

## MIGRATION AND THE LABOUR MARKET – THE CASE OF POLAND AND THE BALTIC STATES

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**Key words:** emigration, labour market, Poland, Baltic States.

### Abstract

This article aims to examine the economic impact of emigration on labour market developments in Poland, Lithuania, Latvia and Estonia (since EU accession) in a comparative perspective. The realization of this goal required an analysis of the literature as well as statistical analysis. The impact of emigration on the unemployment rate reduction, the issue of labour shortages and the wage effect of emigration and rising inflation were analysed.

The main conclusion of the study is that the nature of these effects seems to be country-specific. The analysis indicated that along with reduction in labour supply, the unemployment rate reduction, the wage growth pressure and inflation were observed in all of the analysed countries. However, the strength of these developments varied among them. This differentiation can be attributed firstly to a different scale and intensity of emigration. Furthermore, differences among the analysed countries in the scope of wage pressure and inflation should be explained in the context of changes in the domestic workers productivity.

### MIGRACJE A RYNEK PRACY NA PRZYKŁADZIE POLSKI I PAŃSTW BAŁTYCKICH

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**Słowa kluczowe:** emigracja, rynek pracy, Polska, kraje bałtyckie.

## A b s t r a k t

Celem artykułu jest analiza wpływu emigracji na sytuację na rynku pracy w Polsce, na Litwie, na Łotwie i w Estonii (od przystąpienia do UE) w perspektywie porównawczej. Realizacja tego celu wymaga analizy literatury oraz analizy statystycznej. Przedmiotem analizy jest wpływ emigracji na zmniejszenie stopy bezrobocia, problem niedoboru siły roboczej wraz z wpływem emigracji na kształtowanie płac i presji inflacyjnej.

Głównym wnioskiem z przeprowadzonych badań jest swoisty charakter konsekwencji emigracji w poszczególnych krajach. Analiza wykazała, że wraz ze zmniejszeniem podaży pracy we wszystkich analizowanych krajach wystąpiło obniżenie stopy bezrobocia, presja na wzrost płac i presja inflacyjna. Siła tych zmian jest jednak różna w analizowanych krajach. To zróżnicowanie może być wyjaśnione przede wszystkim różną skalą i intensywnością emigracji. Ponadto różnice między analizowanymi krajami w zakresie presji na wzrost płac czy inflacji mogą być wyjaśnione zmianami w produktywności pracowników krajowych.

**Introduction**

Poland, Lithuania, Latvia and Estonia have extensive experience in migration both as sending and receiving countries. In the second half of twentieth century, the shape of migration flows in the Baltic States was influenced, inter alia, by relations with the Soviet Union. While the Polish labor force also found employment in the countries of the Council for Mutual Economic Assistance, it is worth pointing out that the directions of emigration were more diverse. Between 1981 and 1988, 830,000 people emigrated to Western European countries (MAREK 1992, p. 18). In the years 1991–2001, the main destination countries for Polish emigrants were: Germany (178,000 people), the USA (27,000 people) and Canada (14,400 people) as well as Austria and Italy (STACHOWIAK 2004, p. 216, see also: MAREK 1991, *Zewnętrzne migracje zarobkowe...* 2000).

The circumstances which affect migration patterns in Poland and the Baltic States have changed greatly over the last dozen years. When Poland, Lithuania, Latvia and Estonia joined the European Union in 2004, the citizens of these countries gained the right to move and reside freely within the territory of the EU (taking into consideration restrictions for movement that terminated on 1 May 2011). Not surprisingly, none of the countries under consideration sought transitional periods during negotiations, which resulted from the assumption of the predominance of gains over costs stemming from the free movement of workers. Inasmuch as not all expectations were met, the aim of the paper is to examine the economic consequences of emigration on Poland, Lithuania, Latvia and Estonia (since EU accession) from a comparative perspective. Firstly, the main determinants of the different scale and intensity of emigration in the four countries will be indicated. Then, the

differentiated impact of emigration will be analysed (including *inter alia*: the wage effect of emigration, the impact of outflow on the unemployment rate reduction, the issue of labour shortages together with the rising inflation). The analysis is expected to show that the nature of these effects seems to be country-specific.

