Pawel Kaczmarczyk and Marek Okólski

Economic impacts of migration on Poland and the Baltic states
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Preface

This report on the economic impact of migration on Poland and the Baltic states was prepared by Pawel Kaczmarczyk and Marek Okolski, Centre of Migration Research, University of Warsaw, in conjunction with a project on labour mobility from the new EU member states to the Nordic countries that was commissioned to Fafo by the Nordic Council of Ministers. The final report *Arbeidsmobilitet fra de nye EU-landene til Norden – utviklingstrek og konsekvenser* (Dølvik and Eldring 2008) from the project includes a chapter on the effects of out-migration on Poland and the Baltic states, drawing heavily on information from this report. We want to thank Pawel Kaczmarczyk and Marek Okolski for their excellent contributions to the project, and we are grateful for the opportunity to publish their full report as part of Fafo’s Strategic Institute Programme on labour and enterprise mobility following EU enlargement, financed by the Research Council of Norway. Thanks also to Nina D. Brochmann for her helpful assistance in preparing the manuscript for printing.

Oslo, January 2008
Jon Erik Dølvik and Line Eldring
1. Introduction

Current migration from Central and Eastern Europe, where Poland and the Baltic States play a prominent role, has become one of the most conspicuous population movements in contemporary Europe. As noticed from the British perspective, this particular migratory movement has probably contributed to the largest inflow of people to the United Kingdom when the – relatively short - timeframe is taken into account. Many other countries in Europe are also witnessing an intensified flow of people from a region that has only recently been reintegrated with the core of the continent and has become part of the EU from 1st May 2004. Moreover, the outflow involves a considerable proportion of the population of such countries as Latvia, Lithuania, and Poland.

These population movements attract great interest from researchers and policy makers as they are believed to be strongly affecting the demographic, social, and economic situation in both sending and receiving countries. In this paper we will reflect on the consequences for the former, with an emphasis on economic effects.

It should be made clear that our analysis will be inhibited by the fact that this is a pioneering exercise with little prior research to draw upon. There is a deficit of adequate data and relevant in-depth research, something that hampers with attempts at comprehensive analysis. Our ambitions will be modest since it is still early to draw robust conclusions, as this population movement is relatively new and still changing. Still, despite the mentioned obstacles, it is both necessary and valuable to look deeper into the dynamics and consequences of this ongoing, complex process. Taking all this into account, we have chosen to prioritize specific consequences, economic effects, instead of a comprehensive analysis when addressing and describing the effects recent migration from Poland and the Baltic States have had on the populations and economies of those countries.

The paper has been divided into four major parts. We begin with a general description of migration of the population of Poland and the Baltic States during the transition period, with an accent on the post-accession period, i.e. after May 1st, 2004. Next we compare basic structural features of those movements in the pre-accession and post-accession period focusing on the selectivity of migrants and its impact upon native population. Then follows an analysis of the effects of remittance flows upon sending countries’ economies and households. Finally, we discuss various consequences that migration might have had on labour markets, both at national and regional level, and on home countries endowment with human capital.
2. Recent migration of Poles and citizens of the Baltic States – an overview

Outflow of population from Poland and the Baltic States has been substantial for quite some time now. There is ample evidence that the outflow increased after May 1st, 2004 when EU-membership was granted. During the first 20 months of that period, the cumulative number of migrant workers from those countries registered in the three countries of EU15, which on May 1st, 2004 allowed a free access to their labour markets for citizens of new EU members (i.e. in Ireland, Sweden and the UK), constituted a considerable proportion of total working age population in the home countries: in Lithuania 3.6 per cent, Latvia 2.5 per cent, Poland 1.3 per cent and Estonia 1.1 per cent (WB 2006).

Unfortunately, despite freedom of movements and indeed – what significantly differs from pre-accession period – a growing prevalence of documented flows of people from the new member-states of EU, it is not easy to speak about recent migration in terms of unmistakable aggregate numbers. This is mainly due to two causes: deficiencies in statistics and enormous variety of movements and categories of migrants. Neither figures pertaining to a specific category that originate from various sources (within a single country and even the more so in a cross-country scope) can reasonably be added up nor is it possible to combine various categories into a single synthetic one. Therefore, in the assessment of recent migration from Poland and the Baltic States, instead of providing strong and complete numerical evidence, we will resort to some illustrations, which we consider representative for actual general trends.

Poland and the Baltic States constitute an area with a large outflow of people. This is despite official statistics that show a low level of net emigration. This discrepancy occurs because most of the migrants move abroad without reporting to the authorities their intention to be away for a long time. Moreover, many people leave their home countries without a specific idea as to how long they will be away. Almost all countries of EU15 (or EEA) witness a strongly elevated inflow of persons from ‘accession countries’. From 2004, Britain continues to be by far the main destination. Three factors might be relevant to its leading role: the large size of the labour market, its openness combined with a high demand for labour and relatively uncomplicated administrative procedures on entry, and a relatively low cultural (language) barrier on the part of a great number of migrants. People from EU8 countries are gradually becoming a major fraction of foreigners’ inflow.

Various British sources substantiate these trends. A general tendency can be found in statistics of new arrivals of foreigners to the United Kingdom (Figure 2.1).

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1 In part 3 of the present text, in order to assess the changes in components of the population balance in immediate pre-accession and post-accession years, we reproduced official figures (Table 3.1) that compare net migration in the period 2004-2006 to that in the period 1989-2004. What follows from those figures is not only a very low level of net migration in all four countries (and therefore, assuming – which is plausible – nearly no immigration, very low level of emigration) but in addition a clear decline in the level of net migration (in fact – emigration), with Estonia changing its balance from negative to positive. As it is pointed out in the next paragraph, statistics on recent migration in the transition countries (especially official records) might be misleading. For more on this subject, see Fihel, Kaczmarczyk, Okólski 2007.

2 Of all eight countries who accessed EU in 2004, Lithuania and Latvia displayed the highest (relative) intensity of the outflow, followed by Slovakia, Poland and Estonia, and then, with a distinct lag, the Czech Republic Hungary and Slovenia.
In 2006, 4.8 times more Poles and 4.2 times more citizens of the Baltic States visited Britain than in 2003. The total number of visitors exceeded 1.6 million\(^3\). While in 2003 there were seven German visitors recorded per one visitor from the four countries of interest here, in 2006 that ratio became as low as two. It should be borne in mind though that many travelers make multiple journeys over a year and many are simply tourists. It is clear from Figure 2.2, however, that recently the numbers of newly registered workers from Poland and the Baltic States go in tens of thousands every quarter and reach between 140 000 and 160 000 annually. Poles predominate and in numerical terms – contrary to Baltic people – were for most part of the past three years on the rise.

\(^3\) Presented figures should not be treated as data on migration per se, but rather as a proxy of recent mobility.
The significance of the inflow from Poland becomes undisputable when it is compared with that from countries that traditionally have been a reservoir of foreign labour for Britain. It follows from the statistics of new national insurance numbers allotted to immigrants, that over the recent three consecutive years Poles increasingly outnumbered other nationalities, including citizens of India and Pakistan – traditional sending countries (Table 2.1). A conclusion that Polish citizens have recently come to be one of the top migrant national groups is supported by Labour Force Survey data; e.g. between early 2006 and early 2007, over a 12-month period, the number of Poles residing in the United Kingdom increased from 209 000 to 406 000 (Salt 2007).
Table 2.1. Incoming immigrants allocated a National Insurance number in the United Kingdom, 2002-2007 (in thousand), top ten countries

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<tbody>
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<td>India</td>
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<td>28.8</td>
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<td>Pakistan</td>
<td>16.8</td>
<td>16.8</td>
<td>South</td>
<td>19.3</td>
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<td>16.6</td>
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<td>Australia</td>
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<td>France</td>
<td>13.3</td>
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<tr>
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<td>11.9</td>
<td>China</td>
<td>12.6</td>
<td>France</td>
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<td>16.9</td>
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<td>Iraq</td>
<td>10.1</td>
<td>Poland</td>
<td>Portugal</td>
<td>12.2</td>
<td>Latvia</td>
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<td>Germany</td>
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<td>15.2</td>
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<td>Portugal</td>
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<td>Philippines</td>
<td>10.7</td>
<td>Slovakia</td>
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<tr>
<td>Total</td>
<td>349.3</td>
<td>Total</td>
<td>370.8</td>
<td>Total</td>
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<td>662.4</td>
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<td></td>
<td></td>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

Source: extract from NI Recording System

A similar trend is also visible in case of Ireland. Figure 2.3 suggests a huge increase in the number of immigrants from Poland and the Baltic States who obtained the PPS number.

Figure 2.3. Incoming migrants from Poland and the Baltic States who were granted Personal Public Service number, 2004-2007

Source: Own elaboration based on Hughes (2007).
The inflow to Ireland seems particularly conspicuous since it until recently was a net emigration area and hardly hosted any migrants from Central and Eastern Europe, while today that inflow represents a predominant part of immigration and supplies of foreign labour (Grabowska-Lusinska 2007).

An upsurge in the flows of migrants from “accession countries” to Britain and Ireland after May 1st 2004 was widely expected after those countries chose not to impose transitory limits in the access to their labour markets. A phenomenon which migration experts and policy makers hardly predicted, was a distinct increase in the presence of EU8 countries’ citizens in almost all other countries, and their respective labour markets, of the common European space, including EEA. In particular, this has been noted in relation to Polish migrants in Denmark, Iceland, Italy, Norway, Spain, Sweden and a few other countries (Grabowska-Lusinska, Okólski 2007). In Figure 2.4 we present monthly data on work permit holders from EU8 countries in Norway, which suggest a continuation of a strongly seasonal pattern of employment and, above all, a sharply rising trend after the 2004 EU enlargement.\(^4\)

**Figure 2.4. Work permits held by the EU8 citizens in Norway, 2003-2007**

![Graph showing work permits held by EU8 citizens in Norway, 2003-2007](image)

*Source: Authors’ elaboration based on Norwegian Ministry of Industry data.*

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\(^4\) Work permit holders from Poland and the Baltic States by and large predominate in the EU8 group; those persons account for more than 95 per cent of its total (of which Poles alone for approximately 65 per cent).
In the Norwegian case, it might be hypothesized on the basis of respective work permit records that the ‘steady’ stock of documented migrant workers from EU8 (a bottom line of each annual seasonal cycle), which in 2003 could be estimated at around 2,000, kept rising year by year to reach the level of some 30,000 by January 1, 2007. In the autumn 2007, the level remained stable above 50,000 and was … January 1, 2008. Worth to mention might also be a tendency observed in Sweden (Figure 2.5) where, along with increasing number of migrants from the Baltic States and particularly Poland, a diversification of reasons (especially family related) for the inflow was noted.

Figure 2.5. Residence permits granted to citizens of Poland and the Baltic States in Sweden by reason, 2003-2006

Source: Authors’ elaboration based on Doyle, Hughes and Wadensjö (2006).

Of a few exceptions in the above depicted trend, the most distinct case present is Germany, until 2004 the main destination country for migrants from Central and Eastern Europe, where after the enlargement, as Figure 2.6 might suggest, the inflow slowed down (if not diminished), and, what follows from Figure 2.9, whose leading position as a host country
decreased. It should be remembered that during the pre-accession process, Germany, along with Austria, was most strongly opposed to opening up or even liberalizing the rules of entry to its labour market.

**Figure 2.6. Polish seasonal and contract workers in Germany, 1995-2006, in thousand**

![Graph showing seasonal and contract workers in Germany, 1995-2006, in thousand](source: Authors' elaboration based on the BBA data.)

A quite consistent picture with that just outlined ensues from the perspective of sending countries. We will refer here to one example only, Poland, for its prevailing share in the post-accession population movements. Unlike official statistics based on vital event and migration registers, which are being exploited in population balancing (see Table 3.5), Labour Force Survey (the Polish acronym – BAEL) data indicate (Figure 2.7) that after May 1st 2004, the outflow strongly accelerated and the number of legal Polish residents staying abroad for at least two months has tripled (from around 180 000 in early 2004 to around 540 000 in early 2007).
Figure 2.7. Stock of residents of Poland staying abroad for longer than 2 months, 1994-2007 (in thousand)

Source: Authors’ elaboration based on BAEL (according to Kepinska 2006, 2007)

It is clearly evident in Poland’s case that a general tendency towards more intensive international mobility of people ‘translated’ itself into a diversity of host country specific trends. As follows from Figure 2.8, a sharp rise in the outflow was observed in case of the United Kingdom and Ireland alone, whereas in case of other major host countries an increasing trend was not that much pronounced.
Another set of LFS data that compares destination patterns of pre- and post-accession migrants (Figure 2.9) reveals a radical change of relative positions among major destination countries, including relative losses by such countries as Germany, Italy, USA, Belgium, Austria and a few other, and relative gains by, first of all, Britain and Ireland, but also Sweden and Norway. As a result, for instance, the share of migrants living in Germany, the main pre-accession destination, declined from 38 to 20 percent, while the share of those living in the United Kingdom, the main post-accession destination, increased from 8 to 34 percent.

In assessing the overall recent migration from Poland and the Baltic States, we argue that the accession to EU has triggered a vast ‘hibernated’ migration potential in those countries. That was possible because of a complexity of factors mainly related to the accession, which ultimately radically lowered the level of risk inherent in migration, and stimulated and prompted many persons redundant in their countries of origin, thus far fearful and prudent (reactive rather than proactive) in their life strategies, to explore fresh opportunities opened in other European countries. It seems obvious that those factors included a free entry to labour markets of a handful of EU15 countries but not only and maybe not mainly that. What might have also played a crucial role was granting to the citizens of EU8 countries civil rights equal to those enjoyed by the citizens of EU15 countries, like freedom of movement and establishment. This especially widened the possibility to freely choose place of residence, education, rendering services or setting up a business. Indeed, powerful forces were set in motion that pulled out so far irregular migrants from various
shadow spheres of life in EU15 countries and encouraged many new migrants to try their luck.

