIEW model used by Bertelsman Stiftung, the subsequent growth in consumer prices would lead to a temporary rise in wage claims and inflation and, consequently, to the deterioration of the EU price competitiveness. The cumulative loss over the decade would then amount, respectively, to 0.4% and 1.2% of EU-28 GDP of 2015.

However, the above forecasts of lost trade benefits should be treated only as a lower-bound estimate. As indicated by Deutscher Industrie- und Handelskammer (German Chamber of Commerce and Industry), with the trade volume of Germany in the range of EUR 2.6 billion, in the case of Germany, the growth of average trade costs of a mere 0.5% would mean losses of about 0.4% of GDP yearly. Those estimates include higher costs of warehousing and a decline in trade volume which would probably also occur outside the Schengen area. A similar extent of losses is also expected by Ifo institute (Felbermayr et al., 2016), in the most detailed analysis among those published so far. On the basis of the gravity model of trade it was estimated that each consecutive border control inside the Schengen area corresponds to the imposition of a duty of 0.54% in case of goods and 0.82% in case of services. This would lead to a decline in bilateral exchange of goods of 2.7% and services - of 4.2%[24]. Felbermayr et al. (2016) consider four scenarios of border control reintroduction, separately for Germany and EU-27. The results are summarised in Table 4.1.

Table 4.1. Estimated costs of the Schengen area disintegration caused by a decline in trade according to different scenarios

	lower estimate	upper estimate
Annual impact on GDP in Germany (in % of GDP)		
Scenario 1. Controls across the entire Schengen area; trade with the remaining parts of world through other countries of the Schengen area	0.20	0.49
Scenario 2. Controls across the entire Schengen area; no impact on trade with the remaining parts of world	0.14	0.36
Scenario 3. Controls only on the migration route from the Balkans and from Italy	0.06	0.15
Scenario 4. Controls only between Germany and Austria	0.03	0.09
Annual impact on GDP in EU-27 (in % of GDP)		
Scenario 1. Controls across the entire Schengen area; trade with the remaining parts of world through other countries of the Schengen area	0.25	0.61
Scenario 2. Controls across the entire Schengen area; no impact on trade with the remaining parts of world	0.19	0.47
Scenario 3. Controls at all border-crossing points of France	0.03	0.06
Scenario 4. Maintaining of controls announced as of summer 2015	0.06	0.11

Source: Felbermayr et al. (2016).

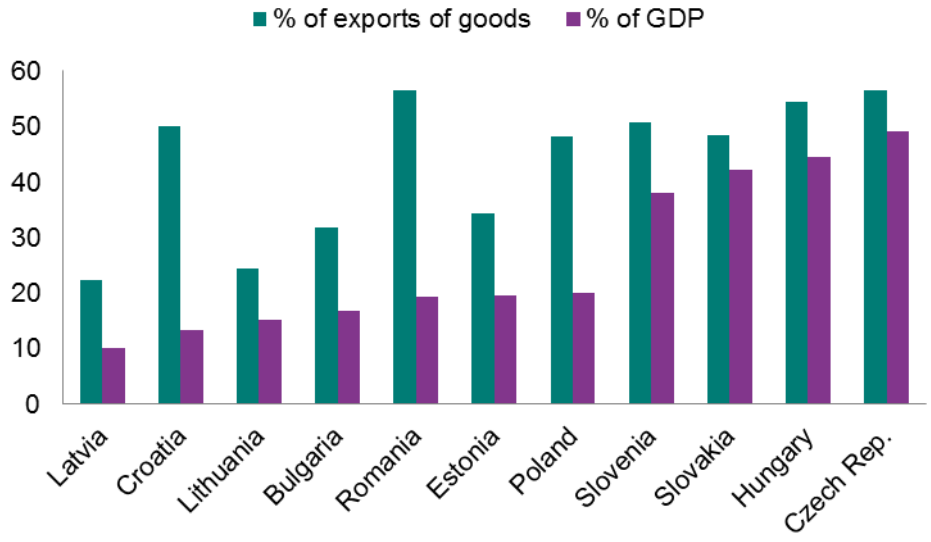
[24] The results of the econometric analysis indicate particularly unfavourable effects of control reintroduction for the electrical and machinery manufacturing, chemical industry and manufacturing of vehicles as well as transportation services and business support service activities.

Reintroduction of full border controls by Germany and Austria would mean very high costs for CEE economies. In order to evaluate their exposure through the goods trading channel, the following scenario comprising a partial Schengen area disintegration was assumed:

- introduction of border control at all external borders of the area comprising Austria, Germany and the Benelux countries (establishment of the *mini-Schengen* area),
- maintaining enhanced security measures at the Hungarian- Slovenian border,
- introduction of control at land and sea borders of Denmark and Sweden.