In the light of theory, international labour movement can enhance the world economy's efficiency. As far as the destination country is concerned, an increase in labour supply leads to a decline in wages. On the contrary, as a result of a reduction of labour supply (through emigration), wages rise in the sending country (CARBAUGH 2015, p. 316, 318). This simple theoretical model does not take into account the consequences of wage growth in excess of productivity growth. As will be shown, on the basis of the analysis of emigration from Poland and the Baltic States, the consequences of emigration for the sending country include not only a decline in unemployment but an increase in wages. Emigration is also accompanied by negative phenomena such as inflation or labour shortages.

In spite of the enlargement of the EU in 2004 and a significant increase in emigration from the EU-10 and increased research into the issues concerning the economic consequences of migration, the research was mainly written from the perspective of the host countries. On the other hand, studies on the effects of emigration from the sending countries point of view were often conducted for a group of countries (as a whole) – EU-8 or EU-10. Thus, the motivation of this paper was twofold: firstly, to show the impact of emigration on the labour market from the sending countries' point of view and secondly, by adopting a comparative perspective to present differences among Poland, Lithuania, Latvia and Estonia as far as the impact of emigration on labour development is concerned.

### **The scale and the determinants of migration in Poland and the Baltic States**

Poland, Lithuania, Latvia and Estonia have a slightly different emigration experience as far as the scale of emigration and its intensity in particular periods are concerned. In Lithuania and Latvia emigration rose shortly after the EU accession – in 2005 and 2004 respectively. In Poland and Estonia, a significant increase in emigration came later – in 2006.

What is common for all of the analysed countries is the second wave of emigration that took place a few years later: in Lithuania and Latvia, emigration started to grow again from 2008 and reached its peak in 2010. In Poland emigration reached the highest value later – in 2013, whilst in Estonia – in 2015 (see Fig. 1).

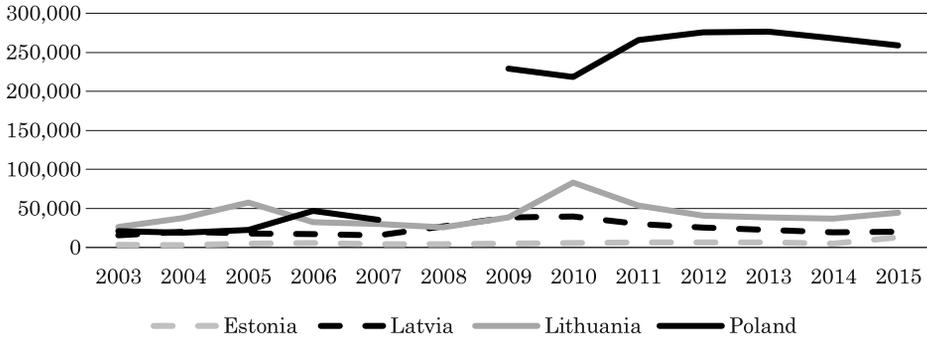


Fig. 1. Emigration flows from Poland and the Baltic States between 2003–2015 (no data available for Poland for 2008), in thousands  
 Source: own elaboration based on Eurostat database (Eurostat 2017).

As one can notice, not surprisingly, being the biggest country of the region, Poland recorded the highest emigration flows in absolute terms. However, such an approach carries the risk of a misleading interpretation: it is desirable in comparative studies to present the data in relative terms (see Fig. 2), especially when countries taken into account are of such different sizes. A relative approach also allows us to reveal the importance of the phenomenon from the sending countries point of view.

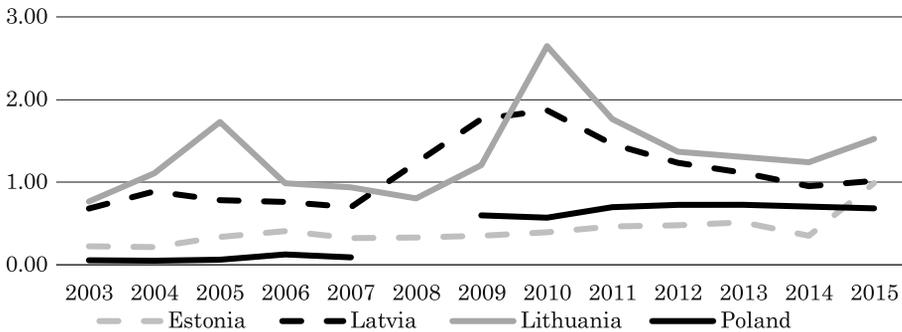


Fig. 2. Emigration rate in Poland and the Baltic States between 2003–2015 (no data available for Poland for 2008), in %  
 Source: own calculation based on Eurostat database (Eurostat 2017).