**Figure 2.9. Main destination countries for migrants from Poland before and after accession, in per cent**

![Bar chart showing main destination countries for migrants from Poland before and after accession, in per cent.](image)

*Source: Authors' elaboration based on BAEL (CMR files).*

Finally, it might be added that many other structural changes in recent migration from Poland and the Baltic States were visible. It has become much more regular or legal than irregular or clandestine, more of a long-term duration than circular, more ‘individualistic’ than related to household strategies, more ‘masculine’ than ‘feminine’, etc. However, forms of flows have been further diversified and migrant profiles differentiated.
3. Impact on demographic phenomena in home countries

3.1. Impact on demographic and regional structures

In this part we will solely refer to migration consequences for just one of the four countries under consideration, namely Poland. It is the only case for which adequate statistical data are available. We adopt an approach according to which the assessment of impact of the population outflow will be based on the analysis of selectivity of migrants, i.e. comparisons of migrants’ compositions by chosen characteristics with those of the general population of Poland.

*Region of residence in Poland*

Generally, the outflow has never been strongly concentrated in terms of region of the origin. Let us consider the top five regions (main administrative districts) out of a total 16. In terms of the population size, at about the time of EU accession, that top-5 accounted for 50.4 percent of the total population, while the top-5 in terms of the volume of pre-accession outflow accounted for 54.2 percent of that outflow, and in terms of the volume of post-accession outflow accounted for 46.4 percent (Table 3.1). Therefore we see not only that there was a slight under-representation of the top-5 in the outflow, it is also true that after the accession, migrants were more evenly regionally distributed.

*Table 3.1. Regional concentration of outflow from Poland in pre-accession and post-accession period*

<table>
<thead>
<tr>
<th>Top-5 regions by share in total population (per cent)</th>
<th>Top-5 regions by share in pre-accession outflow (per cent)</th>
<th>Top-5 regions by share in post-accession outflow (per cent)</th>
<th>Top-5 regions by relative intensity of post-accession outflow† (100 = national average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mazowieckie</td>
<td>12.9</td>
<td>3.6</td>
<td>7.2</td>
</tr>
<tr>
<td>2. Slaskie</td>
<td>12.6</td>
<td>4.5</td>
<td>8.1</td>
</tr>
<tr>
<td>3. Wielkopolskie</td>
<td>8.8</td>
<td>4.1</td>
<td>6.0</td>
</tr>
<tr>
<td>4. Malopolskie</td>
<td>8.2</td>
<td>1.</td>
<td>14.0</td>
</tr>
<tr>
<td>5. Lodzkie</td>
<td>7.9</td>
<td>3.4</td>
<td>5.2</td>
</tr>
<tr>
<td>5.3. Podkarpackie</td>
<td>12.7</td>
<td>1.</td>
<td>11.7</td>
</tr>
<tr>
<td>6.2. Lubelskie</td>
<td>11.0</td>
<td>4.</td>
<td>8.3</td>
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<tr>
<td>7.8. Dolnoslaskie</td>
<td>8.8</td>
<td>2.</td>
<td>9.3</td>
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<tr>
<td>2.9. Podlaskie</td>
<td>7.7</td>
<td>4.5</td>
<td>3.</td>
</tr>
<tr>
<td>3.7.</td>
<td>5.0</td>
<td>6.2</td>
<td>2. Swietokrzyskie</td>
</tr>
<tr>
<td>4.2.</td>
<td>3.6</td>
<td>5.2</td>
<td>5. Zachodnipomorskie</td>
</tr>
</tbody>
</table>

† intensity of outflow here is the ratio of number of migrants in the sample to the sample size (population at age 15+) at around the time of accession

*Source: BAEL (CMR files)*

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5 We will be using BAEL (Polish LFS) data. Respective data for the Baltic States are much more biased due to a small number of migrants in the sample.

6 Only persons aged 15 or more will be considered in the analysis to follow.
Data in Table 3.1 point to the fact that one of the most largely populated regions, Malopolskie, is indeed a major source of migrants but other regions that contribute most to the outflow, Podkarpackie, Dolnoslaskie and Lubelskie, are just moderately populated. A major factor behind the important role of these four regions (also Podlaskie, Swietokrzyskie and Zachodniopomorskie) in generation migration flows from Poland, is their relative underdevelopment. In four of those regions (Lubelskie, Malopolskie, Podkarpackie and Swietokrzyskie) the residents of rural areas outnumber the residents of urban areas, and a large part of the population live on technologically primitive family plots of land. All of these regions display relatively low economic participation rate and a high proportion of households are living mainly on social benefits or pensions. In contrast, the most highly developed region, Mazowieckie with the capital city Warsaw, although it is most largely populated, sends few migrants and has the lowest intensity of outflow.

*Type/size of settlement*

As for European standards, Poland is a country with a large proportion of population living in rural areas and small towns. Over recent 15 years or so, the share of total rural population (38.5 per cent in 2006) was rather stable with a slight tendency to increase. With regard to the outflow, migrants from medium-sized and small towns and villages are over-represented relative to resident population whereas migrants from large towns are under-represented. Therefore the outflow to some extent serves the ‘purpose’ of slowing down the process of ‘counter-urbanisation’, and on the other hand it helps superfluous population living in Poland’s peripheries to find more opportunities.

Table 3.2. Distribution of pre-accession and post-accession migrants by type of settlement *vis-à-vis* general population, in per cent

<table>
<thead>
<tr>
<th>Type/size (no. of inhabitants) of settlement</th>
<th>General population around the accession date</th>
<th>Migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pre-accession</td>
<td>post-accession</td>
</tr>
<tr>
<td>Town, 100 000 or more</td>
<td>29.9</td>
<td>20.1</td>
</tr>
<tr>
<td>Town, 20 000 – 99 999</td>
<td>19.5</td>
<td>21.4</td>
</tr>
<tr>
<td>Town, less than 20 000</td>
<td>13.1</td>
<td>14.0</td>
</tr>
<tr>
<td>Village</td>
<td>37.5</td>
<td>44.5</td>
</tr>
</tbody>
</table>

*Source: BAEL (CMR files)*

From Table 3.2, however, it follows that disproportions in migrants’ distribution by the region of origin (relative to the general population) diminished after the accession. Still they remained visible, especially the under-representation of migrants originating from large towns (100 000 or more).
Sex and age

The general population at age 15 years or more is a little feminised, which seems typical for European populations; there were 89.9 men per 100 women at around the date of the 2004 EU enlargement. Males, however, are more prone to emigration, and that tendency increased strongly after accession. In the pre-accession period each flow of 100 women was accompanied by a flow of 132.8 men, while in the post-accession period that ratio went up to 183.9. Bearing in mind a *sui generis* shortage of males in the population of Poland, this tendency, if continued, may undermine some social processes, such as family formation.

The age selectivity of migrants is probably one of the most universal characteristics of population movements. People older than 50 rarely move, but their share in the population aged 15+ is usually substantial. At the time of accession it amounted to 40 percent whereas among the pre-accession migrants it was only 9.8 percent and even lower among the post-accession migrants (7.7 percent). On the other hand those aged 15-39 were greatly over-represented among migrants: a respective share in the pre-accession group was 64.6 percent, in the post-accession group 78.4 percent whereas in the reference population only 42.3 percent. Undoubtedly, the recent outflow has caused a considerable drainage of people in younger working age brackets.

An interesting change was that hand in hand with declining average age of migrants (from 32.9 to 31.4), a shift was observed among the youngest migrants towards increasing relative importance of people at age 25-34 at the expense of those at age 15-24, i.e. in a way ‘ageing’ of the youngest working age migrants. While the share of the former increased from 31.4 percent to 40.3 percent, the share of the latter declined from 30.5 percent to 30.1 percent. That change was most likely related to the increase in the average level of migrants’ education, as the better educated enter the labour market at a later age than those who are less highly educated.

Level of education

In agreement with what seems typical for migrant selectivity in respect to educational level, the better educated were over-represented relative to the general population and the not-highly-educated under-represented, although that tendency was by no means striking. Truly, the share of uneducated migrants (educational level below vocational) was much lower than that observed in the general population. On the other hand, the by far largest category among migrants and at the same time the most highly over-represented before the accession, were migrants who attended only vocational school whereas those who completed tertiary education were slightly under-represented. This radically changed in the post-accession period when the proportion of the most highly educated substantially increased and the proportion of graduates of vocational schools decreased (albeit continued to be higher than in the general population) (Table 3.3).
Table 3.3. Distribution of pre-accession and post-accession migrants by level of education vis-à-vis general population, in per cent

<table>
<thead>
<tr>
<th>Highest education level completed</th>
<th>All</th>
<th>At age 25-29</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>general population around the accession date</td>
<td>pre-accession migrants</td>
</tr>
<tr>
<td>Tertiary, academic</td>
<td>11.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>Secondary technical</td>
<td>19.4</td>
<td>26.0</td>
</tr>
<tr>
<td>Secondary comprehensive</td>
<td>9.3</td>
<td>12.9</td>
</tr>
<tr>
<td>Vocational</td>
<td>26.1</td>
<td>37.3</td>
</tr>
<tr>
<td>Lower</td>
<td>30.8</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Source: BAEL (CMR files)

A critical change, concomitant to the EU enlargement, took place in the largest group according to age, 25-29, being at the same time potential new entrants to the Polish labour market. Firstly, a predominance of migrants with vocational education turned to a predominance of migrants with tertiary education. Secondly, a strong over-representation of people that fell into that educational category (i.e. vocational education) turned to a strong under-representation. Thirdly, a significant under-representation of the most highly educated turned to a significant over-representation of those people.

**Main source of household income**

As data contained in Table 3.4 indicate, migrants from households living mainly on contract employment incomes were under-represented relative to the general population, though in the post-accession period to a much lesser degree than in the pre-accession period. The largest (and growing) over-representation appeared among migrants from households whose main source of living were ‘other’ incomes accrued from non-economic activity.
Table 3.4. Distribution of pre-accession and post-accession migrants by main source of household income vis-à-vis general population, in per cent

<table>
<thead>
<tr>
<th>Main source of household income</th>
<th>General population around the accession date</th>
<th>Pre-accession migrants</th>
<th>Post-accession migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>45.5</td>
<td>39.3</td>
<td>44.6</td>
</tr>
<tr>
<td>Self-employment in agriculture</td>
<td>7.2</td>
<td>8.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Self-employment outside of agriculture</td>
<td>7.6</td>
<td>5.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Retiring pension</td>
<td>22.4</td>
<td>24.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Disability pension</td>
<td>8.3</td>
<td>5.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Other non-employment source incl. unemployment benefit</td>
<td>8.9</td>
<td>17.3</td>
<td>21.6</td>
</tr>
</tbody>
</table>

Source: BAEL (CMR files)

All in all, a striking characteristic of migrant households with respect to their major source of income was a high proportion of those dependent mainly on other sources than economic activity (47.0 per cent in the pre-accession period and 43.5 per cent in the post-accession period), significantly higher than observed in the general population (39.6 per cent). This may suggest that migration for work from Poland (and probably in other CEE economies under transition) either serves as a vehicle of ‘activisation’ of idle or maladapted households or it conceals (leads to under-estimation of) the actual proportion of households in the general population whose main income comes from economic activity.

A tentative conclusion

Due to a not-so-high number of migrants in both the sub-sets (pre-accession and post-accession one), the empirical material presented in this section does not allow a more in-depth analysis. It would be unwarranted and risky, for instance, to analyse selectivity of migration from Poland at regional level from the viewpoint of sex, age and educational attainment, which would seem rather natural bearing in mind evidence produced so far here. In an inquiry into that problem we had to stop at where we are now. This is why in the present final remark we will limit ourselves to findings that might still be considered hypotheses rather than robust conclusions.

It follows from the case of Poland that although recent migration contributes to a strengthening of mobility in general, it involves to a large extent people from areas and groups that are less prone to change their status and residence than the average. This is evident in the case of relatively backward regions of Poland and rural and tiny urban

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7 The ‘pre-accession set’ included 1 818 migrants and the ‘post-accession set’ 1 882 migrants.
settlements. On the other hand, the actors of recent migration were increasingly young persons originating from large towns and endowed with a high amount of human capital who had hardly started their professional careers. Therefore, two partly opposite migration trends might have been an outcome of Poland’s transition and integration with the European communities: an outflow of redundant non-highly skilled people from the Polish periphery, and an outflow of persons who in near future might aspire to elites. In both the cases, the present Poland turned out too confined.

3.2. Short- and long-term impact of migration on demographic structures

Generally, the assessment of the impact of migration on the demographic structures seems to be an extremely difficult task. Firstly, this is due to the fact that demographers are interested predominantly in permanent or at least long-term developments. Secondly, because there is no chance to include in a demographic forecast the information on illegal or non-registered movements. From part 2 it follows that recent mobility of Poles and citizens of Baltic states is to a large extent temporary in character and, furthermore, only partially registered. There exist no reliable statistical data showing the whole complexity of mobility – both in internal and international terms – in the transition period. Therefore, any considerations of the impact of recent mobility on population structures are bound to be biased. In the following part an overview of recent demographic trends in all the countries under analysis will be provided to emphasize the short term labour market developments. The second part of the chapter consists of a detailed analysis of long-term developments in the case of Poland (with migration issues considered).