The scenario corresponds to the situation where states which have reintroduced controls so far will strengthen them and extend them to their remaining borders. This would not only cause impediments to trade of CEE countries with Austria and Germany but also to transit to other countries of Western Europe. Figure 4. 8 shows what share of exports of CEE countries would be subject to additional border control in such a case.

Figure 4. 8. Value of exports of goods from CEE countries exposed to additional border controls in case of a partial disintegration of the Schengen area (%)



Source: Eurostat.

The significant consequences for CEE countries result from their strong economic integration with Germany and Austria and the openness of their economies. Disruptions in the freight traffic would particularly affect Slovenia, Slovakia, Hungary and the Czech Republic. Assuming an increase in transport cost *(iceberg costs)* of 0,54% (estimate of Felbermayr et al., 2016), the annual losses in those countries arising only from this rise would reach 0.2-0.25% of GDP. Other channels of impact should also be indicated: higher cost of cross-border services, impediments to cross-border commuting and decline in tourist trips. The decline in FDI inflow from EU-15 as a result of deterioration in investing conditions as well as a slower trade growth within global value chains (GVC) located in Central and Eastern Europe would also be probable. Summing up, in case of the Schengen area disintegration CEE countries would incur losses comparable to Germany according to estimates of Felbermayr et al. (2016).

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Statistical Annex

1. National accounts

Table 1. Gross domestic product (in %, y/y)

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	1.7	3.0	2.9	2.9	3.1	3.0	2.9
Croatia	-0.4	1.6	0.2	1.5	2.7	2.0	2.3
Czech Rep.	1.9	4.3	3.9	4.5	4.7	4.0	3.0
Estonia	2.8	1.2	1.3	1.6	1.0	1.0	1.8
Lithuania	3.1	1.6	1.2	1.4	1.7	2.0	2.5
Latvia	2.5	2.6	2.0	2.8	3.3	2.2	1.5
Poland	3.3	3.6	3.8	3.2	3.4	4.0	2.6
Romania	3.1	3.8	3.9	3.8	3.6	3.9	4.2
Slovakia	2.5	3.6	3.1	3.5	3.8	4.0	3.7
Slovenia	2.8	2.6	3.0	2.6	2.2	2.5	2.3
Hungary	3.6	2.9	3.7	2.9	2.5	2.6	0.4

Source: Eurostat, seasonally adjusted data, constant prices of 2010, for Slovakia - seasonal non working days adjustment.

Table 2. Private consumption (in %, y/y)

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	2.7	0.8	-1.0	0.0	1.9	2.1	4.2
Croatia	-0.7	1.2	0.2	0.5	1.5	2.6	2.2
Czech Rep.	1.4	2.8	2.7	2.8	2.9	2.9	3.1
Estonia	3.7	4.8	5.0	5.5	5.2	3.4	5.2
Lithuania	4.1	4.8	4.3	5.0	5.6	4.4	4.1
Latvia	2.5	3.1	2.5	2.8	4.0	3.2	3.9
Poland	2.5	3.0	3.2	3.1	3.1	2.7	2.7
Romania	3.9	6.0	4.8	5.2	6.4	7.4	9.9
Slovakia	2.3	2.4	1.9	2.3	2.6	2.6	2.6
Slovenia	0.7	1.7	0.7	1.1	2.4	2.5	0.8
Hungary	1.8	3.0	3.0	2.4	3.2	3.4	4.6

Source: Eurostat, seasonally adjusted data, constant prices of 2010, for Slovakia - seasonal non working days adjustment.

Table 3. Gross fixed capital formation (in %, y/y)

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	3.5	1.0	0.3	1.3	1.4	0.9	-3.9
Croatia	-3.6	1.5	-0.6	0.8	2.0	3.9	4.1
Czech Rep.	2.0	7.4	3.7	8.6	9.2	8.0	0.6
Estonia	-1.8	-5.0	-9.4	-6.0	-3.3	-0.5	-5.5
Lithuania	5.3	10.9	6.1	10.8	15.0	11.6	-5.4
Latvia	0.7	2.1	2.2	2.3	4.4	-0.4	-13.3
Poland	9.9	6.0	9.3	6.5	5.0	3.2	-1.4
Romania	2.9	8.7	8.1	7.3	2.3	17.8	10.2
Slovakia	3.5	14.0	9.6	11.1	17.1	17.9	3.5
Slovenia	3.1	0.5	1.6	-0.5	-2.1	3.2	-9.1
Hungary	11.2	1.9	-1.2	1.0	-0.7	8.9	-7.2

Source: Eurostat, seasonally adjusted data, constant prices of 2010, for Slovakia - seasonal non working days adjustment.