Country statistics show that in relative terms (i.e. in relation to the population of the country) emigration was the strongest in Lithuania and Latvia. With the exception of 2008 and 2009, the emigration rate was the highest in Lithuania, reaching 2.65% in 2010 (for a country with approximately 3.1 million people then, emigration of 83 thousand people represents

a sizable proportion of its population). Latvia also recorded a high emigration rate with its peak (at the level of 1.87%) in 2010. Thus, although Poland was the main sending country, it was not Poland that was most affected by the phenomenon of emigration.

Furthermore, the analysis of the emigration impact on the labour market requires referring to the data on the decline in the working age population. The number of Lithuanian, Latvian, Polish and Estonian emigrants between 2004 and 2007 accounted for respectively: 5.22% of Lithuania, 3.95% of Latvia, 2.32% of Poland and 1.49% of Estonias' working age population. Consequently, Lithuania and Latvia felt the most negative impact in the decline of the working age population (D'AURIA et al. 2008, p. 5, KAHANEC, ZIMMERMANN 2008, p. 9).

In conclusion, one may distinguish two types of countries as far as migration patterns after the EU accession are concerned: with regards to a high scale of migration – Poland, and with regards to high intensity of migration – Lithuania and Latvia. Estonia recorded quite modest migration processes as compared to Poland, Lithuania and Latvia.

Taking into account these findings, it is reasonable to detect the reasons for the differentiation among the analysed countries in terms of the scale of emigration. Analysing the main push factors: the level of GDP and unemployment rate (as compared to the EU), one can find the reason for the modest emigration rate in Estonia on the one hand and high emigration recorded in Poland, on the other hand. In the year of accession to the EU, Estonia recorded the lowest – among the analysed countries – unemployment rate, at the level of 10.2% and at the same time, the highest level of GDP per capita. Poland, on the contrary, recorded the highest unemployment rate – at the level of 19.1% (with regards to the level of GDP, Poland took next to last place, ahead of Latvia only).

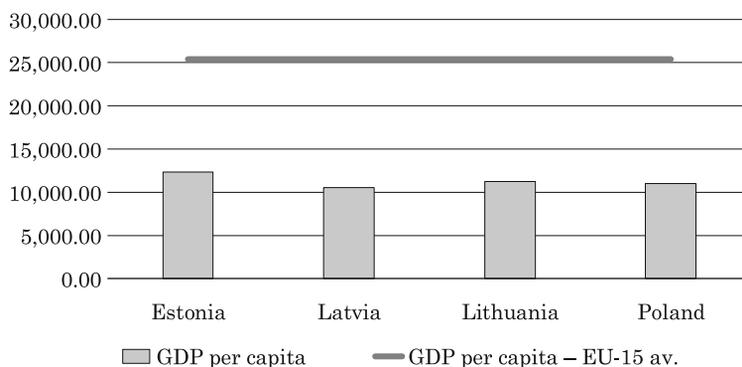


Fig. 3. GDP (PPS per capita) in Poland and the Baltic States compared to the EU average in 2004  
Source: own elaboration based on Eurostat database (Eurostat 2017).

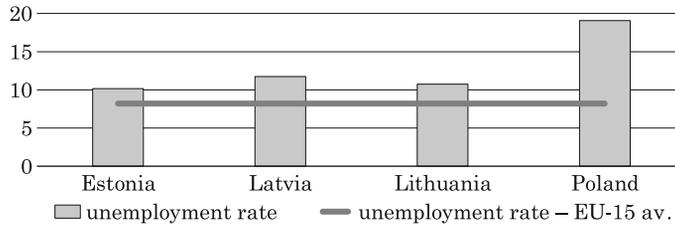


Fig. 4. Unemployment rate in Poland and the Baltic States compared to the EU average in 2004 (in %) Source: own elaboration based on Eurostat database (Eurostat 2017).