Table 3.5. Population change in Poland and the Baltic states between January 1st 1989 and January 1st 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>Total population on January 1st (in thousand)</th>
<th>Average annual change (in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Natural increase</td>
</tr>
<tr>
<td>Estonia</td>
<td>1 566</td>
<td>1 351</td>
</tr>
<tr>
<td>Latvia</td>
<td>2 667</td>
<td>2 319</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3 675</td>
<td>3 446</td>
</tr>
<tr>
<td>Poland</td>
<td>37 885</td>
<td>38 191</td>
</tr>
</tbody>
</table>

Source: EUROSTAT.

Data gathered in table 3.5 shows that in the last 18 years the populations of the Baltic states significantly declined. In case of Poland, the situation was more favorable. However,
also here there was recently recorded a decrease in population. Prior to the EU enlargement, out-migration was the most important factor responsible for population decline in the Baltic states (particularly in the first half of 1990s); between 2004 and 2006 both migration and natural increase influenced the demographic situation in a negative way.

In comparison to the EU15 countries, populations of Poland and the Baltic states are relatively young with a high share of middle-aged people (50-64). For example, in case of Poland in 2004 the number of persons aged 15-64 years was over 5 times larger than the number of persons aged 65 years and more (70 per cent and 13 per cent of the population respectively, see also figure 3.1) (Bijak 2007).

**Figure 3.1. Share of persons aged 15-64 in the total population in Poland and the Baltic states, 2000-2006**

![Figure 3.1](image)

*Source: Authors’ elaboration based on World Bank (2007).*

Data presented in figure 3.1 shows that this situation is typical for all the countries under consideration: in recent years the share of persons aged 15-64 years in Poland and the Baltic states varied from 66 per cent to 69 per cent, whereas Lithuania was in a relatively less favorable position and Poland was the country with the youngest population among those considered here. The data shows also that since 2000 the demographic situation of analyzed countries has been slightly improving. However, this may be only a short-term effect related predominantly to cohort effects resulting from the baby-booms of the 1950s and of the 1980s. In all cases we have to deal with a delay in demographic processes as observed in case of Western European countries for over 20 years. It should be noted that
presented data does not refer to recent outflow. All presented demographic data includes permanent residents of a given country. Thus only permanent migration (in the former Soviet block countries typically associated with deregistration and change in permanent place of residence) is considered. Thus, neither short-term nor long-term legacy of temporary and unregistered movements can be taken into account.

**Figure 3.2. Activity rates of persons aged 15-64 (in per cent) in Poland and the Baltic states, 2000-2006**

![Activity rates of persons aged 15-64 in Poland and the Baltic states, 2000-2006](image)

*Source: Authors’ elaboration based on World Bank (2007).*

Data presented in the next figure (3.2) shows that even if Poland and the Baltic states are more or less similar in demographic terms (3 pp. difference in shares of population aged 15-64 in the total population), there is clearly different patterns as regards the participation in the labour market. Whereas the activity rates in the Baltic states are relatively high (at least as for the EU10 standards\(^8\)), the activity rate of the Polish population was extremely low and decreasing since the very beginning of the socio-economic transition. In 2006 it was equal to 63.4, i.e. it was 8.2 pp. lower than the EU15 average and 4.1 pp. lower than the EU10 average. This may suggest that the patterns of labour market participation can be of bigger importance for future developments than pure demographic structures (see also analysis below).

\(^8\) In 2004 the activity rate of persons aged 15-64 in the EU15 was equal to 71.6 percent and in the EU10 amounted to 67.4 percent (World Bank 2007).
With regard to the long-term demographic developments, the most critical issue relates to migration. Out of necessity, the assumptions on both internal and international mobility included in projections provided by the EUROSTAT or national statistical offices are very simplistic. As a consequence, projections provided for emigration (and immigration) countries are far from being reliable. Therefore we decided to concentrate on a forecast presented by a research team from the Central European Forum for Migration Research led by Marek Kupiszewski (2007). The forecast presented for years 2004-2054 has the advantage that the authors have taken into account different scenarios concerning internal and international mobility. However, the analysis is available for Poland only.

In the presented forecast, following assumptions have been made (Bijak 2007):
- the fertility (measured by the TFR) was assumed to increase slowly from the very low recent level (1.2) up to 1.5 in 2054; also, the alternative scenario was tested: in case of the ‘high fertility’ scenario the author assumed a higher pace of increase (0.01 a year) – as a consequence, the target value should be around 0.5 higher than in the basis scenario;
- with regard to mortality, a steady increase of life expectancy \((e_0)\) was assumed: according to the assumptions, life expectancy values should reach 80.4 years for men and 85.8 years for women (2054);
- finally, with regard to mobility, the authors considered two possible scenarios: the scenario ‘Development and Liberalisation’ assumes economic development (2-5 per cent of GDP annual growth) and gradual liberalization of migration policies, in the second scenario ‘Stagnation and Control’ slow pace of economic development and restrictive migration policies were assumed; the outcomes of above presented assumptions are shown in Figure 3.3.

**Figure 3.3 Net external migration (in and out) in Poland for different scenarios, 2004-2054**

![Poland: yearly net migration](source: Bijak 2007: 11)
From the presented data it follows that according to the first scenario ('Development & Liberalisation') Poland is assumed to become a net immigration country around 2020, while in the second case ('Stagnation & Control') one should expect steady outflow of Poles abroad (although the scale of this phenomenon is expected to diminish over time, particularly after 2029).

The outcomes of the forecast prepared on the basis of above presented assumptions are shown in figures below:

**Figure 3.4. Population of Poland: forecast, 2004-2054**

![Graph showing population forecast from 2004 to 2054 for Poland under High fertility, Stagnation, and Development scenarios.]

*Source: Bijak 2007: 12*

According to the forecast, the size of the Polish population is expected to decline from 38.2 million in 2004 to 29.4 million (stagnation scenario), to 30.3 million (development scenario) or to 33.4 million (high fertility scenario). In all cases, a significant decrease in the number of people is expected by 2054: by 21 percent, 23 percent and 13 percent respectively. However, the size of the population is only one issue that should be considered in the context of the labour market developments.
Data presented above shows the predicted changes in the age structure of the Polish population and in the age structure of the Polish labour resources. From the forecasted data it follows that although the decline in population size seems to be a serious issue, far more important are changes with respect to age structures. According to the forecast, one can expect a decline in the number of people in the labour force from 17.2 million in 2004 to 12.3 million (‘stagnation and control’ scenario), 12.8 million (‘development and liberalization’ scenario) or 13.9 million (‘high fertility’ scenario) in 2054 – see Figure 3.6.
Even if we assume a gradual increase of the participation rates to the maximum average European values for a given age – the so-called ‘maximum activity’ scenario, one should predict a decrease of the labour force by 12 per cent (to 15.1 million in 2054) (Bijak 2007). The outcomes of the presented forecast can be summarized by discussing selected demographic and labour market indicators (see Figure 3.7).

**Figure 3.7. Demographic and labour market indicators: base year and forecast, 2004, 2029 and 2054**

![Figure 3.7. Demographic and labour market indicators](image)

*Source: Authors’ elaboration based on Bijak (2007: 15).*

From the data shown in Figure 3.7 it follows that in the next 50 years, regardless of assumed scenario, we should expect a serious burden for the Polish labour market (and Polish social security system). Furthermore, most of these changes will be clearly visible in the coming 10-20 years. Potential Support Ratio is predicted to fall by around 50 percent till 2029 and by 67-70 per cent (depending on the scenario) till 2054. In the context of labour

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9 Whereas:

*Potential Support Ratio* (PSR) is defined as the ratio of population in the productive age (15–64) to population aged 65 years and more;

*Labour Force Participation Rate* (LFPR) is defined as a share of the total labour force resources in the total population (aged 15 years and more);

*Labour Market Support Ratio* (LMSR) is defined as the ratio of the economically active to the economically inactive population (aged 15 years and more).
market analysis, the most interesting would be to take a closer look at the Labour Market Support Ratio indicating a ratio between the economically active and the inactive population. In fact, this indicator may serve as a proxy of the overall support of the labour market. The value of LMSR in 2004 was equal to 1.18 something which does suggest a relatively poor labour market situation already at the departure point. However, LMSR is expected to decline to around 1.10 in 2029 (according to all scenarios except maximum activity scenario) and to values between 0.89 (stagnation) and 0.96 (high fertility) in 2054 (value for the development scenario: 0.92). From the presented data it follows that regardless of the expectations of many politicians – so-called replacement migration (see e.g. UN 2000) – future immigration should not be perceived as a potential solution neither in terms of demographic structures (PSR) nor in terms of the labour force (LMSR). Additionally, the issue of recent – and possible future outflow – from Poland should not be forgotten. In fact, the real demographic effects of migration can be far less beneficial than foreseen in the presented forecast (if accounted for persons who are leaving temporarily but could prolong their stay and become permanent migrants in the future).

Thus, the major conclusion from the presented analysis – and we argue this may hold true both for Poland as well as for the Baltic states – would be as follows: considering recent and future demographic trends and trends in migratory behavior, the only chance to improve the labour market situation is to influence the activity rates of the population. In general, only the ‘maximum activity’ scenario (and related political actions taken) may lead to a relatively secure situation in the future (but still will reduce the labour force significantly).
4. Remittances – macro- and microeconomic perspectives

4.1. Methodological and theoretical considerations

There are at least two reasons why consequences of mobility related to remittances flows are so difficult to analyze and therefore relatively poorly researched: The first one is theoretical and the second one is methodological in nature.

From the theoretical point of view, migrants’ remittances are perceived as a potential source of savings and foreign exchange. They can contribute to the migrant-sending economy in the following ways: they increase national income directly, raise national income indirectly by providing foreign exchange and savings, influence investment rates and generate additional effects on the local and regional scale thereby bolstering consumption and thus raising domestic demand. In all cases it would be necessary to take into account both direct and indirect effects of remittances. The indirect effects result from expenditures by migrant households and works through the so-called multiplier effect. Thus, even if remittances are spent for consumption and not investments, they may have significant positive impact on the economy. Additionally, particularly in the case of less developed countries they ‘give away’ some means that can be used in another more ‘productive’ way. Remittances can also be a significant component of household budgets and may be seen as an important part of their ‘survival strategies’. All these effects make the full assessment of the issue extremely difficult and therefore such analyses are very rare in the migration research (Massey et al. 1986, Massey et al. 1999, Adelman and Taylor 1990).

From the methodological point of view, the major problem is the incompleteness of data, particularly the lack of detailed data sets appropriate for in-depth analyses including the assessment of indirect effects. In general, there are five main categories of transfer channels: banks, non-bank money transfer operators, post offices, cash and commodities carriers (often within migrant networks), and informal money transfer services. There is official data available for the first three channels only. Obviously, not all money remitted are identifiable on the macro level. Particularly, there is no chance to include physical transfers of cash (or goods) across borders, transactions by private households, incomes of short-term workers as well as funds remitted to own bank account or used for acquisition of financial assets or real estates (Michalik 2005).

As a consequence of the above mentioned limitations, in all official data sources remittances are defined on the basis of formal flows only. More specifically, in the balance of payments framework they are typically identified as private current transfers including following components:

1) **Compensation of employees**, i.e. earnings by residents of a given country for work performed in another country and paid for by residents of this other (i.e. receiving) economy.

2) **Workers’ remittances**, according to the IMF’s Manual (BPM5), workers’ remittances shall cover transfers by migrants employed abroad who are considered residents there (nonresidents in a given country). Due to the fact that a migrant is defined as a person who comes to a given country and is expected to stay there for a year or more, persons whose
intention is to stay for shorter period are considered non-residents. Thus, data on workers' remittances do not include information on transfers by persons who are staying abroad for less than a year: their transactions are assumed to be attributed to 'compensation of employees'.

3) **Migrants’ transfers** defined as flows of goods and changes in financial items that occur with migration (‘to or from the migrant as resident to the same person as nonresident’).

However, there are a few specific methodological problems. First of all, with respect to compensation of employees the data can include information on compensation of residents working for nonresidents (abroad and in a given country). This problem appears among others in the case of Poland. In practice, the data on compensation of employees may include – depending on compensation scheme - data on persons working for transnational companies in Poland (i.e. non migrants). Thus, it would be reasonable to concentrate, if possible, on the data on workers’ remittances. The next problem is a result of the introduction (in 2004, due to the EU legislation) of a minimum threshold of 12 500 EUR for data reporting which significantly influenced the quality of the official data.

Against this background, the next two parts are organized in the following way: Firstly, selected estimates of remittances to Poland and the Baltic states shall be presented, including outcomes of more in-depth studies on specific groups of migrants. Secondly, we are going to discuss macro- and micro effects of remittances, with particular emphasis on Poland as the major migrant sending country in the region and the potential impact of remittances on labour market developments.

### 4.2. Value and structure of the remittances flows – selected estimates

The first serious attempt to estimate the remittances transfer scale in the Central and Eastern Europe was made by Leon-Ledesma and Piracha (2001). They estimated the remittances value of chosen 10 CEE countries (Bulgaria, Croatia, Czech Republic, Hungary, Macedonia, Poland, Romania, Slovakia, Slovenia and Ukraine) at 7 billion USD in 1999. This is certainly too low due to the fact that they included only legal transfers, but on the other hand, the inclusion of Ukraine makes this estimate not plausible for the situation in the new member states, including Poland and the Baltic states.
Figure 4.1. Remittances\textsuperscript{10} as portion of GDP in selected countries of Eastern Europe and the former Soviet countries, 2004\textsuperscript{11}

According to the estimates of the World Bank, in 2004 the officially recorded remittances in the Eastern Europe and former Soviet countries were equal to over 19 billion USD which amounted to 8 percent of the global value of remittances (232.3 billion USD in total) and 12 percent of remittances received by developing countries (160.4 billion USD in total) (Mansoor and Quillin 2006). However, in most cases the relative importance of remittances was rather small (see figure 4.1). Except of Moldova and former Yugoslavian countries, the share of remittances in GDP was lower than 5 percent. The relatively low level is particularly visible in the case of important migrant sending countries such as Poland and Ukraine.

