Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements

- Country Studies -

This study has been carried out on behalf of the Employment, Social Affairs and Equal Opportunities Directorate General of the European Commission (contract VC/2007/0293). The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.

Nuremberg, 2009
Country studies

1. Country Study Austria
2. Country Study Bulgaria
3. Country Study Croatia
4. Country Study Denmark
5. Country Study France
6. Country Study Germany
7. Country Study Hungary
8. Country Study Ireland
9. Country Study Italy
10. Country Study Latvia
11. Country Study Poland
12. Country Study Romania
13. Country Study Spain
14. Country Study Sweden
15. Country Study United Kingdom
Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements

VC/2007/0293
Deliverable 8
Austrian Institute of Economic Research (WIFO)

Country Study: Austria
Peter Huber and Klaus Nowotny

Abstract
We survey the economic and labour market developments of Austria in the years since enlargement to identify noticeable shifts in economic development, which can be causally linked to the enlargements of the EU in 2004 and 2007. Since the public policy debate before enlargement expressed concerns about the potential effects of enlargement on migration, the labour market position of the less skilled and foreigners as well as potentially asymmetric impacts on regions, we pay particular attention to these four aspects of economic development. We find rather ambiguous evidence.

Economic development in Austria since the first round of the Eastern enlargement in 2004 has been marked by a noticeable improvement in the business cycle, which was primarily driven by higher exports to countries outside the EU 27. With the impeding financial crisis, however, Austria is likely to enter a recession in 2009 and growth expectations for 2010 are also subdued. We also find that despite strong employment growth, unemployment rates increased in the first two years after enlargement and still have not declined to levels attained at the end of the last economic upswing in the year 2000. At the same time the number of employees increased substantially since 2004. Half of this increase can be accounted for by increased migration.

Increased migration in the period 2004 – 2006, however, was not primarily due to an increase in migration from the new member states, but rather due to increased migration from the old EU member states, in particular Germany. By contrast, migration from the new member states increased only modestly. Although there is some anecdotal evidence of circumvention of the existing restrictions towards immigration, actual labour movements from the NMS to Austria were small relative to ex ante forecasts of post-enlargement migration potentials. This, however, was also to be expected given derogation periods on the freedom of movement of labour.

Furthermore, there is no clear cut evidence that either regional economic development or labour market outcomes of foreigners or low skill groups have been severely affected by migration following enlargement, but some evidence that since the year 2000 foreign workers have experienced increasing difficulties on the Austrian labour market.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
1 Introduction

Among the many important steps towards European integration in the last two decades the enlargements of the European Union by the 12 new Central and Eastern European member states in 2004 and 2007 were undoubtedly the most controversially discussed in the Austrian public policy debate. In this debate the potential implication of enlargement on migration and labour markets featured prominently. Critics often mentioned the potential negative effects of migration on the labour market (in particular of the income and employment opportunities of the less qualified), while proponents argued that migration would be associated with positive growth and employment effects and could potentially also alleviate bottlenecks with respect to high qualified workers, which repeatedly arise in boom phases of the business cycle, in particular in low unemployment economies like Austria.

Against the background of the intensity of the controversy, a large number of ex-ante studies were devoted to analysing the potential impact of enlargement on migration and the Austrian labour market (see for example Pichelmann et al., 1998; Walterskirchen and Dietz, 1998; Palme et al., 1999 Mayerhofer and Palme, 2001; ibids, 2001a). In consequence it seems fair to say that Austria represents a country in which the extent of research output on the potential impact of enlargement and the associated migration was particularly large prior to accession of the 12 new member states to the EU 15.

Ex-post evaluations of the developments since 2004 are, however, much more seldom. Exceptions include the study by Untiedt et al. (2006), which focuses on the effects of enlargement on general economic development in the post accession phase 2004 to 2006, and a study by Biffl et al. (2006) which reviews the developments in the field of migration for 2004 and 2005. Among these studies Untiedt et al. (2006) find little evidence that enlargement had major effects on economic development. In fact, according to their results both rapid economic growth and the slow decline in unemployment rates in the post 2004 period in Austria seem to have been primarily driven by higher export growth to countries outside the EU 27 and high immigration of German nationals to Austria.