Nevertheless, all the analysed countries had strong incentives to emigrate: the unemployment rate both in Poland as well as in all the Baltic States was higher than the average for the EU-15 (Fig. 4). GDP per capita in Estonia, Latvia, Lithuania and Poland accounted for – respectively: 48%, 41%, 44% 43% of the average for the EU-15 (Fig. 3).

### The effects of emigration on the labour market of Poland and the Baltic States

The accession of Poland, Lithuania, Latvia and Estonia to the EU was preceded by lengthy and active negotiations, also in the area of free movement of the workforce. It is worth noting that the objective of all the analysed countries was to achieve the shortest possible transition periods, which indicates a conviction of the superiority of benefits over costs stemming from that freedom. Therefore, the public discussion which lasted parallel to the negotiations stressed mostly the former, indicating the possibility of a significant drop in unemployment.

The impact of emigration on the unemployment rate is not easy to determine. The degree of the impact depends, among others, on the migrants' structure and their status in the labour market before deciding to emigrate. While in the case of people who decided to emigrate due to the lack of employment in their country, an outflow causes a drop in the number of unemployed (the effect of exporting unemployment), whereas in the case of people who emigrated in spite of having a job (and the reason for the migration was e.g. low wages), emigration results in an increase in the number of vacancies. Here emigration may indirectly affect the reduction in the level of unemployment, when vacancies can be filled by the existing unemployed. However, in the absence of volunteers to work, vacancies may remain unfilled.

Certain migration strategies have no impact on reducing the level of unemployment. For instance, in the case of temporary migration, employment

abroad, when one emigrates during holidays (as the emigration of Polish teachers to another Member State during the summer break), will not have the substitutional character in relation to their employment in the country of origin. Emigration can also indirectly influence the decrease in unemployment by increasing employment through the multiplier effect associated with the increase in consumption by households receiving remittances from abroad.

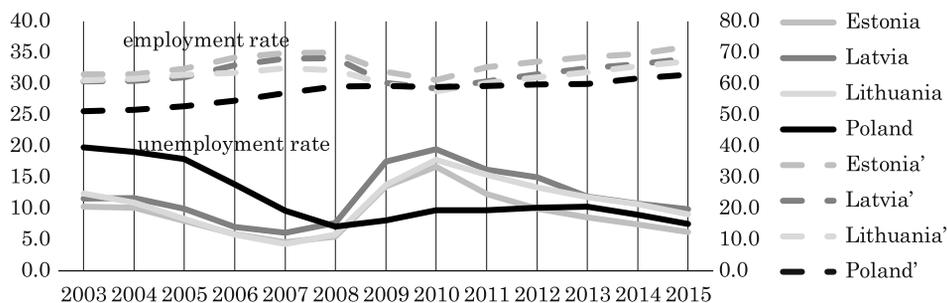


Fig. 5. Unemployment rate (left axis) and employment rate (right axis) in Poland and the Baltic States between 2003–2015

Source: own elaboration based on Eurostat database (Eurostat 2017).

As one can notice from the data in Figure 5, since the accession to the EU, the unemployment rate in Poland and the Baltic States started to decline. The decrease was significant, especially in the first years after accession: in Poland from 19.1% in 2004 to 9.6% in 2007; in Lithuania to the level of 4.3% in 2007. The decline in unemployment is connected with the phenomenon of emigration after the accession to the EU (HAZANS, PHILIPS 2011, p. 3, KAHANEC et al. 2009, p. 30). However, in all of the analysed countries after 1 May 2004 there was also an increase in the demand for labour<sup>1</sup>. For example, in Poland, the number of newly created jobs – between 2005 and 2007 amounted to more than 1,350 thousand (*Popyt na pracę w 2005 r.* 2006, p. 15, *Popyt na pracę w 2006 r.* 2007, p. 50, *Popyt na pracę w 2007 r.* 2008, p. 50). Identifying the factor, which had a strong impact on unemployment reduction (emigration or increasing labour demand) is straitened. A study by SCHREINER (2008, p. 87) indicates that in Poland and the Baltic States the unemployment reduction was to a significant extent driven by an increase in employment. Another study – devoted to emigration from eight Central and Eastern European countries

<sup>1</sup> Due to the lack of the data for all analysed countries about the number of newly created jobs in the analysed period, labour demand was identified as employment level (i.e. number of available jobs). Such approach is not perfect – the level of employment does not include job vacancies (i.e. unsatisfied labour demand).