According to the World Bank data, only three countries of the region – Moldova, Bosnia and Herzegovina and Albania – were placed among the top 20 migrants remittances receiving countries in the world with shares of remittances in the GDP ranged from 15 to 25 percent (Figure 4.2). Obviously, this outcome is an effect of the value of transferred money as well as extremely low level of GDP in all the countries mentioned.

\textsuperscript{10} Remittances are defined as a sum of received compensation of employee, received workers’ remittances and received migrants’ transfers – see 4.1.

\textsuperscript{11} For Albania and Slovakia data for 2003.
Having in mind information provided in part 2 one might, however, expect drastic changes in the patterns of migrant remittances as a consequence of the significant increase in the scale of mobility from the new member states after the EU enlargement. Figure 4.3 shows the development of the inflow of remittances’ to Poland and the Baltic states between 2000 and 2006, i.e. prior to and directly after the accession into the EU.

**Figure 4.3. Remittances (total) in Poland and the Baltic states, 2000-2006, in million USD**
The above presented data clearly indicate the increase in the scale of remitted money. In the case of Poland it may be seen as a continuation of previous trends, but in the case of the Baltic states we can definitely note a structural break in the process (particularly in Estonia and Lithuania). According to the recently up-dated World Bank database on remittances, the value of remittances increased between 2003 and 2006 by 788 percent in Estonia, 541 percent in Lithuania, 279 percent in Latvia and 164 percent in Poland. The scale of remittances was the highest in the latter case – the value of remittances to Poland amounted to 4.36 billion USD in 2006 (114.4 USD per capita)\(^\text{12}\).

As suggested in the previous part, a significant shortcoming of the data on total remittances is that they can include compensation of employees working for transnational companies, even if they perform their work in the country of origin. The data shown in next figure indicate that this issue may be of some importance in two of the Baltic states, namely in Estonia and Latvia. In both cases the most important share of total remittances is constituted by compensation of employees. For Poland and Lithuania, migrants’ remittances ranged between 60 to 90 percent of the total sum of remittances. This issue, however, needs closer examination in the future.

**Figure 4.4. Workers’ remittances in Poland and the Baltic states, 2000-2006, in million USD**

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\(^{12}\) In 2006, remittances per capita in the Baltic states equaled in Estonia 299.5 USD, in Latvia 211.3 USD, and in Lithuania 183.8 USD.
From the above presented figures it follows that Poland and Lithuania receive most remittances in the Baltic area in absolute terms (however per capita values are the highest in Estonia and Latvia). Looking at the most recent data on remittances in the balance of payments framework, it is possible to identify the most important features of the phenomenon.

**Figure 4.5. Private current transfers in Poland (left axis) and Lithuania (right axis), quarterly data in million EUR**

Source: Authors’ elaboration based on National Bank of Poland and National Bank of Lithuania data

Firstly, as noted above, we should distinguish between two patterns of migration growth with varying impact on remittances inflow. In the case of Poland, recent mobility is to a large extent the continuation of previous trends also with regard to remittances that were relatively high at the end of the previous decade. In both cases however, the dynamics of the recent inflow is extremely high, which is clearly shown on the figure 4.5.

Secondly, the inflow of remittances is strictly seasonal (see figures 4.5 and 4.6), which reflects the very nature of the recent mobility from the countries under analysis – to a large extent short-term, predominantly labour mobility – but also points to the potential seasonal impact of remittances on the domestic economies.

Thirdly, there are different modes of money transfer visible (however, it is not possible to analyze it in a detailed way). In the case of Estonia and Latvia, the larger share of total remittances is recorded as employees’ compensation, in the other cases workers’ remittances predominate. This is also identifiable for Lithuania, where since 2004 workers’ remittances have been playing a more and more important role in the current private transfers (Figure 4.6).
As mentioned above, all the presented data encompass only part of all the remittances – namely those sent via legal channels – and thus can not be perceived as very reliable. With regard to Poland however, it is possible to make use of data gathered on the micro level or for specific groups of migrants. In such cases the data refers to both registered and non-registered transfers.

Most of the estimates are related to the remittances from the Polish migrants working and residing in Germany, which for long was the most important destination country for those leaving Poland on both temporary and long-term basis. In the late 1990s, Hönekopp (1997) and Marek (1999) estimated the remittances of the so-called programme workers from Poland (predominantly seasonal workers) who took up legal employment in Germany in the framework of the 1990 Polish-German bilateral agreement. In the first case, the value of the transfer was estimated at 375 million EUR (1996), in the latter the total value of remittances amounted to around 340 million EUR (1998). The differences between these two estimates resulted mainly from the fact that they covered different groups of workers.

Similar groups of workers - however, in this case the research include only seasonal workers - was a subject of interest in a CMR study that included a survey of seasonal workers who were employed in Germany in 1998-2000 (based on a representative, in statistical terms, sample comprising over 800 individuals, see Kaczmarczyk and Lukowski 2004). The results of this survey are especially interesting here because, firstly, the migratory behaviour within that group of seasonal workers was relatively unified (purely economic migration, migrants as typical ‘target earners’), and secondly, most of the income was spent...
in Poland (all the expenses abroad were minimized and the total expenses in Germany were usually lower than 15 percent) (Kaczmarczyk 2004). Survey data served as a basis for the assessment of the volume of remittances in 1998-2001 and then an interpolation for the period 1991-2004 was performed (Table 4.1).

Table 4.1. Estimated amount of remittances from Polish seasonal migrants employed in Germany, 1991-2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Polish seasonal migrants in Germany</th>
<th>Remittances (in 1,000 EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>68 516</td>
<td>43 103</td>
</tr>
<tr>
<td>1992</td>
<td>131 020</td>
<td>82 423</td>
</tr>
<tr>
<td>1993</td>
<td>139 824</td>
<td>96 758</td>
</tr>
<tr>
<td>1994</td>
<td>124 860</td>
<td>109 967</td>
</tr>
<tr>
<td>1995</td>
<td>164 864</td>
<td>176 314</td>
</tr>
<tr>
<td>1996</td>
<td>191 055</td>
<td>216 343</td>
</tr>
<tr>
<td>1997</td>
<td>189 424</td>
<td>225 221</td>
</tr>
<tr>
<td>1998</td>
<td>201 681</td>
<td>252 481</td>
</tr>
<tr>
<td>1999</td>
<td>218 403</td>
<td>274 789</td>
</tr>
<tr>
<td>2000</td>
<td>238 160</td>
<td>299 647</td>
</tr>
<tr>
<td>2001</td>
<td>261 133</td>
<td>328 551</td>
</tr>
<tr>
<td>2002</td>
<td>282 830</td>
<td>355 850</td>
</tr>
<tr>
<td>2003</td>
<td>302 544</td>
<td>380 653</td>
</tr>
<tr>
<td>2004</td>
<td>320 000</td>
<td>402 616</td>
</tr>
</tbody>
</table>

Source: Kaczmarczyk 2004.

According to the presented estimates, it can be assumed that in the early 2000s the value of the financial means remitted to Poland by seasonal workers employed in Germany was between PLN 1.3 and 1.6 billion, which amounted to 300-400 million EUR (402.6 million EUR in 2004). According to the National Bank of Poland data, in 2004 the total value of current transfers (credit) – typically presented as remittances data - equalled 4.3 billion EUR (i.e. ten times larger value than the estimate of seasonal workers' remittances). Having in mind that at that time Polish seasonal migration to Germany was one of the largest migrant flows from Poland, one might also conclude that the data on private current transfer seriously overestimate the value of remittances.

Last but not least, a set of in-depth analyses in the Opole region needs to be mentioned. This area is of particular interest here due to the presence of so-called autokhton population (‘ethnic Germans’) – i.e. people who according to German regulations could (and can) hold double citizenship and thus participated legally in the German labour market. According to Jończy’s (2003) analyses, in the early 2000s the amount of money remitted to the region could be estimated at 1.4 billion PLN (350 million EUR). The most recent study (2004) provided a value of ca 2.7 billion PLN (675 million EUR) earned abroad, of which approximately 2.15 billion was transferred to Poland (536 million EUR) (Jonczy 2005). Based on these two data sources – survey information on Polish seasonal migrants and ‘ethnic Germans' working abroad – the value of remittances from Germany to Poland could be
estimated at around 1 billion EUR (as compared to 4.3 billion EUR recorded in the balance of payments as private transfers (credit)).

4.3. Macro- and micro effects of remittances

Typically, the proxy for the impact of remittances impact on the sending economy is the share of remittances in the GDP. With regard to this characteristic, Poland and the Baltic states are far below the average value for the East European and former Soviet Union countries: in all the countries under consideration, remittances equaled in 2004 less than 2 percent of GDP (Figure 4.7).

This situation did not change much, even after the EU enlargement with massive migration outflows and increase in the scale of remittances. In 2006 officially registered remittances equaled 2.6 percent of GDP in the case of Estonia, 2.5 percent in Latvia, 2.1 percent in Lithuania and 1.3 percent in Poland. Again, such shares predominantly reflect the size of a given economy. Notwithstanding, in neither of the cases money sent back by migrants could be assumed to play an important role in the domestic economy.

Figure 4.7. Remittances as a portion of GDP in Eastern Europe and the former Soviet Union, 2004 (in per cent)

Similar conclusions can be drawn from a comparison of remitted money with the total value of export (Figure 4.8). According to World Bank data (2004) remittances constituted in all cases less than 5 percent of incomes from export. The comparison with both European and non-European countries strongly dependent on remittances shows that in Central and Eastern Europe (including Poland and the Baltic states) migration should not be perceived as a substitute to international trade. This is particularly true with regard to the countries under analysis, where export is an important component of the GDP growth.

Remittances can appear slightly more important if compared with incoming foreign direct investment. For example, from the analysis of seasonal workers from Poland, it followed that in 2001 the seasonal workers remittances only amounted to 5.4 percent of the total value of the direct foreign investments in Poland. In 2006 the total value of FDI inflow to Poland amounted to 11 093 million EUR. In the same period private current transfers equalled 6 344 million EUR, indicating that along with the growing intensity of migration after May 2004 the inflow of remittances to Poland is has become more and more significant.

Figure 4.8. Remittances as a share of export, 2003 (in per cent)

Generally, the macro impact of remittances on Poland and the Baltic states is rather limited. In all the cases, however, this outcome is to a large extent the product of relatively large and fast expanding economies (clearly visible in case of export and foreign direct investments). Therefore, it would be extremely difficult to assess the effect of recent remittances on the macroeconomic aggregates. The only attempt to such an assessment was presented by Leon-Ledesma and Piracha (2001) with regard to the 10 CEE countries (including Ukraine) and for the time period 1990-1999. Based on the official data on remittances, they found that the potential impact of remittances on investments in the sending countries under analysis should be assumed to be positive and statistically significant: elasticity (unit change impact on investment) was relatively low ranging from 0.27 to 0.46 depending on the estimate. As a next step, the study looked at the impact of remittances on another GDP component, i.e. private consumption. The influence turned out to be positive and statistically significant. Additionally, the strength of the influence was relatively large, the elasticity varying from 0.63 to 0.69. Generally, the presented estimates indicated that – with regard to the group of countries under analysis – migration may influence in a statistically significant way two major GDP components – investment and the private consumption. The elasticity with respect to consumption was almost twice that of investment. This effect clearly reflects the nature of the process, namely the fact that remittances are spent predominantly on consumption related expenses. However, due to inclusion of countries like Ukraine, the outcomes of the referred study are not that relevant to this report.

Following the line of reasoning of Leon-Ledesma and Piracha (2001), it might be interesting to take a look at the importance of remittances for private expenses. At the macro level we can only compare the value of remittances and consumption, but more detailed analyses can be presented with regard to developments at the micro and meso level.
The data presented in figure 4.9 supports the hypothesis of diverse impact of remittances on the countries under analysis. In the case of Estonia and Latvia the share of workers’ remittances in private consumption is extremely low (below 0.2 percent), while in the case of the other countries, remittances could play a significant role in supporting household budgets: in 2006 the share of money remitted officially by migrant workers equaled 1.8 percent in Lithuania and 1.6 percent in Poland with clearly positive trends in both cases.

This observation may serve as a point of departure for the discussion of regional, local, and individual effects of remittances. Due to the fact that such analyses demand

\[\text{Note that the data refers to workers’ remittances, i.e. the category is smaller than total private transfers, however, in a more directed way related to migration.}\]
detailed data on migration and remittances, the following part will be limited to Poland because only with respect to this country such studies have been presented so far.

Scale and modes of remittances

If looking at the individual strategies of migrants and the micro consequences of remittances, two effects should be emphasized. First, most of Polish migrants (as shown by empirical research definitely till 2004) follow the logic of target earners. They tend to minimise their own spending while staying abroad (e.g. through accommodation restraints and limiting all activities not related to work) and to maximize incomes (e.g. due to extremely high work intensity). In consequence, up to 90 per cent of all earned money can be remitted back home. Interestingly, this was also the case of migration of ‘ethnic Germans’ from the Opole region (Jonczy 2004, 2005) – see table 4.2.