Table 4. Exports of goods and services (in %, y/y)

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	0.7	8.0	13.9	6.8	5.4	6.1	0.3
Croatia	7.9	9.2	7.1	10.4	8.2	11.1	7.0
Czech Rep.	8.8	7.2	7.3	7.3	7.0	7.3	6.0
Estonia	1.8	-1.1	2.1	-0.7	-3.8	-1.9	-0.9
Lithuania	3.0	-0.1	2.6	-0.5	-2.0	-0.3	5.8
Latvia	3.0	1.3	3.3	1.5	1.3	-0.8	-1.8
Poland	6.7	6.8	7.0	6.4	6.6	7.1	6.3
Romania	9.4	4.0	7.4	6.2	1.8	0.9	0.7
Slovakia	3.6	7.0	5.2	6.2	7.4	9.2	0.2
Slovenia	5.4	4.5	6.2	6.2	4.2	1.7	6.7
Hungary	7.6	8.4	8.6	8.8	8.6	7.8	5.6

Source: Eurostat, seasonally adjusted data, constant prices of 2010, for Slovakia - seasonal non working days adjustment.

Table 5. Imports of goods and services (in %, y/y)

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	1.9	4.4	6.0	5.0	2.6	4.1	-1.2
Croatia	4.4	8.6	5.7	6.6	8.1	13.8	6.1
Czech Rep.	9.8	8.1	9.1	8.3	7.9	7.0	5.6
Estonia	1.4	-1.8	-0.5	-2.6	-3.4	-1.0	2.5
Lithuania	2.8	6.0	8.2	8.4	4.4	3.3	0.5
Latvia	0.8	1.8	0.6	2.1	5.1	-0.5	4.9
Poland	10.0	6.4	7.2	5.6	4.7	8.0	9.1
Romania	8.0	9.3	10.1	11.0	10.2	6.2	7.5
Slovakia	4.3	8.2	5.0	7.4	10.0	10.5	0.5
Slovenia	3.7	3.9	5.9	4.0	3.0	2.6	4.3
Hungary	8.5	7.8	7.5	7.4	8.1	8.0	7.8

Source: Eurostat, seasonally adjusted data, constant prices of 2010, for Slovakia - seasonal non working days adjustment.

2. Business cycle and economic activity indicators

Table 6. Industrial production (in %, y/y)

	09.2015	10.2015	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016
Bulgaria	1.5	0.7	1.7	2.5	3.8	2.1	3.0	3.0
Croatia	5.4	6.3	6.9	3.6	0.6	8.3	4.5	6.8
Czech Rep.	3.6	6.4	6.3	3.1	-0.6	4.0	1.8	4.0
Estonia	-4.0	-2.1	-2.3	-6.3	-8.3	-0.3	-1.9	-5.0
Lithuania	0.7	6.4	6.9	5.5	4.7	9.7	4.5	4.7
Latvia	2.1	1.7	2.0	4.6	3.0	5.5	4.5	1.8
Poland	4.4	4.8	4.9	5.6	4.3	3.6	2.8	1.2
Romania	3.3	2.8	2.6	2.6	2.2	-0.9	-0.4	0.2
Slovakia	6.7	4.2	2.1	7.7	4.9	2.9	6.0	-0.9
Slovenia	6.1	3.4	4.6	5.6	4.4	5.7	5.9	4.5
Hungary	7.8	12.6	12.6	7.0	7.0	2.4	2.0	-2.1

Source: Eurostat

Table 7. Retail trade turnover (in %, y/y)

	09.2015	10.2015	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016
Bulgaria	-0.2	0.4	0.8	0.4	0.9	2.7	3.9	4.0
Croatia	1.2	4.5	5.1	6.4	1.8	2.0	2.8	
Czech Rep.	7.1	7.2	6.5	6.6	5.7	4.9	5.3	5.8
Estonia	4.3	5.7	1.7	6.4	8.6	5.8	2.8	5.8
Lithuania	5.8	6.0	4.8	4.8	6.3	6.1	4.8	5.7
Latvia	5.3	5.2	1.4	2.2	3.2	2.1	0.5	1.7
Poland	4.5	6.2	6.0	7.1	6.6	4.9	3.0	8.1
Romania	12.3	13.4	14.1	14.2	15.4	16.8	19.4	19.0
Slovakia	2.6	1.2	2.9	2.3	1.5	1.6	2.0	3.5
Slovenia	0.0	0.7	1.5	1.4	2.0	-1.1	0.8	1.8
Hungary	5.3	5.0	4.4	4.5	3.0	5.2	4.7	6.1