(EU8) that joined the EU in 2004 – points out that emigration reduced unemployment in 2009 by 0.27 of a percentage point in the EU8 (ZAICEVA 2014, p. 6).

Along with unemployment reduction, a problem of unmet demand for labour occurred. One can distinguish three periods: 2005–2007, 2008–2010 and 2011–2015. In all of the analysed countries, between 2005 and 2007 as well as between 2011 and 2015 the unemployment rate reduction was concurrent with an increase in the job vacancy rate. Between 2008 and 2010 the unemployment rate rose in all analysed countries. What is worth highlighting are the similar changes of the Beveridge curve in all analysed countries (Fig. 6).

At the beginning of 2005 in all of the analysed countries, a high unemployment rate and a low job vacancy rate occurred. Inasmuch as those points are to the right of the 45 ray, this would indicate that there was a demand deficiency (*Structural Unemployment...* 2012, p. 3). Analysing movements along the curve between 2005 and 2007 one can notice the counter-clockwise movements, typical for a business cycle pattern of the falling unemployment as vacancies increased. The job vacancy rate increased significantly in all the analysed countries: from 0.7% to 1.5% in Poland, from 0.7% to 2.1% in Lithuania, from 1.5% to 2.1% in Latvia, and from 2.4% to 3.3% in Estonia. Thus, the problem of satisfying labour demand occurred. Two comments are indispensable here. Firstly, with the recruitment difficulties, employers took a number of measures, including an increase in salaries. This issue will be described later in the paper. Secondly, one can notice that in Poland – as opposed to the Baltic States – although unemployment declined, it was still high in 2007 (at the level of 9.6%). Thus, the high job vacancy rate and recruitment difficulties (while 1,766 thousand people were simultaneously unemployed) indicates labour mismatches.

Since 2008 the worldwide recession took hold and affected labour markets. This was manifested in the unemployment rate soaring and job vacancies plummeting at the same time, represented by a south-eastern movement on the Beveridge curve in all analysed countries. By 2010, unemployment rose significantly to 19.5% in Latvia, to 17.8 in Lithuania and to 16.7% in Estonia. Only in Poland, the increase in unemployment was moderate – to 9.7% in 2010.

Since 2011 Lithuania, Latvia and Estonia have been experiencing a drop in unemployment rates and a moderate increase in the rate of job vacancies. In Poland there are changes in the same direction, but it started later – in 2014. These changes are represented by a north-western movement on the Beveridge curve in all analyzed countries. However, unlike the changes between 2005 and 2007, there has been no such significant increase in the rate of job vacancies. Over the analyzed period (i.e. between 2005 and 2015), in all analyzed countries, it was in 2007 when there were the biggest labor shortages.