Table 4.2. Use of remittances by migrants’ group (in per cent)

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenses in Poland</th>
<th>Expenses abroad</th>
<th>Deposits in banking sector in Poland</th>
<th>Deposits in banking sector abroad</th>
<th>Other</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed exclusively abroad</td>
<td>65.89</td>
<td>20.11</td>
<td>9.82</td>
<td>1.92</td>
<td>2.32</td>
<td>1 507</td>
</tr>
<tr>
<td>Permanent job in Poland and temporary job abroad</td>
<td>65.77</td>
<td>19.82</td>
<td>9.91</td>
<td>1.80</td>
<td>1.80</td>
<td>111</td>
</tr>
<tr>
<td>Temporary job in Poland and temporary job abroad (or unemployed in Poland)</td>
<td>65.80</td>
<td>19.91</td>
<td>9.96</td>
<td>2.16</td>
<td>2.16</td>
<td>231</td>
</tr>
<tr>
<td><strong>Migrants total</strong></td>
<td><strong>65.87</strong></td>
<td><strong>20.06</strong></td>
<td><strong>9.79</strong></td>
<td><strong>1.95</strong></td>
<td><strong>2.27</strong></td>
<td><strong>1 849</strong></td>
</tr>
</tbody>
</table>


From the presented data it follows that, on average, almost 70 percent of earned money were spent in Poland. The share of income used for expenses in Poland was relatively high even in the case of people who worked exclusively abroad.

Channels

Traditionally, it was mainly informal channels that were used to transfer remittances back to Poland. As showed by Hirszfeld (2001), this was among others due to the fact that migrants abroad were paid predominantly in cash; there were hence no possibilities of transferring the money to Poland in a formal way, e.g. on their own bank account. According to the data gathered through a CMR ethnosurvey (1999), only in 20 percent of the cases did
migrants use bank transfer to remit money to Poland. However, we should take into consideration all the new developments related to the recent mobility from Central and Eastern European countries, particularly the possibility of legalization of the stay abroad as well as changes with respect to destination countries (with the UK and Ireland as perfect examples). Recent activity of institutions dealing with money transfer (e.g. Western Union) on the Polish financial market clearly indicates possible changes regarding modes of remitting behavior (however, empirical evidence is still lacking).

**Allocation strategies**

The most detailed analysis of the scale and usage of remittances was provided within the CMR project on Polish seasonal workers in Germany (Kaczmarczyk 2004, Okólski 2006). According to the survey data, Polish seasonal workers earned on average approximately 1 000 EUR a month (around year 2000). Obviously, even if the earnings were relatively low for the German standards, they were significantly higher than the average wages in the sending country. With the relatively short average length of the contracts (less than 8 weeks), the savings generated by Polish seasonal workers amounted to around 1 500 EUR.

Remittances sent by migrants were claimed one of the definitely positive aspects of the mobility. This was predominantly due to the fact that regardless of the absolute value of the money transferred back to Poland, the remittances were an important part of the budgets of the respondents. The average savings accumulated during a short trip abroad, would constitute about 20 percent of the total yearly income of the migrant’s household.

Table 4.3. Seasonal migrants who in 1998-2000 worked in Germany by assignment of their remittances (after last migration)

<table>
<thead>
<tr>
<th>Group of expenditures</th>
<th>Per cent of all seasonal migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current consumption</td>
<td>45.1</td>
</tr>
<tr>
<td>House/apartment modernisation</td>
<td>30.1</td>
</tr>
<tr>
<td>Purchase of durables (other than a car)</td>
<td>18.3</td>
</tr>
<tr>
<td>Children’ education</td>
<td>14.1</td>
</tr>
<tr>
<td>Repaying debts</td>
<td>13.9</td>
</tr>
<tr>
<td>Purchase of a car</td>
<td>12.3</td>
</tr>
<tr>
<td>Bank investment (including savings)</td>
<td>10.8</td>
</tr>
<tr>
<td>House/apartment purchase</td>
<td>8.3</td>
</tr>
<tr>
<td>Investment in productive assets</td>
<td>6.2</td>
</tr>
<tr>
<td>Own education</td>
<td>5.5</td>
</tr>
<tr>
<td>Other</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*Source: Kaczmarczyk 2004: 182.*

Table 4.3 presents the most important groups of expenditures of Polish seasonal workers employed in Germany. From the data it follows that most of the expenses were current consumption or related items (e.g. purchase of durables). Such a pattern of remittances allocation was quite common for all forms of Polish migration in the 1990s (Frejka, Okólski and Sword 1998). A panel study by CMR in one provincial town in the Podlasie region in 1999, revealed that in 93 percent of migrants’ households the remittances were spent on current consumption, in 25.6 percent of households on house/apartment
related expenses (including refurbishing or modernisation), while in only 9.3 percent of households it was spent on investment in productive assets, in 4.7 percent on savings and in 4.5 percent on children’s education (Hirszfeld 2001). The only exception was the case of ‘ethnic Germans’. According to estimates provided by Jonczy (2003), 36 percent of the remittances of this group were spent on consumption, while slightly less - 31 percent - was invested in housing stock or financial assets.

With regard to Polish seasonal workers a typology of remitting behaviour was presented (Kaczmarczyk 2004, Okólski 2006). Regardless of the specific form of seasonal migration, these types or strategies seem to be quite representative of Polish migration in late 1990s and early 2000s.

The first model of allocation (‘survival strategy’) was related to individuals in a relatively difficult economic situation, often without a job in Poland. For these migrants the seasonal work in Germany was being used to get additional financing to their household budgets. The individuals most prone to follow this pattern of spending were between 30 and 40 years of age, with lower education, and of a poor or lower-middle class.

The second model (‘independency strategy’) could be ascribed predominantly to young people, who thanks to seasonal earnings had a chance of becoming independent. Around 10 percent of the respondents used the remittances to enlarge their savings, while among people under 20 this share was higher than 30 percent.

The third group (‘development strategy’) could be related to relatively well-off people, in whose case the income from seasonal work was used to finance housing (approximately 40 percent used remittances to buy or to renovate a house/ flat), investment (5 percent), and education. However, in these cases seasonal migration was merely an additional source of income used for financing extra expenses.

From the above presented data it clearly follow that in almost all cases, the share of investment spending was rather low or very low, seriously influencing the indirect effects on the local and regional level. However, a certain tendency to invest in human capital should be taken into account. Such behaviour was visible even in the late 1990s, but far more important in the case of seasonal workers. Between 6 and 7 percent of the respondents declared that they spend the remittances on their own education, and additional 9 to 14 percent financed education of their children. Interestingly, the group spending money on education included mainly people from households of relatively difficult financial standing, coming from the peripheral regions, middle aged, but with respect to the level of education both very well and very poorly educated. This shows a strong pressure on the side of the Polish labour market, which forces the improvement of skills or a change of career. From the data on recent migration of Poles (as well as citizens of other CEE countries) it follows that this mode of behaviour is gaining importance, particularly that a large majority of the new migrants constitute young people who could use the money earned abroad for financing their own education (in sending countries or abroad).
Perspective of sending communities and regions

Assessment of direct and indirect effects of remittances for the sending communities and regions is one of the most controversial issues in migration analysis. On the one hand, one may easily assume that remittances and thus migration leads to improvement of the economic situation of migrants and their households. It should have a significant positive effect on those communities where the share of migrant households is relatively high. However, on the other hand, there are a set of potential negative effects. Consequences of migration may include inflation (or at least inflationary pressure), growth in inequality, and a decline in incentives to engage in economic activities at the domestic labour market. Interestingly, with regard to Mexico-US migration Durand, Parrado and Massey (1996) concluded that “international migration improves the material well-being of particular families without leading to sustained economic growth within migrant communities”. Thus, they tended to describe the Mexico-US migration as an ‘illness’ or ‘syndrome’, ‘addiction’ or ‘dangerous dependence’ rather than serious growth factor.

When we analyze the effect of remittances from the perspective of Polish sending communities and regions, the conclusion might be similar: labour mobility has only exceptionally a significant impact on the local economy. According to the biggest in-depth study of migration from Poland done by CMR between 1994 and 1999 in two of six Polish microregions, a predominant part of migrants chose to invest locally, potentially creating real chances for local development (Jazwinska and Okólski, 2001; Jazwinska, Lukowski and Okólski 1997). In the other communities, a majority of households spent money almost exclusively on private consumption, quite commonly of luxury goods. According to Giza (1996), the share of the households receiving remittances was relatively low and it varied between 7 and 29 percent. Hirszfeld (2001), however, questioned such a conclusion. Using similar data set (but including an additional wave containing post-1996 migrants), Hirszfeld argued that there were strong contractual mechanisms between migrants and their families. These mechanisms allowed large scale mobility, but at the same time the studied community became to a large extent dependent on the transfers of remittances from abroad.

Additionally, as stressed by Giza (1996), in many cases the remittances were not large enough to be invested (e.g. in production). However, they could play an important role for household budgets. This observation is clearly consistent with conclusions proposed by Massey and others (Massey 1999). They emphasised that migration is often a product of underdevelopment and a consequence of serious market failures, including problems with accessing the credit market etc. In this context, to “expect migrants to be proficient at turning savings into production is unrealistic. Migration will have larger effect when local institutions exist to gather savings and make them available for producers” (Massey 1999). In other words – we should not expect migrants to replace the market and to change completely local conditions. According to Giza (1998; 110), “migrants do not tend to become a new petite bourgeoisie in respect of their occupation; however, […] they tend to shape their consumption and living standards according to those of the petite bourgeoisie”.

40
If we look at potential direct and indirect effects of migrant remittances we can find at least a few chances of future positive development. Table 4.4 presents these effects for remittances generated by seasonal migrants employed in Germany.

Table 4.4. Potential effects of seasonal workers’ remittances on sending country economy (in parentheses per cent of migrants who spent their money on a given category)

<table>
<thead>
<tr>
<th>Potential effect</th>
<th>Investments (short- and long-term)</th>
<th>Long-term investments</th>
<th>Impact on local economy</th>
<th>Impact on regional economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Own education (5,5)</td>
<td>House/flat purchase (8,3)</td>
<td>Car purchase (12,3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Children education (14,1)</td>
<td>House/flat reconstruction (30,1)</td>
<td>Purchase of other goods (18,3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumption (45,1)</td>
<td>Consumption (45,1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Purchase of other goods (18,3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Okólski 2006.

From the above presented data it follows that we can take into consideration both direct and indirect effects of remittances inflow, the assessment of migration should be positive (or very positive). Obviously, in case of seasonal migration the share of migrants who spent their money abroad was relatively low. However, in this particular case the average amount of money remitted back home was relatively small (around 2,000 EUR). Spending on education can be expected to have positive labour market effects. Interestingly, these ‘investments’ related not only to the actual situation on the labour market (own education), but also to the long-term future (children’s education). In both cases significant positive externalities are expected. When looking at other expenses, including consumption, we can suggest an impact on the local economy via the multiplier effect. As regards categories like house/flat purchase or reconstruction, these effects are expected to be locally felt, while in other cases they may have an impact on the regional economy. With regard to the labour market, most of the spending of remittances leads to increase in consumption and investment demand and thus boosts creation of new jobs etc.

From studies done in Poland it follows that migration and remittances may also have real effects on the local economies, except of generating additional consumption or investment demand. Surveys carried out in various regions, among others in Lower and Upper Silesia, Podlasie and Podhale (Frejka, Sword and Okolski 1998; Jonczy 2003; Solga 2002, Cieślinska 1997; Hirszfeld and Kaczmarczyk 1999, 2000; Jazwinska and Okólski 2001) showed that administrative units with significant shares of migrant households tended to have more modern housing stock as well as more highly developed infrastructure (sewage and water pipelines, telecommunication, roads, etc.). In the Podlasie region, the mechanism of circular mobility led to the development of local transportation companies (international
minibus service), travel agencies and employment brokers. In other cases migrant remittances were used to upgrading of tourist facilities and development of small and medium enterprises (Jazwinska, Lukowski and Okólski 1997).

The most striking example of importance of remittances for the local economy is the Opole region (however, this does not necessarily refer to the labour market effects – see below). In the case of this region, migrant remittances have, according to Jonczy (2003, 2005), had a significantly positive impact on the incomes and radically improve the relative position of the region (due to the very simple fact that they are not recorded officially and thus cannot be included in the GDP accounts). Officially, in 2000 the disposable monthly income per capita in the Opole region amounted to PLN 630, but when adding remittances, the final value was estimated at PLN 840, i.e. by one-third more. Due to this adjustment, the position of the Opole region in the ranking of all Polish regions should be modified from the 10th (among 16 regions) to the 1st. This extreme case (due to very high intensity of mobility) shows that migration and remittances can seriously impact the economic situation of not only migrants but also the local communities and even regions.
5. Labour market perspective

5.1. Recent labour market developments in view of post-accession migration

According to economic writings on labour migration, a massive outflow of workers will affect the sending labour market in a rather unequivocal way. Expected in such a situation would be a decline in the unemployment rate, a rise in the number of vacancies, increase in wages, increase in the employment rate, upward occupational (and social) mobility and ultimately inflow of foreign labour. We will now examine the actual course taken by some of those processes by using respective national LFS and other survey data.

In the 1990s all four countries – Latvia, Lithuania, Estonia and Poland – were struggling with job shortages and soaring unemployment. At its peak, the unemployment rate in Estonia reached 12.8 percent (2000), in Latvia 14.3 percent (1998), in Lithuania 16.5 percent (2001) and in Poland 19.9 percent (2002). In all the cases the maximum unemployment preceded the moment of accession to EU. A declining unemployment trend, however, has been strongly accelerated after 2004 (Figure 5.1). In 2006, the rate dropped to approximately 6-7 percent in the Baltic States and 14 percent in Poland. In absolute terms, between 2004 and 2006 the number of jobless persons in Poland decreased by 890 000 and in the three Baltic States by 150 000. The same holds true for the trend in unemployment among youth (persons below the age of 25).