Source: Eurostat

Table 8. Consumer confidence indicator

	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016	06.2016
Bulgaria	-29.9	-29.8	-30.7	-29.9	-29.5	-29.2	-29.4	-27.4
Croatia	-25.1	-25.5	-20.2	-23.3	-24.9	-24.6	-28.3	
Czech Rep.	2.9	4.1	6.6	4.8	3.4	2.4	2.4	2.9
Estonia	-5.6	-6.0	-6.6	-13.7	-15.0	-12.9	-8.4	-8.9
Lithuania	-7.3	-5.6	-6.6	-8.5	-8.2	-8.8	-11.8	-8.1
Latvia	-8.9	-8.4	-8.2	-7.0	-9.5	-8.1	-8.6	-8.7
Poland	-11.5	-12.3	-11.4	-11.7	-10.9	-5.9	-9.5	-9.4
Romania	-17.8	-20.6	-17.9	-20.3	-20.2	-17.6	-18.6	-19.6
Slovakia	-12.5	-10.7	-5.4	-7.2	-10.0	-8.9	-7.0	-7.5
Slovenia	-11.2	-9.8	-15.8	-18.3	-19.1	-16.4	-17.4	-16.8
Hungary	-17.9	-18.9	-16.2	-19.0	-23.0	-19.6	-17.2	-18.2

Source: European Commission, CNB

Table 9. Business climate indicator

	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016	06.2016
Bulgaria	1.1	1.8	1.3	-0.1	0.1	-1.4	-2.9	-0.5
Croatia	22.0	25.0	25.0	25.0	17.0	17.0	17.0	
Czech Rep.	1.1	1.0	4.0	2.6	1.0	1.9	2.5	2.2
Estonia	-1.6	-0.2	0.8	-0.2	0.6	-0.4	-1.9	-0.4
Lithuania	-1.5	-7.6	-7.2	-7.9	-9.5	-12.2	-10.8	-12.6
Latvia	-7.1	-6.2	-5.9	-7.2	-5.4	-4.5	-4.8	-3.2
Poland	-11.5	-12.2	-11.6	-11.3	-10.8	-11.4	-12.7	-11.8
Romania	0.0	0.1	0.3	-1.1	-0.8	-0.1	-0.3	1.0
Slovakia	-0.6	-2.9	11.1	8.9	7.9	3.6	2.8	2.1
Slovenia	7.0	6.6	4.4	3.9	3.8	7.5	3.9	3.7
Hungary	6.5	4.5	5.4	3.4	4.5	1.9	3.9	4.8

Source: European Commission, OeKB

3. Prices

Table 10. HICP (in %, y/y)

	10.2015	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016
Bulgaria	-1.2	-0.9	-0.9	-0.4	-1.0	-1.9	-2.5	-2.5
Croatia	-0.5	-0.4	-0.3	-0.2	-0.6	-0.9	-0.9	-1.2
Czech Rep.	0.1	0.0	-0.1	0.5	0.5	0.3	0.5	0.0
Estonia	0.0	0.5	-0.2	0.1	0.4	0.5	0.0	0.0
Lithuania	-0.4	-0.5	-0.2	0.7	0.5	0.8	0.8	0.2
Latvia	-0.1	0.0	0.4	-0.3	-0.6	-0.6	-0.7	-0.8
Poland	-0.6	-0.5	-0.4	-0.3	-0.2	-0.4	-0.5	-0.4
Romania	-1.4	-0.9	-0.7	-1.5	-2.1	-2.4	-2.6	-3.0
Slovakia	-0.5	-0.4	-0.5	-0.6	-0.3	-0.5	-0.4	-0.7
Slovenia	-1.2	-0.9	-0.6	-0.8	-0.9	-0.9	-0.7	-0.5
Hungary	0.2	0.6	1.0	1.0	0.3	-0.2	0.3	-0.1

Source: Eurostat

Table 11. HICP – all items excluding energy, food, alcohol and tobacco (in %, y/y)