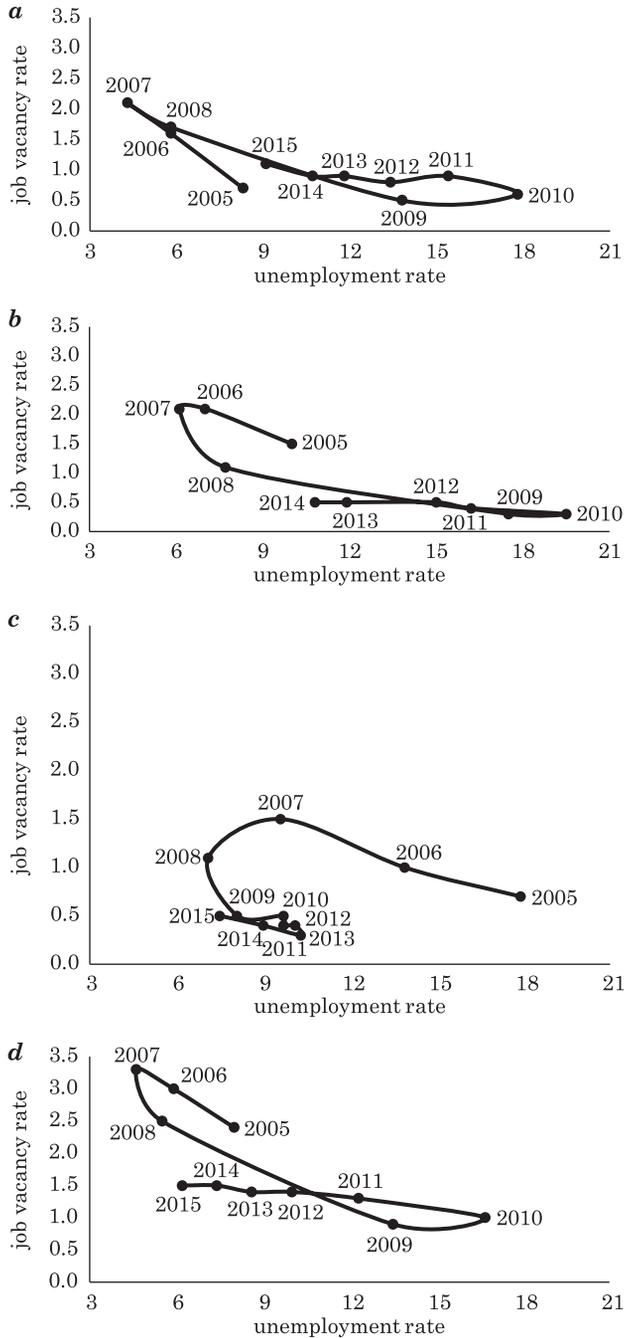


Fig. 6. Beveridge curve for Lithuania (a), Latvia (b), Poland (c) and Estonia (d) in 2005–2015  
 Source: own elaboration based on Eurostat database (Eurostat 2017).

Reducing the unemployment rate, which in part can be attributed to emigration after the 1 May, 2004 affected the bargaining position of workers. In response to recruitment difficulties, especially in 2007, one of the actions taken by employers was an increase in wages. Under conditions of rapid economic growth (and the creation of many new jobs) this led to an upward pressure on wages. Indeed, between 2005 and 2007, all the analysed countries were affected by increases in wages, however, with different intensity (Fig. 7). Latvia recorded the highest annual percentage change of compensation with its peak in 2007 – compensation increased by 35%. Estonia was also significantly affected by the wage increase – in 2007 compensation grew by 24.8%. In Lithuania and Poland wage growth was significant but more modest. Against the background of the economic recession, wages started to decrease, with the exception of Poland only, where wage growth slowed down, but was still positive. Since 2011, in the group of analyzed countries, wage growth has been rather stable – with the exception of Latvia in 2011 (when wages increased by 17.2%) and Poland in 2015, where wages fell.

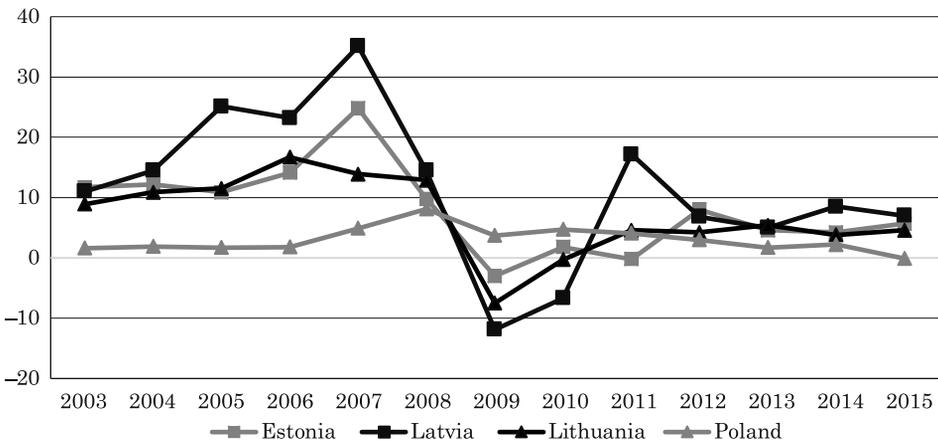


Fig. 7. Annual percentage changes of compensation per employee in Poland and the Baltic States, 2003–2015

Source: own elaboration based on: *Convergence Report* (2010, p. 100, 122, 140, 176), *Labour Market Developments in Europe* (2013, p. 109, 117, 118, 124), *Labour Market and Wage Developments in Europe* (2016, p. 115, 123, 124, 130).