Figure 5.1. Unemployment rate in Poland and in the Baltic states, 2002-2006 (in per cent)

Source: Authors’ elaboration based on EUROSTAT data.

Concomitant with a decrease in the unemployment was a growing incidence of jobs difficult to fill because of the deficit (or mismatch) of workers (or specific skills). That problem
has become acute in several economic sectors shortly after the accession in 2001. We may illustrate this phenomenon by using the case of Poland (Figure 5.2 and 5.3). On aggregate level, the number of job vacancies had been slightly declining until the middle of 2005, and then it started to rise; between the second quarter 2005 and the first quarter 2006 it more than doubled. Shortage of workers became particularly serious in manufacturing, trade, hotels and restaurants, and construction where (except for manufacturing) still around the time of the accession hardly any vacancies were recorded.

**Figure 5.2. Labour shortages as an important barrier to growth of Polish companies: share of companies reporting hiring difficulties and rank of the obstacles**

![Bar chart showing share of companies reporting hiring difficulties and rank of the obstacles]

Source: Authors’ elaboration based on NBP 2007 and World Bank 2007.

**Figure 5.3. Polish enterprises reporting hiring difficulties, by sector (in per cent)**

![Line graph showing percentage of companies reporting hiring difficulties by sector]

Source: Authors’ elaboration based on World Bank (2007: 22)
As follows from Figure 5.4, a consistent and rapid increase in vacancy rates\textsuperscript{14} in the recent two years or so was evident in the four countries.

**Figure 5.4. Vacancy rates in Poland and in the Baltic states, 2005-2007 (I q, in percent)**

![Bar chart showing vacancy rates in Estonia, Latvia, Lithuania, and Poland from I Q 2005 to I Q 2007.]

*Source: Authors’ elaboration based on WB (2007: 6)*

In the first quarter 2007 it reached its relatively highest level in Estonia (3.2 percent), but the pace of its growth was the fastest in Lithuania where between the first quarter of 2005 and the first quarter of 2007 it increased by factor 3.8. In Latvia, Lithuania and Poland, as Figure 5.5 suggests, the problem of a deficit of people and skills appeared aggravated in at least three sectors – manufacturing, construction and trade – where in early 2007 the vacancy rate universally exceeded 1 percent, with a maximum of 4.5 percent in the Polish construction sector.

\textsuperscript{14} The percentage share of job vacancies in the total number of jobs occupied and vacant.
A quarterly survey of enterprises in Poland conducted by the Central Bank (NBP) revealed a sharply growing proportion of construction companies that reported problems with filling vacant posts – from 10 percent at the end of 2005 to 35 percent in early 2007 (NBP 2007).

With regard to wages, its average level rose considerably between 2004 and 2006 in all the three Baltic States (on the average by around 9 percent per annum) and rather moderately in Poland (by 2 percent). In Lithuania and particularly in Latvia the rise was much stronger than in 2000-2003. Only in Poland no visible change occurred in 2004-2006 relative to 2000-2003 (Figure 5.6). In the latter country, however, some sectors (notorious for growing labour and skill shortages) encountered a sharp increase in wages in the period 2004-2006. This was specially so in agriculture and construction.

* for Poland data for enterprises with 10 and more employees only

Source: Authors’ elaboration based on World Bank (2007: 23-24)
A similar trend was found with regard to retail trade and health sector in Lithuania (Figure 5.7). According to the available data, similar tendencies were noted in 2007: in case of Poland, in three first quarters of 2007 the average monthly salary rose by 8.6 percent (as compared to similar period in 2006), the highest increase was recorded in agriculture (11 percent), construction (15.7 percent) and health and social work (20.4 per cent). Analysts from the World Bank had no doubts in attributing the recent wage rise in the Baltic States and Poland to ‘an increasing number of available jobs and lack of people willing to fill these’ (WB 2007: 23).

Figure 5.7. Growth of average gross monthly wage in selected sectors in Lithuania and Poland, 2003-2006


Note: 4Q average.
Finally, in the Baltic States and Poland a rather universal pattern of growth in employment was noted. In the late 1990s employment kept decreasing, in 2001-2003 it stabilized or started to rise (with the exception of Poland where it continued to decline), and in 2005-2006 employment increased quite strongly (Figure 5.9).

In view of the above review of recent trends pertaining to the labour markets in Poland and the Baltic States a question arises: do we really have strong evidence that validates expectations concerning the influences of the recent outflow on the labour markets of those countries?

When assessing theoretical models it is for analytical purposes legitimate to assume that labour migration is a primary and major factor that influences the domestic labour market. In the reality of Poland and the Baltic States, however, over the last 10 to 15 years the outflow of workers went hand in hand with an on-going economic transition and restructuring of the economy related to integration with the European communities, especially (most recently) the accession to EU. Changes observed in the labour market were likely by all means to be an effect of the interplay of those three crucial processes. On top of that interplay, over recent few years still another factor has been influential, namely rising economic prosperity and growth, which has indeed boosted the demand for labour in the domestic economy. It requires quite sophisticated tools and special (so far unavailable) data to separate the influences of each of those interacting factors. We therefore clearly distance ourselves from the common simplistic interpretations according to which the recent changes in the labour markets of the countries under considerations an effect of the recent mass migration from those countries. A simple illustration follows e.g. from the figure 5.5, in which the presented data shows that the vacancy rates are rising not only in Poland and the Baltic states, but also in the Czech Republic (as well as in Hungary) – countries that definitely do not suffer mass outflow of labour. A challenge in Poland and the Baltic states, however, is that the interplay between internal growth and external migration tends to aggravate the shortages of skills and labour.

To give an illustration that may justify our caution, we would like to present two figures showing the complexity of linkages between migration and labour market related issues.
Data included in Figure 5.8 shows the relation between the unemployment rate and the number of Polish migrants staying temporarily abroad, both according to the Polish LFS. On that basis one may suggest the following:

- since late 1990s till the Poland’s accession into the EU, unemployment played a role of an important push factor – as clearly indicated by the positive correlation between the two phenomena;
- since 2004, the intensity of migration has been rising and at the same time a gradual decrease in the unemployment rate has been noted; thus, migration from Poland might be perceived as a labour market relief.

However, in both cases critical empirical evidence is lacking. As we know from previous research, people moving abroad are often those who do have permanent jobs in Poland (typically, over 50 per cent). Theoretically, employed people that leave may create job opportunities for those who stay, however, due to the fact that the Polish population is rather immobile in internal terms and there are many structural disequilibria on the labour market, their leave may not have a significant impact on the unemployment rate. The complexity of the issue can be illustrated by data shown on Figure 5.9.
Data shown on Figure 5.9 relates to the number of employed and unemployed as well as economically not active on the Polish labour market. It is clearly visible that since 2004 (or maybe even since 2003) the number of registered unemployed has been decreasing. However, at the same time the number of employed has been rising – moreover, the scale of this ‘rise’ is far higher than the decline in number of unemployed. It may suggest that the gradual improvement of the economic situation, particularly with regard to employment rates, is the major reason for declining unemployment. Interestingly, at the same time or at least since 2005 the number of economically not active persons has been rising. This effect can very well be a consequence of the fact that people who had been registered as unemployed are no longer part of the (official) labour market. The decline in unemployment could also be perceived not as a consequence of intensive international mobility but rather as a side effect of ‘deactivation’ of a large part of the population alongside rising employment in the past couple of years. We will emphasize these kinds of effects in the next section.

5.2. Labour market effects on regional and local level

Due to the very fact that migration is selective conclusions based on the macro level aggregate data can be seriously biased. This was clearly suggested by the discussion

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15 As well as due to methodological problems, as for example the so-called ecological fallacy.
provided above. Even if there is a positive correlation on the macro level between the unemployment rate and migration intensity, it is not enough to assume that the situation on the labour market is a significant push factor. Therefore, to assess the impact of international labour migration on the labour market it is necessary to consider regional, local and individual effects. In the following part we present two in-depth analyses related to seasonal mobility of Polish citizens and migration of ‘ethnic Germans’ from the Opole region. In both cases we question the traditional approach to migration which sees labour mobility as an opportunity to ‘export’ unemployment and to improve domestic labour market conditions. While presenting these cases we are far from any kind of generalization. Obviously, recent migration from Poland and the Baltic states might to some extent be perceived as a relief to the labour market of countries under transition. The idea is rather to draw attention to the other far less positive aspects of labour migration.

Seasonal migration and its impact on labour market related phenomena

Poland is one of these transition countries that suffered the most painful negative effects of its labour market restructuring, including extremely high unemployment. Thus, migration was perceived as one of the possible solutions to labour market disequilibria. Such considerations were one of the major reasons for the creation of the seasonal migration framework. In December 1990, a bilateral agreement was signed by the Polish and German government on employment of Polish so-called programme workers in Germany. The idea was to create a framework for employment of a limited and strictly controlled number of Poles, predominantly low skilled workers. One of the major reasons for signing the agreement – expressed by both parties involved – was the will to ease negative effects of the economic and political transition in Poland in the 1990s, especially those related to unemployment.

The above mentioned agreement created, in fact, a framework for one of the largest flows in the recent history of Poland. In early 2000s, the number of Poles employed on that basis in Germany exceeded 300,000 annually. Therefore, real and potential labour market effects of this type of mobility are of crucial importance to the Polish economy.

The programme of seasonal migration was supposed to support those who suffered unemployment in Poland. However, the data provided by the survey done by CMR does not support this thesis (Kaczmarczyk 2005, Okólski 2006). Generally, the status on the labour market of those who were leaving for seasonal jobs was relatively good: an overwhelming part of seasonal workers were regularly employed in Poland when leaving for Germany. The share of such persons was nearly 42 percent (including self-employed and farmers almost 53 percent). The unemployed constituted 25 percent of the seasonal migrants and the share of persons who were economically not active on the Polish labour market amounted to 20 percent. In fact, the effect of ‘exporting unemployment’ started to play a relatively important role only in the late 1990s, when the situation on the Polish labour market worsened significantly. Since 2000, the share of seasonal migrants with and without regular job in Poland has been about the same and simultaneously the number of seasonal workers who
were economically inactive grew. The conclusion from the individual data is also that since the late 1990s seasonal migration has become an escape from unemployment. Interestingly, the effects of this strategy were hardly seen on the aggregate level. The correlation between unemployment rates and shares of seasonal migrants in the labour force at the powiat level (a mid-level administrative unit in Poland) was moderate and statistically insignificant (Kaczmarczyk 2005).

Moreover, in the context of this paper the results provided by Fihel (2004) are of high importance. She focused on the potential effect of seasonal migration on economic activity on the Polish labour market and argued that the seasonal migration does not lead to any status change on the Polish labour market. Even more so, typically seasonal migration can increase the unemployment and lead to staying out of the labour force in Poland.

The analysis of flows between different ‘statuses’ on the labour market has shown that seasonal migrants very rarely change the status between consecutive trips abroad. Almost 80 percent of those who were unemployed prior to the first seasonal migration in Germany did not succeeded in finding a job in Poland before the next seasonal migration. Such a relatively low mobility on the labour market is quite typical for the whole country however, but the comparison between seasonal workers and the total labour force may suggest that there are negative effects of seasonal migration on the migrants’ labour market position in Poland (Figure 5.10 and 5.11).
Data shown on the presented figures clearly indicate that probabilities estimated for the total population differ significantly from those calculated for seasonal workers. The general conclusion could be that Polish seasonal migrants are, firstly, relatively more often without job and, secondly, face serious problems with finding job after periods of unemployment. Among seasonal workers who were unemployed prior to the first seasonal migration, 86.3 percent did not change this status till the next seasonal migration (in the case of the total labour force – 55 percent). The share of persons who were able (or who wanted) to find a job was equal to 1 percent (28 percent for the total labour force). On the basis of the presented analysis, Fihel (2004) argued that in the long term seasonal migration has a negative impact on employment prospects in Poland and does not lead to improvement of the migrants’ labour market position: migrants are relatively rarely able to return to the labour force or to find employment. This outcome may be a consequence of several factors. Firstly, as shown by other studies (Kaczmarczyk 2004, Kaczmarczyk 2005), seasonal migration may be seen as a specific migration strategy based on circular international movements. When benefits related to mobility (earnings abroad) are relatively high and potential earnings at
home relatively low (e.g. when the risk of unemployment is high), the outcome of cost-benefit calculations may be an increase in the intensity of seasonal work abroad and leaving the labour force in Poland. Secondly, due to limits set by the agreement (agriculture as the most important sector), seasonal employment demands only manual work and no qualifications. In most cases migration experience related to this type of mobility do not boost the human capital of migrants. The latter effect seems to be of central importance also for other types of recent migration from Poland and the Baltic states. Despite of a relatively high level of education, they are able to find employment predominantly in the secondary labour markets of well-developed economies. Such migration has only moderate impact on unemployment in the sending country, and may, furthermore, lead to a permanent drop in participation rates on the local and regional scale.

The Opole region

One of the most extensively researched migrant-sending areas in Poland is the Opole region. This part of Poland is also highly interesting when studying labour market effects of migration. A significant part of the region’s inhabitants, namely 'ethnic Germans' (autochthons), was the only group of Polish citizens who had easy access to German citizenship and thus to the western European labour market: since the early 1970s, they were able to work in Germany on a legal basis. The number of autochthons in the Opole region amounted to 440 000 in 1950 and 330 000 in 1999. The region’s number of Polish residents with a German passport was estimated at 150 000 – 200 000 (15-20 percent of the total population). These numbers are not that high, however the research conducted in the early 1990s showed that the share of 'ethnic Germans' in the case of almost a half of the local communities (gmina) was higher than 60 percent. This makes the potential consequences of migration relatively significant on both the local and regional level. Accordingly, a huge migration potential and massive migration flows could be expected.