	10.2015	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016
Bulgaria	-0.6	-0.3	0.1	0.1	-0.3	-0.4	-0.6	-0.7
Croatia	1.2	1.1	0.8	0.7	0.8	0.7	0.6	1.0
Czech Rep.	0.6	0.6	0.7	0.6	0.8	1.2	1.3	1.3
Estonia	1.0	0.9	1.6	2.2	1.3	1.3	1.8	1.6
Lithuania	1.7	2.1	2.4	2.5	2.5	2.2	2.2	2.7
Latvia	1.6	1.3	1.4	1.1	1.2	1.0	0.7	1.0
Poland	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3
Romania	1.4	1.4	1.4	1.5	1.6	0.6	0.2	0.1
Slovakia	0.5	0.4	0.4	0.5	0.7	0.8	0.9	0.9
Slovenia	0.2	0.3	0.1	0.6	0.4	0.2	0.2	0.4
Hungary	1.6	1.8	1.9	1.7	1.7	1.7	1.6	1.6

Source: Eurostat

4. Balance of payments

Table 12. Current account balance (in % of GDP, 4-quarter moving average)

	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	0.7	1.0	0.9	1.5	0.9	1.2	1.4	1.8
Croatia	0.5	0.4	0.9	1.4	2.2	4.8	5.2	8.0
Czech Rep.	0.2	0.0	0.2	0.4	0.6	0.6	0.9	1.4
Estonia	-1.5	-0.9	-0.2	0.2	1.1	1.3	0.8	0.5
Lithuania	1.3	3.0	3.6	2.7	1.0	-1.2	-1.7	-0.8
Latvia	-2.4	-2.0	-2.0	-1.6	-1.7	-1.8	-1.2	-0.6
Poland	-2.0	-2.3	-2.0	-1.3	-0.4	-0.4	-0.2	-0.4
Romania	-1.5	-1.2	-0.5	-0.2	-0.2	-0.4	-1.1	-2.2
Slovakia	0.4	0.1	0.1	0.2	-0.4	-1.4	-1.3	-1.8
Slovenia	5.8	6.4	7.0	6.8	7.1	7.6	7.3	7.8
Hungary	3.1	2.6	2.0	2.6	3.4	3.7	4.4	4.7

Source: Eurostat, central banks, calculations of EI NBP

Table 13. Direct investment balance (in % of GDP, 4-quarter moving average)

	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	-2.4	-1.3	-2.1	-2.6	-3.1	-4.6	-3.4	-2.9
Croatia	-2.0	-2.8	-3.1	-3.1	-2.2	-1.3	-0.3	0.3
Czech Rep.	-1.6	-2.0	-1.9	-1.3	-0.4	0.3	0.6	0.6
Estonia	-0.9	-1.7	-2.8	-3.5	-0.9	-1.0	0.4	1.1
Lithuania	-0.9	-0.2	0.4	-0.6	-1.0	-1.6	-2.1	0.4
Latvia	-1.2	-1.4	-1.0	-1.9	-2.1	-2.3	-2.3	-1.2
Poland	-1.3	-2.1	-2.0	-1.6	-1.1	-1.4	-1.5	-1.4
Romania	-2.3	-2.4	-1.8	-1.8	-1.9	-2.0	-1.7	-1.7
Slovakia	-0.3	0.6	0.2	-1.0	-0.8	-0.8	-1.1	-0.2
Slovenia	-1.9	-2.6	-1.6	-2.8	-1.3	-0.7	-2.5	-2.3
Hungary	-0.9	-2.8	-2.8	-1.8	-1.9	-1.3	0.8	0.5

Source: Eurostat, central banks, calculations of EI NBP

Table 14. International investment position (in % of GDP, end of quarter)

	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	-77.6	-75.5	-74.9	-70.7	-63.5	-62.1	-60.7	
Croatia	-93.1	-88.8	-88.0	-89.7	-89.3	-80.4	-78.6	
Czech Rep.	-38.0	-36.4	-36.9	-32.3	-32.1	-33.5	-31.5	-28.1
Estonia	-46.6	-44.6	-42.7	-45.5	-43.7	-42.8	-40.5	-41.4
Lithuania	-47.0	-46.6	-46.2	-49.1	-48.1	-47.8	-45.2	-47.2
Latvia	-64.6	-64.4	-60.9	-61.7	-60.0	-61.5	-59.3	
Poland	-68.7	-69.4	-67.2	-68.7	-65.8	-63.4	-60.5	
Romania	-59.3	-58.2	-56.9	-54.8	-53.4	-52.2	-50.2	-49.4
Slovakia	-67.8	-67.6	-69.0	-70.9	-69.2	-69.0	-69.4	
Slovenia	-46.2	-44.7	-43.7	-42.7	-40.9	-38.9	-38.5	
Hungary	-87.9	-83.1	-79.8	-83.0	-76.4	-73.8	-66.1	-66.7

Source: Eurostat, central banks, calculations of EI NBP

Table 15. Official reserves to foreign debt ratio* (in %, end of quarter)