The growth of wages was not necessarily the result of growth in productivity. The consequences of the increase in wages depend on whether or not it is accompanied by an increase in labour productivity. If wages increase faster than labour productivity, than an increase in unit labour cost occurs, affecting the level of competitiveness of the country<sup>2</sup>.

<sup>2</sup> Unit labour cost is the ratio of labour costs to labour productivity.

In all of the Baltic States, between 2003 and 2008, as well as between 2012 and 2015 productivity grew slower than wages (Fig. 8). In Poland, wage growth exceeded productivity growth in 2005, 2007–2009, and between 2012 and 2014.

As a result of wage growth exceeding productivity growth, the unit labour cost increases. All analysed countries experienced this phenomenon, but at a slightly different time and with different intensity (Fig. 9), with the sharpest increase in Latvia at a level above 27% in 2007. In Lithuania the increase of unit labour cost was the biggest in 2006 (12.1%) whilst in Estonia – in 2007 (at the level of 16.8%). In case of Poland, a significant increase in the unit labour costs came later – in 2008 when the unit labour cost increased by 7.8%.

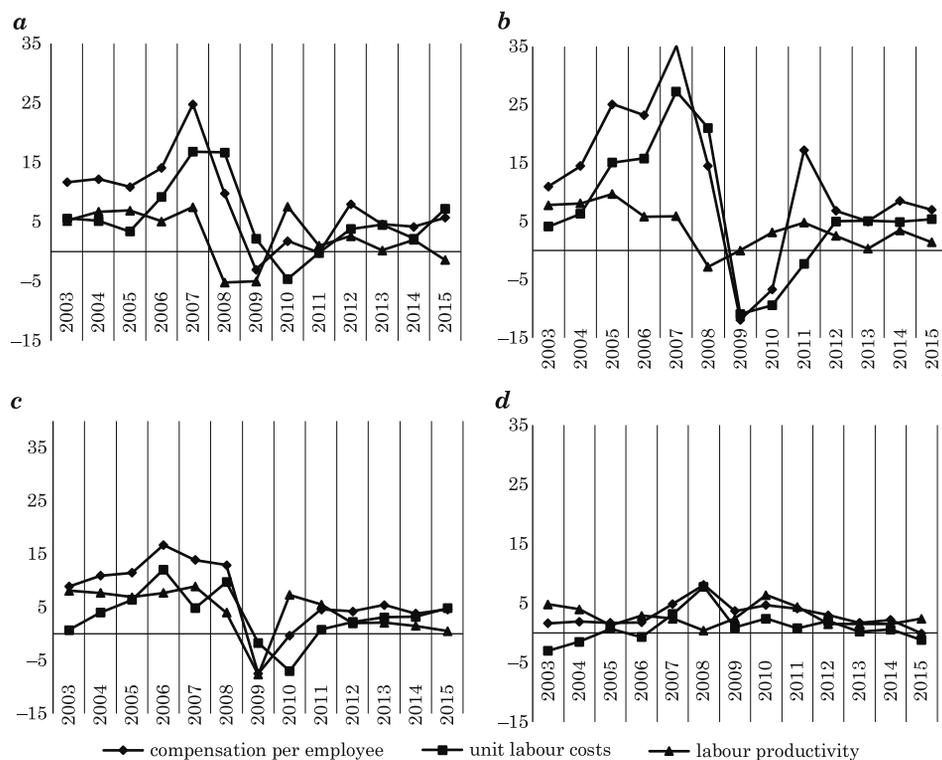


Fig. 8. Annual percentage changes of compensation, labour productivity and labour unit cost in the Baltic States (a – Estonia, b – Latvia, c – Lithuania) and Poland (d), in 2003–2015

Source: own elaboration based on: *Convergence Report* (2010, p. 100, 122, 140, 176), *Labour Market Developments in Europe* (2013, p. 109, 117, 118, 124), *Labour Market and Wage Developments in Europe* (2016, p. 115, 123, 124, 130).

The consequence of a unit labour cost rise is an increase in prices (if the enterprises shift the burden of rising labour costs to consumers). Indeed, as one can notice from Figure 9, the annual rate of HICP inflation was at a low level in 2003, but started to pick up rapidly thereafter, reaching the highest level in all of the analysed countries in 2008, i.e.: 15.3% in Latvia, 11.1% in Lithuania, 10.6% in Estonia and 4.2% in Poland. The underlying inflation pressures were caused by substantial wage increases. This is especially true for the Baltic States between 2006 and 2008 and to a lesser degree for Poland in 2008.