In fact, as shown by Jonczy (2005), the scale of migration from the Opole region was enormous: about 25 percent of persons with permanent residence in Poland moved and were living abroad for a long time; 34 percent were migrating on temporary basis. This situation deepened in the late 1990s and early 2000s. Currently more than 43 percent of the population aged 15-64 and 57 percent of those who are employed work abroad on temporary or permanent basis. Jonczy argued that the number of persons working abroad might exceed the number of those who are employed in Poland. From his estimations it follows that out of 150 000 autochthons in productive age, over 61 000 were employed abroad, including 43 000 persons working exclusively abroad (both temporarily and permanent).

Such a massive migration can be expected to have a very significant impact on the labour market situation. In fact, on the local level in the Opole region stronger outflow rate is associated with lower unemployment rate. For instance in 2000, the regional unemployment rate (relative to all people at productive age) amounted to 10 percent whereas in the communities with a high share of autochthons (and migrants) the unemployment rates were below 6 percent. Therefore Jonczy (2005) argued that the impact of migration on the
unemployment in the region is not disputable and unemployment as such refers only to those who do not have free access to the German labour market.

However, the impact of migration on economic activity in the region is highly controversial. On the one hand, Jonczy (2004) argued that migration from the Opole region is related to significant multiplier effects. According to his estimates, the international migration of one person should decrease the number of unemployed by 3 persons (direct effect) and two additional persons as a result of remittances (through the multiplier effect). On the other hand, as the most important development problem in the region the relationship between migration and economic activity is perceived. Particularly, very problematic is the lack of equilibrium between incomes generated on the basis of migration and economic potential. Migration leads to decrease in the unemployment but also to reduction of employment: in 2000, the employment rate in the region equaled 31 percent, which was way below Poland’s average. The economic activity is relatively low and at the same time, a transfer of remittances and an increase in consumption demand has been observed as a result of migration. In such a situation, there are theoretically a few options open. Firstly, we might expect an increase of production on the local and regional scale, and secondly, an increase of import of goods and services from outside of the region (with pressure on price level). In the case of Opole, due to massive outflow of labour force, the first option is hardly realistic. Serious labour shortages are visible in many sectors of the economy. The construction sector may serve as a typical example – in this particular case we observe at the same time a significant outflow of workers abroad and very high transfer of remittances (home/flat related expenses as the major category of migrant spending).

The chances to increase the capital intensity of the local and regional production are also very limited. This is particularly due to deficits in highly skilled labour. As a result of the economic incentives structure (demand for low skilled labour in major destination countries), the average level of education in communities with high share of ‘ethnic Germans’ is lower than in the whole region – a situation quite typical for many migrant communities in Poland. As a consequence, the only real option is import of goods and services from other regions or from abroad. Under such circumstances, the potential multiplier effects are significantly reduced, and additionally, one might expect strong inflationary pressures.

The case of migration from the Opole region shows that massive migration can lead to serious economic problems on the local and regional scale. Clearly visible are labour shortages and higher prices (and wages). However, far more import is the depreciation of human capital and the hindering of economic development through crowding out local economic activity. Additionally, in the long term the outflow of the younger part of the population can seriously deteriorate demographic structures something that has a negative impact not only on the labour market but also on the social security system.

5.3. The human capital perspective – brain drain, brain gain, or brain exchange?
In net emigration countries, like Poland and the Baltic States, the outflow of people often ensues a phenomenon known as brain drain. It means a negative balance (net loss) of population that represents desired qualitative characteristics, such as completed university education, professional competences, or experience and managerial or entrepreneurial skills. Such a loss basically results from a systematic over-representation (relative to the general population) of emigrants endowed with a high level of human capital – the highly skilled or the most highly educated. This may bring about a decrease in the number of the best professionals and the most highly educated, and a deterioration of the quality of the workforce, and may denote a wasteful use of public resources and finance devoted to education and training of specialists.

In the contemporary world, a more than proportionate outflow of the highly educated seems to constitute a rule. Around the year 2000, the share of people 15-year old or more with a university diploma who emigrated from the most developed countries stood at 30 to 50 percent compared to a 10 to 30 percent share of that category in the total population aged 15+ of the sending countries (Dumont, Lemaitre 2005). Such over-representation takes place also in the case of the outflow from the less developed countries, but because of a relatively low level of education at the tertiary level, emigrants from those countries are rather rarely highly educated. For instance, in 2000, the percentage of university graduates among migrants from the richest (being and at the same time net immigration) countries was 49.9 in case of USA, 49.7 in case of Japan, 45.9 in case of Australia and 41.2 in case of Britain, while in a much poorer and a typical net emigration country like Turkey, it was only 6.4 (OECD 2005).

This suggests that currently the better educated are more prone to move than those who are less highly educated. Brain drain, which almost exclusively is being observed in the less well-off countries, stems to a larger extent from a great surplus of outflow over inflow of people than from a high proportion of the relatively better educated migrants in the total outflow. From that perspective, the present situation of Poland and the Baltic States seems very interesting since those countries display a strong propensity to emigration and at the same time belong to those rather less well-off countries. In our considerations that follow we will focus on the Polish case with a presumption that it might be deemed representative for all three of the other countries.

Before we start the analysis, it should be remembered that in dealing with any aspect of migration from Poland a researcher first of all has to face imperfections and gaps in empirical material. An assessment of the effects of migration on the level of human capital in the Polish society will mainly be pursued by resorting to the results of the 2002 population census. Then we will supplement our findings by means of BAEL data, the Polish Labour Force Survey.

The transition period in Poland from 1989 onwards was marked by a growing inflow of foreign citizens, yet until today the level of immigration has remained relatively low. At least in comparison to the level of outflow, which has continued to be relatively high, although in the early 1990s it was slowly decreasing. In order to examine a joint impact of those opposite-direction flows on the ‘brain exchange balance’, a composition of various categories
of migrants (both emigrants and immigrants) who took part in those flows with regard to their educational attainment will be compared. Table 5.1 presents the percentage structure of each of those migrant categories by the level of education, as grasped by the 2002 population census.

It follows from these data that on 20 May 2002, the share of residents of Poland (aged 15+ years) who completed tertiary (university-type) education was 9.9 percent in males and 11.0 percent in females. With one exception it was lower, and substantially lower, than in the migrant categories identified in Table 5.1. Among migrants who at the time of the census stayed in a foreign country for more than two months, that share was 3 percentage points higher in the case of men and 5 percentage points higher in the case of women compared to the general population. Other categories represented even higher human capital; the difference relative to the resident population exceeded 15 percentage points (in case of the foreigners who moved to Poland it exceeded 30 points). In two categories (male foreigners staying in Poland) the most highly educated constituted a clear majority.

The exception referred to earlier was persons born in Poland and at the same time regular residents of Poland who held a double German-Polish citizenship. A large part of those people were either actual emigrants or return migrants or circular migrants. Although they constitute a tiny fraction of the total population of Poland (.8 percent of all residents at age 15 or more), in some regions of Poland that proportion is quite considerable, especially in the western part of Upper Silesia. Those double citizens, being apart from Poland citizens of the Federal Republic of Germany, have for a long time benefited from a free access to labour markets of the EU countries, and until May 1st, 2004 enjoyed such a freedom as the only group of Polish citizens. Until the date of the 2004 EU enlargement, international mobility among the members of that group was enormously high (Jonczy 2006). One of the striking characteristics of the group of German-Polish citizens living in Poland was a very low percentage, at one-half of the level observed in the general population, of young and adult persons with a university diploma.

Conversely, the share of the population falling into the group whose educational attainment was lower than upper secondary level was by far predominant and distinctly higher than in the general population. Quite different were the proportions of the lowest education group in all other migrant categories – those proportions were significantly lower than in the resident population.

We may conclude therefore that in Poland, as much as in other countries, international mobility has become a domain for well-educated people. From the point of view of human capital balance, the inflow of foreigners and fellow-countrymen has been beneficial, whereas the outflow of Polish residents (except for bi-nationals holding German passports) detrimental. Of course, it might be argued that a negative effect of the outflow could be offset over a longer time-span provided that emigrants return. It might be so because returning migrants are much better educated than current emigrants and especially the general population. Whether in Poland there occurs a net loss of the most highly educated, i.e. brain drain, is decided not so much by the sheer fact of outflow nor the size of
outflow, but rather by the numerical proportions between the outflow and inflow of people
with tertiary education\textsuperscript{16}.

It is possible, on the basis of the 2002 population census data, to roughly estimate the
actual net effects of migration of the highly educated in the period 1989-2002. The net loss in
that period was close to 17 500 men and 12 000 women, which was an equivalent of 1.2 and
.7 percent, respectively, of the total Poland’s male and female populations of the same
educational status at the time of census (Okólski 2006). As we shall see, that was not very
much compared to what has happened in the period after Poland has accessed EU.

\textsuperscript{16} Under Polish conditions, according to the 2002 population census data, the outflow which would outnumber the
inflow by factor two would still be generating a positive balance of the highly educated.
Table 5.1 Selected indicators of educational structure† of various categories of Poland’s population (aged 15+)
viewed from the angle of international migration, on 20 May 2002

<table>
<thead>
<tr>
<th>Highest level of education completed††</th>
<th>General population</th>
<th>Regular residents staying abroad for more than two months (de facto emigrants)</th>
<th>Regular residents with double German-Polish citizenship</th>
<th>Regular non-Polish residents who arrived in Poland after 1988 (de facto return migrants)</th>
<th>Temporary residents (foreigners who arrived in Poland more than two months before census date)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of persons (in thousand)</strong></td>
<td>14,962,1 (100,00)</td>
<td>339,3 (2,27)</td>
<td>124,3 (0,83)</td>
<td>10,7 (0,07)</td>
<td>22,6 (0,15)</td>
</tr>
<tr>
<td><strong>Percentage indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University or equivalent</td>
<td>9,9</td>
<td>12,7</td>
<td>5,1</td>
<td>46,0</td>
<td>28,7</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>21,5</td>
<td>27,1</td>
<td>16,8</td>
<td>29,5</td>
<td>29,5</td>
</tr>
<tr>
<td>Lower secondary or below</td>
<td>68,6</td>
<td>60,2</td>
<td>78,1</td>
<td>24,5</td>
<td>41,8</td>
</tr>
<tr>
<td><strong>females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of persons (In thousand)</strong></td>
<td>16,326,3 (100,00)</td>
<td>393,3 (2,41)</td>
<td>118,1 (0,72)</td>
<td>10,6</td>
<td>28,8</td>
</tr>
<tr>
<td><strong>Percentage indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University or equivalent</td>
<td>11,0</td>
<td>15,1</td>
<td>26,2</td>
<td>35,8</td>
<td>28,0</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>29,3</td>
<td>41,7</td>
<td>68,6</td>
<td>39,5</td>
<td>40,1</td>
</tr>
<tr>
<td>Lower secondary or below</td>
<td>59,7</td>
<td>43,2</td>
<td>24,7</td>
<td>31,9</td>
<td>31,9</td>
</tr>
</tbody>
</table>

† percentages reflect proportion of persons aged 15+ with a given education in the total population of a given category

†† upper secondary includes post-secondary other than certified with a university diploma or equivalent, secondary technical and secondary comprehensive; lower secondary includes grammar-school education and vocational

Source: Authors’ elaboration based on Central Statistical Office data.
The census data also enable us to trace a general trend in the outflow of the highly educated, i.e. a major component of ‘brain circulation’ in Poland. It follows from these data that among people who emigrated before 1989, the share of the most highly educated stood at 12.0 percent, in 1989-1991 – 9.1 percent, in 1992-1994 – 10.5 percent, in 1995-1997 – 10.5 percent and in 1998-2001 – 11.5 percent (Kaczmarczyk, Okólski 2005). We may conclude that at the start of the transition, the propensity of well educated people to move strongly decreased\(^{17}\), then increased just a little and remained stable (still lower than in the pre-transition period) until 1997 but that afterwards it grew rapidly. The pre-transition level was probably reached still before May 1\(^{\text{st}}, 2004\).

The net effect of brain circulation between May 1\(^{\text{st}}, 2004\) and early 2007 is probably much more strongly negative than our above quoted estimate for 1989-2002 which suggested the net loss of some 30 000 highly educated people. It is known from BAEL data (shown in part 3 of the present paper) that the proportion of Polish migrants with tertiary educated who moved abroad in the post-accession period was 16.5 percent, much more than anytime in the 1990s. We assume that the minimum cumulative number of migrants aged 15 years or more over the post-accession period could be approximated as a difference between the stock of Polish migrants as measured by BAEL in the second quarter of 2007 and the respective stock in the second quarter of 2004, which is around 360 000. This brings us to an estimate of some 60 000 highly educated persons who might have emigrated after May 1\(^{\text{st}}, 2004\), or 1.6 percent of the total population with university (or equivalent) diploma\(^{18}\). That final absolute figure (60 000) might not be far from the actual net loss of ‘brains’ because in recent years immigration to Poland did not increase in any significant way and, therefore, the inflow of highly educated people remains very low in terms of absolute numbers.

Figure 5.12. Excess supply of labour by educational attainment, 2006

![Graph showing excess supply of labour by educational attainment for Estonia, Latvia, Lithuania, and Poland in 2006.](source)


\(^{17}\) This confirms earlier findings by Hryniewicz et al. (1992, 1994).
\(^{18}\) An estimate that comes from BAEL in the first quarter of 2007 is somewhat higher and it amounts to 84 000.
The loss of less than 2 percent of the stock of people with university diplomas might not mean a serious damage to the economy, especially since Poland still suffers from a considerable unemployment of the most highly educated. Such a hypothesis finds ‘support’ in the indices of the educational mismatch\textsuperscript{19}, as shown in Figure 5.12. Indeed, in 2006, a relative deficit of people with tertiary education was noted in Poland, but however, at the same time it was consistent with that observed in the EU15, not to mention other countries of the EU8+\textsuperscript{20}.