	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	38.3	40.4	42.2	48.1	54.0	58.6	59.5	61.4
Croatia	26.6	26.0	27.2	28.8	28.1	28.6	30.1	
Czech Rep.	42.2	42.4	42.2	45.4	46.8	47.9	51.1	54.8
Estonia	1.7	2.0	1.9	2.2	1.7	1.9	2.0	2.3
Lithuania	24.6	25.1	27.9	3.6	7.4	7.0	5.6	7.7
Latvia	7.9	7.8	7.9	8.5	8.7	9.1	9.4	8.8
Poland	26.1	27.3	28.2	29.5	30.3	29.3	28.7	
Romania	36.2	36.4	37.5	37.0	37.0	36.3	39.4	39.2
Slovakia	2.5	2.6	3.2	5.2	3.6	4.4	3.9	
Slovenia	1.9	1.8	1.8	1.9	2.0	1.9	1.8	1.7
Hungary	29.4	29.5	29.0	28.9	28.1	27.4	26.3	24.3

**Official reserve assets according to central banks statements*

Source: Eurostat, central banks, calculations of EI NBP

5. Labour market

Table 16. Employment (in %, y/y)

	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
Bulgaria	1.0	1.0	1.4	1.9	1.9	1.0	1.2	2.2
Croatia	1.9	1.6	1.9	1.9	1.6	1.4	1.2	1.5
Czech Rep.	0.7	0.2	0.9	1.3	1.2	1.4	0.9	0.7
Estonia	-0.7	-0.2	1.0	1.8	2.2	1.3	4.3	1.0
Lithuania	1.9	0.9	2.9	1.7	1.6	1.6	-0.2	1.0
Latvia	0.4	0.1	-2.5	-1.5	0.0	0.8	1.9	1.6
Poland	0.5	1.7	-0.4	0.2	0.5	0.4	2.0	1.1
Romania	1.0	0.4	1.4	0.8	-1.4	0.4	0.0	0.0
Slovakia	0.1	1.0	1.7	2.6	2.4	2.5	2.3	2.4
Slovenia	-0.6	0.6	1.1	1.1	1.8	0.7	0.5	0.5
Hungary	7.1	4.9	5.3	4.4	1.9	3.0	2.7	2.7

Source: Eurostat

Table 17. Unemployment rate (in %, of labour force)

	09.2015	10.2015	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016
Bulgaria	8.4	8.1	7.9	7.7	7.5	7.4	7.3	7.1
Croatia	16.3	15.9	15.7	15.3	15.2	15.1	14.9	14.6
Czech Rep.	4.7	4.6	4.5	4.5	4.3	4.2	4.1	4.1
Estonia	5.6	6.2	6.4	6.3	6.3	6.3	6.8	
Lithuania	8.9	8.9	8.8	8.9	8.6	8.5	8.4	8.2
Latvia	9.9	9.9	9.9	10	10	9.8	9.6	9.6
Poland	7.3	7.2	7.1	6.9	6.6	6.5	6.3	6.3
Romania	6.9	6.6	6.6	6.7	6.5	6.4	6.4	6.4
Slovakia	11.3	11.1	10.9	10.7	10.5	10.4	10.3	10.2
Slovenia	8.7	8.5	8.3	8.3	8.3	8.2	8.1	7.8
Hungary	6.5	6.4	6.3	6.1	5.9	5.7	5.6	

Source: Eurostat

Table 18. Nominal wages (in %, y/y)

	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Bulgaria	5.2	4.6	6.7	8.2	8.0	8.2	5.2	5.6
Croatia	0.1	0.1	-0.2	2.7	3.0	0.6	0.7	
Czech Rep.	2.8	1.3	3.5	2.6	2.1	2.1	8.3	1.0
Estonia	7.6	5.5	5.8	3.9	5.0	5.8	3.9	7.8
Lithuania	5.6	4.3	4.8	6.3	5.0	7.0	5.3	7.3
Latvia	9.5	6.5	7.3	7.2	6.8	7.6	7.8	7.1
Poland	4.0	3.0	2.2	5.4	2.6	4.1	3.2	3.8
Romania	6.0	6.2	8.7	7.1	7.6	6.8	9.1	7.0
Slovakia	3.0	2.4	1.4	2.4	2.5	-0.9	0.0	-1.1
Slovenia	7.0	6.1	4.6	4.1	3.2	2.9	5.6	3.4
Hungary	4.1	3.4	2.4	3.9	4.0	4.2	3.3	

Source: Eurostat

Table 19. ULC (in %, y/y)