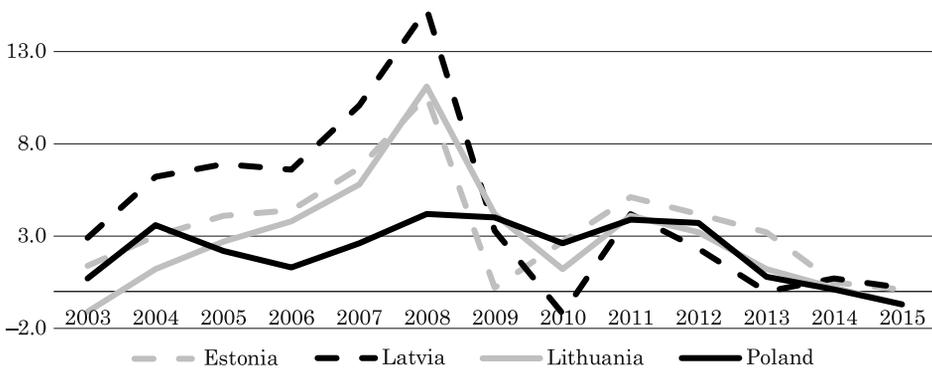


Fig. 9. Price developments in Poland and the Baltic States, in 2003–2015

Source: own elaboration based on: (*Convergence Report 2010*, pp. 100, 122, 140, 176; *Labour Market Developments in Europe 2013*, pp. 109, 117, 118, 124; *Labour Market and Wage Developments in Europe 2016*, pp. 115, 123, 124, 130).

## Conclusions

In this paper, the impact of emigration on the labour markets of four countries: Poland, Lithuania, Latvia and Estonia has been explored. As the supply of labour decreased, the unemployment rate was reduced, and wage growth pressure and inflation were commonly observed in all of the analysed countries. However, the strength of these developments varied between member states. This differentiation can be attributed firstly to a different scale and intensity of emigration. Although all of the analysed countries recorded accelerating emigration after the EU accession in 2004, the scale and the intensity of the phenomenon varied across the countries. On the one hand, Poland recorded the largest emigration flows in absolute terms; on the other hand, Lithuania and Latvia recorded the highest emigration rate – in relation to their population – and they have been the most affected by the phenomenon of emigration. Estonia stood out, with moderate emigration compared to the

other countries. Nevertheless, in light of the analysis of the push factors, these observations are not astonishing.

Secondly, different labour market developments can be ascribed to a different initial situation: in the year of the EU accession, the unemployment rate in Poland was nearly twice as high as the unemployment rate in the Baltic States. Thus, although all the analysed countries recorded an unemployment rate reduction together with the rising job vacancy rate, the problem of labour shortages in Poland was more moderate. On the other hand, high initial job vacancy rates in Estonia (with a fall in the unemployment rate) resulted in a meaningful deepening of the problem connected with labour shortages.

Furthermore, together with the decrease in the labour supply and the rising problem of labour shortages, wage pressure in all of the analysed countries took place. Still, one can indicate differences among the analysed countries in this respect, which should be explained in the context of changes in the domestic workers productivity. All of the analysed countries experienced periods when productivity grew slower than wages. This was especially true for the Baltic States, which recorded – as a result – a significant increase in the nominal unit labour cost. Hence, the internal and the external factors influenced the inflation rate, and the Baltic States recorded high inflation growth that even reached 15.3% (in Latvia in 2008). However, it must be remembered that such developments – regarding price changes – were influenced not only by wage pressure but also by other factors.

To conclude, the consequences of emigration from Poland and the Baltic States after joining the EU go beyond reduction in unemployment. There were also negative effects such as wage growth in excess of productivity growth or labour shortages. The scale of these negative phenomena was determined by the initial situation in the labour market. The scale and dynamics of emigration, as well as labour market developments, influenced employee productivity. Still, the aim of presenting both the positive and negative consequences of emigration from the perspective of the sending country is not to question the win-win-win scenario (for migrants, destination countries and countries of origin), but to underline the need for a deeper reflection and ex-ante analysis that go beyond the basic theoretical foundations.

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