Nevertheless, the great outflow of potential or actual specialists that occurred in Poland after the accession date must have caused many occasional sectoral and local-scale shortages. An example of such shortages is in relation to the medical profession.

Although no records exist concerning the actual emigration of medical professionals, such an outflow can be approximated by means of a registration of certificates issued to physicians by the Polish Chamber of Physicians and Dentists that confirm the skills according to EU rules. The only practical purpose of requesting such a certificate by a physician is its presentation to an employer (a hospital or a clinic) in any other EU country, which would be related to a job search\textsuperscript{21}. Selected relevant data are included in Table 5.2.

Table 5.2 Certificates of medical proficiency issued to physicians, 1 May 2004 – 30 June 2006

<table>
<thead>
<tr>
<th>Medical profession</th>
<th>Number of economically active physicians</th>
<th>Number of certificates issued</th>
<th>Share of certificates in the total number of professionals of a given category, %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top five professions with the highest number of certificates issued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>3 984</td>
<td>625</td>
<td>15.6</td>
</tr>
<tr>
<td>General surgery</td>
<td>5 395</td>
<td>334</td>
<td>6.1</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>2 261</td>
<td>168</td>
<td>7.4</td>
</tr>
<tr>
<td>Internal diseases</td>
<td>11 792</td>
<td>163</td>
<td>1.4</td>
</tr>
<tr>
<td>Radiology</td>
<td>1 993</td>
<td>154</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Top five professions with the highest share of certificates</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>3942</td>
<td>625</td>
<td>15.6</td>
</tr>
<tr>
<td>Plastic surgery</td>
<td>142</td>
<td>21</td>
<td>14.7</td>
</tr>
<tr>
<td>Chest surgery</td>
<td>218</td>
<td>28</td>
<td>12.8</td>
</tr>
<tr>
<td>Radiology</td>
<td>1 993</td>
<td>154</td>
<td>7.7</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>2 261</td>
<td>168</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>81 346</td>
<td>3 074</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: Authors’ elaboration based on the Ministry of Health data.

\textsuperscript{19} The mismatch is measured as a difference between the proportion (in percent) of people with a given level of education among the unemployed and among the employees (WB 2007).

\textsuperscript{20} Of all CEE countries that accessed EU in 2004 and 2007, Lithuania was in relatively the most unfavourable situation with regard to tertiary education (-17.5 percentage points) while Romania relatively in the most favourable situation (-7.5 percentage points).

\textsuperscript{21} The Ministry of Health informally estimated that around 50 per cent physicians having certificate left Poland.
It follows from these data that while generally a relatively low number of medical doctors requested and obtained the certificate – a little more than 3,000, which means 3.7 percent of all active physicians – in some medical professions the loss might have been disastrous. This is shown by the high share of certain professions to whom certificates were issued during the short time that elapsed since May 1, 2004 when the ‘issue of medical certificates’ emerged. Namely as many as 15.6 percent of all active anesthesiologists, 14.7 percent of surgeons specializing in plastic (cosmetic) surgery, and 12.8 percent of surgeons obtained the certificate during a little more than the two first years of Poland’s membership in the EU, which made them potential migrants.

Some losses are already felt in real life, and even casualties were reported due to the lack of specialists in individual hospitals. The outflow of medical professionals, intermediated by countless agencies, has contributed to a heated atmosphere and unrest in professional circles, and recently to turmoil and physicians’ and nurses’ strikes that demanded a drastic pay rise or threatened the medical authority with a mass exodus.

It might be added that a quite similar trend has emerged in the Baltic States, especially in Lithuania and Estonia. According to a survey conducted in the latter country in 2004, approximately 56 percent of physicians and nurses expressed a will to leave Estonia. Estonian medical professional are subject to several recruitment programs carried out by companies from the Scandinavian countries, mainly from Finland. By April 2006, 456 physicians out of 5,208, i.e. 8.9 percent of the total number of physicians, applied for a certificate that enable them to work abroad. The Health Care Board suggested that around 44 percent of those who applied, actually left the country before June 2005 (65 percent went to Finland) (WB 2006).

The international mobility of medical professionals is by all means one of the most controversial issues in current public debates in CEE. This is first of all due to the fact that this sector of the labour market represents a typical example of intangible services, that is, the human flow cannot be easily substituted with mobility of goods and services. On the other hand, in the light of unfavourable demographic trends, most of the well-developed countries are facing serious deficiencies in the number of their medical staff. The demand is very high. In effect, potential immigrants may expect highly beneficial financial and social conditions, integration support and, in at least several receiving countries, simplified immigration procedures. As a consequence, high migration propensity among this group should be expected.
Conclusions

1. Current international mobility from selected Central and Eastern European countries has become one of the most prominent population movements in the contemporary world. This causes a great interest particularly with regard to the demographic, social, and economic impact of migration on both sending and receiving areas.

2. Outflow from Poland and the Baltic states – particularly from Poland, which is perceived as one of the traditional emigration countries – has been substantial for some time now. However, the scale of the outflow increased significantly after May 1st, 2004, i.e. after the EU enlargement. The best examples of countries that witness an extremely large inflow of migrants from the countries under analysis, are the United Kingdom and Ireland. However, migrants from the CEE have become ‘visible’ in almost all countries of EU15 or even EEA.

3. According to the British sources, citizens of Poland and of the Baltic states in a very short period of time became the most important immigrant group. This is clearly visible when analyzing e.g. data on allocation of the national insurance numbers. A similar situation is also visible in the case of Ireland (according to the data on Personal Public Service numbers).

4. A distinct increase in the presence of EU8 countries’ citizens was noted in almost all countries of the EEA, particularly in countries like Italy, Spain, Norway, Sweden and even Iceland.

5. The only exception with regard to the dynamics of inflow, constitute Germany and Austria – countries that still block entry to its labour market and adopted so-called transitory arrangements. The former case is particularly interesting due to the fact that prior to the EU enlargement, Germany was the most important destination for migrants from the CEE.

6. The authors argue that the accession to the EU has triggered a ‘hibernated’ migration potential in the CEE countries. This process is to be attributed to a complex set of factors mainly related to the accession including: freedom of movement and establishment, free entry to selected labour markets, but also development of recruitment services and transportation routes. Generally, these and other factors radically lowered the level of risk related to migration and stimulated many persons who previously did not assess the migratory option as reliable to migrate.

7. As a consequence of the EU enlargement and related phenomena, recent migration from Poland and the Baltic states are to a large extent structurally different from those observed in the 1990s. Post 2004 mobility has become much more regular or legal than irregular or clandestine, more of long-term duration than circular (however this issue seems to be very controversial and does need further considerations), and more ‘individualistic’ than related to household or family strategies. The forms of flows have been diversified (among others with respect to destination countries) and migrant profiles differentiated.

8. The changes in structure of migration / migrants are clearly visible with regard to Poland – the most important sending country in the region. Post-accession migrants are
more evenly regionally distributed than prior to 2004. Recent migrants are, on average, younger and better educated than persons who were leaving abroad in previous decades. In general, from the Polish case it follows that recent migration strengthened the mobility of people and involves persons from areas or groups so far less prone to migrate. Interestingly, this is evident both in the case of relatively backward regions of Poland as well as large towns. As a consequence, the outcome of recent changes in migration structure might be two partly opposite trends: outflow of redundant, relatively poor educated people from the periphery and mobility of well endowed groups with a high level of human capital from the centers of development.

9. The assessment of the impact of migration on the demographic structures seems to be – particularly due to lack of reliable statistical data – an extremely difficult task. Generally, in comparison to the EU15 countries, the populations of Poland and the Baltic states are concentrated in the middle age-brackets. This however, does not necessarily correspond with participation in the labour market. In the case of Poland, changes in the pattern of labour market participation can be of bigger importance than pure demographic structures. So far, very little is known about the impact of recent mass mobility on demographic phenomena.

10. Having in mind recent and potential developments with regard to migration – i.e. the relatively large scale of the outflow and very limited inflow – the only chance to improve the labour market situation in the long run is to influence the activity rates of native populations. This is particularly important for Poland, but as we argue, holds true also for the Baltic States.

11. Due to methodological and statistical reasons, our knowledge of the scale and the impact of remittances on migrant-sending countries is limited. According to official data, in 2006 remittances equaled to 2.6 percent of GDP in Estonia, 2.5 percent in Latvia, 2.1 percent in Lithuania, and 1.3 percent in Poland. The impact on the macro level seems to be rather moderate, but a dramatic increase in the scale of remittances since the EU enlargement was noted (e.g. 790 percent increase in Estonia and 540 percent increase in Lithuania).

12. In-depth analyses provided by Leon-Ledesma and Piracha (2001) revealed that in the case of the CEE countries remittances do have potential positive impact on investment and private consumption, whereas the elasticity with respect to consumption was almost double than in the case of investment.

13. Detailed analyses on the micro level – available for Poland only – showed that due to the leading pattern of migration (labour migration, temporary mobility) between 70 and 90 percent of earned money can be transferred and spent at home. Typically, remittances are being allocated to consumption expenditures. However, spending on house/apartment purchase or modernization and education (own education or education of children) have attained a more and more predominant role. In general, the share of remittances spent on investment is very low, but money sent from abroad can play an important role in budgets of migrant households. There are also positive examples of impact of remittances on
development of infrastructure or local businesses. All in all, the impact of remittances on the community level is generally positive, however one may note a few negative effects, including growing inequality, decline in incentives to engage in activities on the domestic market, dependency on remitted money, and inflationary pressures.

14. According to economic theory, a massive outflow of workers abroad would lead to decline in the unemployment rate, a rise in the number of vacancies, an increase in wages, an increase in the employment rate and, eventually, a growing demand for foreign labour. Analysis of all the mentioned effects with regard to post-enlargement migration on the countries under analysis is very difficult and does not lead to un-ambiguous conclusions.

15. On the one hand, since May 2004, a gradual decrease in unemployment rates has been clearly visible. This holds true both in the case of Poland as well as the Baltic states. At the same time, labour shortages became one of the most important barriers to growth for companies in the region. Shortage of workers became particularly serious in manufacturing, trade and construction. In at least a few sectors, included agriculture and construction, a sharp increase in wages has been noted. Typically, all of the above mentioned effects are ascribed to recent out-migration and related to loss of human capital.

16. However, on closer examination, the relation between migration and the situation on the labour markets in the CEE countries seems to be far more complicated. Firstly, the growing number of vacancies became a serious problem not only in Poland and the Baltic states, but also in the Czech Republic and Hungary – countries which do not suffer from mass outflow of labour – suggesting that fast growth rates and rising labour demand have played an important role in the changes of the labour markets. Secondly, as indicated by the Polish case, a decrease in the number of unemployed may very well be the consequence of the out-migration as well as increase in employment (as mentioned before) and ‘deactivation’ of a large part of the population that is no longer part of the labour market (at least the official one).

17. The complexity of linkages between migration and labour market related issues can be very well exemplified on the basis of two case studies: Polish seasonal workers in Germany and migration from the Opole region.

18. From the first example it follows that seasonal migration may have only a moderate impact on the unemployment in the sending country. On one hand, a majority of workers leaving to Germany was regularly employed in Poland. On the other hand, seasonal employment abroad relatively often has had negative impact on employment prospects in Poland and rather leads to immobility on the domestic labour market.

19. The Opole region in Poland is an extremely interesting case due to a very large scale of international migration and due to the fact that a significant part of the population (‘ethnic Germans’) had easy access to the EU labour markets since early 1970s. This case shows that migration may have a negative impact on the unemployment level on the local and regional level but, at the same time, it may lead to serious labour shortages, wages pressure, and economic imbalances resulting from crowding out local economic activity (due to strong dependency on money remitted from abroad).
20. Central and Eastern Europe are typically presented as a brain drain area. This was not necessarily true in the first phase of transition; however, recently international migration from Poland and the Baltic States has increasingly become a domain for well educated people. The problem is that the extent to which there occurs brain drain is decided not solely by the fact of outflow of persons with tertiary education (which is a natural phenomena in the contemporary world) but rather by the very low inflow of well educated immigrants (i.e. numerical proportions between outflow and inflow). Secondly, when analyzing the phenomena in the labour market context one may argue that a significant part of the recent migration has constituted ‘brain overflow’ rather than ‘brain drain’ due to poor employment opportunities for those deciding to migrate. Thirdly, far more detrimental could be the effect of ‘brain waste’, i.e. employment of migrants from the CEE far below their professional skills. This type of migration can easily lead to depreciation of human capital and can impact the incentives to acquire human capital in a negative way.

21. Nevertheless, recent migration of highly skilled workers from Poland and the Baltic states already caused occasional sectoral and local-scale shortages. The best example of such an impact is the situation in the health care sector. The available statistical data revealed that whereas the total number of migrating doctors is not that high, in some medical professions (as well as on the local level) the loss of specialists might in some instances have been disastrous.
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Economic impacts of migration on Poland and the Baltic states

This report was prepared in conjunction with a project on labour mobility from the new EU member states to the Nordic countries that was commissioned to Fafo by the Nordic Council of Ministers. The report gives a general description of migration of the population of Poland and the Baltic States, and compare basic structural features of those movements in the pre-accession and post-accession period. The report also gives an analysis of the effects of remittance flows upon sending countries’ economies and households, and discuss various consequences that migration might have had on labour markets, both at national and regional level, and on home countries endowment with human capital.