Biffl et al. (2006) focus more strongly on migration issues and argue that migration from the new member states has not increased dramatically in the two years (2004 and 2005) after enlargement, but that immigration remained at the levels, which prevailed already prior to enlargement. Furthermore, they too suggest that within the short period since enlargement no clear evidence of severe negative effects of migration on regional labour markets can be found.

In this country report on Austria, we focus on the economic, labour market and migration development of the Austrian economy since 2004 with the aim of assessing the impact of

---

1 The authors would like to thank Julia Bock-Schappelwein, Herbert Brücker, Anna Iara and Hermine Vidovic for helpful comments.
enlargement on immigration and the effect of migration inflows on the Austrian labour market. Thus we address the questions to which degree enlargement has led to increased migration in the last three years and whether there have been strong and visible changes in the structure of labour market imbalances in the country. In this respect we focus in particular on those aspects of the labour market, where particular impacts on employment and unemployment were expected. These are the labour market situation of foreigners and less skilled as well as the regional impact of enlargement. From a methodological point of view – due to the short observation horizon available since enlargement, which limits the possibility for statistical analysis, – we primarily use descriptive methods. In the next section we describe the economic development since enlargement. Section 3 then analyses changes in the structure of employment and unemployment while section 4 looks at migration trends and section 5 summarises some of the literature on the potential effects of migration on the Austrian labour market, which in the case of Austria largely pre-dates accession. Section 6, finally, concludes.
2 Macroeconomic and institutional framework for migration to Austria

2.1 Macroeconomic and labour market development

2.1.1 Macroeconomic development 2004 - 2007

From a macro-economic perspective, the period 2004 to 2007 was marked by an upswing of both GDP and employment growth (see Figure 1). After the boom years of 1998 and 1999 Austria – following international business cycle trends – had entered a phase of more modest growth at the turn of the century. In 2004 GDP growth picked up pace and assumed values in excess of 2% - levels comparable to those of the late 1990’s. In particular the years 2006 and 2007 were marked by GDP growth of more than 3% and can thus be considered boom years. The driving forces behind this upturn were the changes in exports induced by the international business cycle. The Austrian current account changed from -0.2% of GDP in 2003 to over 3.0% of GDP in 2007. The major beneficiaries of this improvement were the manufacturing industries.

The components of domestic demand (consumption and investments), by contrast, were less important driving forces of the business cycle. Investments in machinery and equipment, after a reduction in 2004, increased only modestly in 2005 and 2006. Thus enterprises reacted to the improved business cycle situation only in 2007 by increasing investments by 7.1%. Similarly, investments in construction remained rather subdued between 2004 and 2005. In the last two years, when the construction sector showed signs of overheating on account of both increased public as well as private sector investments accompanied by good weather conditions in winter, construction investments grew more strongly, however.

The most modest increases over the whole upturn were registered with respect to private consumption. This slow growth, which was below the long term average for the entire period since the turn of the century, was caused by rather modest increase in disposable income as well as an increasing savings rate and increasing consumer prices in 2007.

2.1.2 Labour market development

Similarly to GDP employment growth, which at the end of the upswing of the 1990’s started to reduce with the usual lag in 2000 to 2002, also increased noticeably in 2004: The number of employees grew by +0.7% and until 2007 growth rates of employees increased each year, reaching 2.1% in 2007. Furthermore, while growth in the number of

---

2 We focus on changes in the current account rather than exports and imports, because since 1.1.2005 exports for the purpose of repair are not included in foreign trade statistics any more, which makes export and import statistics for 2005 difficult to interpret. Without this change export growth in 2005 would have amounted to 8% in 2005 (see: Sieber, 2006)

3 Since the turn of the century disposable incomes increased more modestly than GDP in all years except for 2003.
employees until 2004 was primarily owed to a reduction in average working hours\textsuperscript{4}, since 2005 working hours have also been increasing for the first time since 2000 (see Walterskirchen, 2006). This is owed to particularly strong employment growth in the manufacturing sector, which is the primary provider of full time employment in Austria.