	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
Bulgaria	6.1	4.2	4.3	6.5	7.1	6.1	6.3	4.4
Croatia	0.2	2.2	2.4	1.4	4.1	2.9	-0.9	0.2
Czech Rep.	2.6	1.1	-0.1	2.9	-0.1	-0.9	-1.6	4.9
Estonia	3.5	4.1	4.0	4.5	4.9	4.7	9.3	3.9
Lithuania	3.7	6.6	6.9	7.1	7.6	7.1	5.6	6.7
Latvia	2.1	2.4	-0.4	0.9	4.2	3.0	5.6	4.6
Poland	0.6	1.6	-1.1	-1.9	-0.8	-0.2	-2.3	-2.8
Romania	3.2	4.0	4.4	6.7	1.6	4.2	3.1	5.0
Slovakia	1.8	5.5	5.2	4.5	3.3	2.2	1.4	4.0
Slovenia	1.6	1.4	0.5	0.9	4.2	0.7	2.4	1.1
Hungary	6.7	4.8	5.3	3.7	2.3	4.4	4.6	2.9

Source: Eurostat, EI NBP calculations

6. Financial markets and financial system

Table 20. 3-month interbank rates (monthly averages)

	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016	06.2016
Bulgaria	0.49	0.43	0.24	0.18	0.14	0.12	0.14	0.13
Croatia	1.07	0.92	0.72	0.59	0.58	0.55	0.55	0.55
Czech Rep.	0.29	0.29	0.29	0.28	0.29	0.29	0.29	0.29
Estonia	-0.09	-0.13	-0.15	-0.18	-0.23	-0.25	-0.26	-0.27
Lithuania	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Latvia	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Poland	1.73	1.72	1.70	1.68	1.67	1.67	1.68	1.71
Romania	1.07	1.02	0.85	0.76	0.78	0.76	0.75	0.81
Slovakia	-0.11	-0.13	-0.16	-0.21	-0.24	-0.25	-0.26	-0.29
Slovenia	-0.11	-0.13	-0.16	-0.21	-0.24	-0.25	-0.26	-0.29
Hungary	1.35	1.35	1.35	1.34	1.20	1.05	1.01	1.01

Source: Reuters

Table 21. ULC-deflated REER (in %, y/y – growth means appreciation)

	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
Bulgaria	5.5	3.9	2.5	1.7	0.7	0.3	0.5	0.7
Croatia	-7.6	-6.8	-7.8	-5.1	-3.3	-3.0	-0.9	-0.1
Czech Rep.	-4.4	-4.4	-4.7	-3.4	-2.9	-1.5	-0.4	-0.2
Estonia	3.1	2.4	2.5	3.7	5.1	5.5	5.8	4.5
Lithuania	1.7	1.2	1.0	1.8	2.0	2.0	2.4	1.9
Latvia	3.2	3.3	3.2	3.2	2.5	1.6	1.6	1.3
Poland	-1.7	-0.4	0.5	-1.7	-1.6	0.5	-1.6	-2.5
Romania	-1.6	2.0	3.3	1.8	0.2	-3.0	-2.8	-1.4
Slovakia	0.2	-0.1	-0.3	-0.4	-1.0	-1.4	-1.1	-0.9
Slovenia	-1.5	-2.2	-2.6	-2.5	-2.7	-2.6	-2.0	-1.5
Hungary	-4.8	-4.6	-5.6	-3.7	0.1	1.0	1.6	0.3

Source: BIS, EI NBP calculations

Table 22. Central banks' policy rates (end of period)

	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016	06.2016
Czech Rep.	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Poland	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Romania	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Hungary	1.35	1.35	1.35	1.35	1.20	1.05	0.90	0.90

Source: Central Banks, Reuters

Table 23. Loans to the private sector (in %, y/y)

	10.2015	11.2015	12.2015	01.2016	02.2016	03.2016	04.2016	05.2016
Bulgaria	-10.2	-0.2	-1.6	-1.9	-1.9	-2.3	-1.9	-1.1
Croatia	-1.0	-0.9	-1.5	-5.7	-6.8	-8.0	-7.8	
Czech Rep.	8.3	8.1	6.5	7.0	7.2	8.4	8.5	
Estonia	3.5	3.8	4.8	5.5	5.9	6.1	5.9	6.0
Lithuania	4.5	4.9	5.2	6.1	6.2	6.4	6.5	7.6
Latvia	-3.8	-4.5	-3.4	-3.8	-3.4	-4.2	-3.1	
Poland	7.3	7.1	7.3	6.6	6.7	5.6	7.5	5.9
Romania	0.2	1.9	2.5	2.3	2.1	2.3	2.2	1.4
Slovakia	8.3	9.3	9.7	8.6	7.8	8.0	8.2	7.9
Slovenia	-8.0	-8.0	-5.4	-6.2	-7.8	-8.3	-7.4	-7.5
Hungary	-7.8	-8.1	-12.3	-15.0	-13.9	-6.4	-6.2	

Source: Central banks

7. Public finance

Table 24. General government fiscal balance defined according to ESA '95 (in %, of GDP)

	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	1.6	-4.1	-3.2	-2.0	-0.3	-0.4	-5.4	-2.1
Croatia	-2.8	-6.0	-6.2	-7.8	-5.3	-5.3	-5.5	-3.2
Czech Rep.	-2.1	-5.5	-4.4	-2.7	-3.9	-1.3	-1.9	-0.4
Estonia	-2.7	-2.2	0.2	1.2	-0.3	-0.2	0.8	0.4
Lithuania	-3.1	-9.1	-6.9	-8.9	-3.1	-2.6	-0.7	-0.2
Latvia	-4.1	-9.1	-8.5	-3.4	-0.8	-0.9	-1.6	-1.3
Poland	-3.6	-7.3	-7.5	-4.9	-3.7	-4.0	-3.3	-2.6
Romania	-5.5	-9.5	-6.9	-5.4	-3.7	-2.1	-0.9	-0.7
Slovakia	-2.3	-7.9	-7.5	-4.1	-4.3	-2.7	-2.7	-3.0
Slovenia	-1.4	-5.9	-5.6	-6.7	-4.1	-15.0	-5.0	-2.9
Hungary	-3.6	-4.6	-4.5	-5.5	-2.3	-2.6	-2.3	-2.0

Source: Eurostat

Table 25. Government debt defined according to ESA '95 (in %, of GDP)

	2008	2009	2010	2011	2012	2013	2014	2015
Bulgaria	13.0	13.7	15.5	15.3	16.8	17.1	27.0	26.7
Croatia	39.6	49.0	58.3	65.2	70.7	82.2	86.5	86.7
Czech Rep.	28.7	34.1	38.2	39.9	44.7	45.1	42.7	41.1
Estonia	4.5	7.0	6.6	5.9	9.5	9.9	10.4	9.7
Lithuania	14.6	29.0	36.2	37.2	39.8	38.8	40.7	42.7
Latvia	18.7	36.6	47.5	42.8	41.4	39.1	40.8	36.4
Poland	46.6	49.8	53.3	54.4	54.0	56.0	50.5	51.3
Romania	13.2	23.2	29.9	34.2	37.4	38.0	39.8	38.4
Slovakia	28.2	36.0	40.8	43.3	52.4	55.0	53.9	52.9
Slovenia	21.8	34.6	38.4	46.6	53.9	71.0	81.0	83.2
Hungary	71.6	78.0	80.6	80.8	78.3	76.8	76.2	75.3

Source: Eurostat

8. Forecasts

Table 26. Economic growth rate forecasts (in %, y/y)

		EC		IMF	
	2015	2016	2017	2016	2017
Bulgaria	3.0	2.0	2.4	2.3	2.3
Croatia	1.6	1.8	2.1	1.9	2.1
Czech Rep.	4.2	2.1	2.6	2.5	2.4
Estonia	1.1	1.9	2.4	2.2	2.8
Lithuania	1.6	2.8	3.1	2.7	3.1
Latvia	2.7	2.8	3.1	3.2	3.6
Poland	3.6	3.7	3.6	3.6	3.6
Romania	3.8	4.2	3.7	4.2	3.6
Slovakia	3.6	3.2	3.3	3.3	3.4
Slovenia	2.9	1.7	2.3	1.9	2.0
Hungary	2.9	2.5	2.8	2.3	2.5

Table 27. Inflation forecasts (in %, y/y)

		EC		IMF	
	2015	2016	2017	2016	2017
Bulgaria	-1.1	-0.7	0.9	0.2	1.2
Croatia	-0.3	-0.6	0.7	0.4	1.3
Czech Rep.	0.3	0.5	1.4	1.0	2.2
Estonia	0.1	0.8	2.9	2.0	2.9
Lithuania	-0.7	0.6	1.8	0.6	1.9
Latvia	0.2	0.2	2.0	0.5	1.5
Poland	-0.7	0.0	1.6	-0.2	1.3
Romania	-0.4	-0.6	2.5	-0.4	3.1
Slovakia	-0.3	-0.1	1.5	0.2	1.4
Slovenia	-0.8	-0.2	1.6	0.1	1.0
Hungary	0.1	0.4	2.3	0.5	2.4

Sources for tables 26-27: European Commission (05.2016), IMF (04.2016)

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