Table 1: Economic Development 2004-2007 and WIFO Forecasts 2008-2009: Main Indicators

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008*</th>
<th>2009*</th>
<th>2010*</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{Real}</td>
<td>2.9</td>
<td>3.4</td>
<td>3.1</td>
<td>1.8</td>
<td>−0.5</td>
<td>0.9</td>
</tr>
<tr>
<td>\text{Nominal}</td>
<td>5.0</td>
<td>5.3</td>
<td>5.3</td>
<td>4.1</td>
<td>1.2</td>
<td>2.2</td>
</tr>
<tr>
<td>\text{Manufacturing} \text{Real}</td>
<td>4.8</td>
<td>9.6</td>
<td>5.5</td>
<td>3.0</td>
<td>−2.8</td>
<td>2.0</td>
</tr>
<tr>
<td>\text{Wholesale and retail trade, real}</td>
<td>2.2</td>
<td>−1.0</td>
<td>1.5</td>
<td>1.0</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>\text{Final consumption household expenditure, real}</td>
<td>2.6</td>
<td>2.4</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>\text{Gross fixed capital formation, real}</td>
<td>2.4</td>
<td>2.6</td>
<td>4.7</td>
<td>1.9</td>
<td>−3.8</td>
<td>0.3</td>
</tr>
<tr>
<td>\text{Machinery and equipment}</td>
<td>5.5</td>
<td>0.9</td>
<td>6.8</td>
<td>2.0</td>
<td>−7.0</td>
<td>±0.0</td>
</tr>
<tr>
<td>\text{Construction}</td>
<td>−0.4</td>
<td>4.2</td>
<td>2.8</td>
<td>1.8</td>
<td>−1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>\text{Exports of goods}</td>
<td>3.2</td>
<td>6.8</td>
<td>8.7</td>
<td>3.6</td>
<td>−0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>\text{Nominal}</td>
<td>5.4</td>
<td>9.5</td>
<td>10.5</td>
<td>4.9</td>
<td>−1.0</td>
<td>1.7</td>
</tr>
<tr>
<td>\text{Real}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{Imports of goods}</td>
<td>2.9</td>
<td>4.1</td>
<td>8.0</td>
<td>2.4</td>
<td>0.3</td>
<td>1.3</td>
</tr>
<tr>
<td>\text{Nominal}</td>
<td>5.9</td>
<td>8.0</td>
<td>9.6</td>
<td>5.3</td>
<td>−0.7</td>
<td>1.8</td>
</tr>
<tr>
<td>\text{Real}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{Current account balance Billion €}</td>
<td>4.9</td>
<td>7.3</td>
<td>8.6</td>
<td>8.7</td>
<td>7.4</td>
<td>6.9</td>
</tr>
<tr>
<td>\text{In % of GDP}</td>
<td>2.0</td>
<td>2.8</td>
<td>3.2</td>
<td>3.1</td>
<td>2.6</td>
<td>2.4</td>
</tr>
<tr>
<td>\text{Long-term interest rate}</td>
<td>3.4</td>
<td>3.8</td>
<td>4.3</td>
<td>4.3</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>\text{in (in %)}</td>
<td>2.3</td>
<td>1.5</td>
<td>2.2</td>
<td>3.2</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>\text{Consumer prices}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{Unemployment rate}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{Eurostat definition}</td>
<td>5.2</td>
<td>4.8</td>
<td>4.4</td>
<td>3.5</td>
<td>3.9</td>
<td>4.1</td>
</tr>
<tr>
<td>\text{in %}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{National definition}</td>
<td>7.3</td>
<td>6.8</td>
<td>6.2</td>
<td>5.8</td>
<td>6.5</td>
<td>6.9</td>
</tr>
<tr>
<td>\text{in %}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>\text{Active dependent employment}</td>
<td>1.0</td>
<td>1.7</td>
<td>2.1</td>
<td>2.4</td>
<td>−0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>\text{Government financial balance (in % of GDP)}</td>
<td>−1.5</td>
<td>−1.5</td>
<td>−0.4</td>
<td>−0.5</td>
<td>−2.8</td>
<td>−3.2</td>
</tr>
</tbody>
</table>

Notes: * 2008 and 2009: forecasts. \text{1} Value added, including mining and quarrying. −\text{2} Including other products. −\text{3} According to Statistics Austria. −\text{4} 10-year central government bonds (benchmark). −\text{5} According to Eurostat Labour Force Survey. −\text{6} According to Public Employment Service Austria, percent of total labour force excluding self employed. −\text{7} Excluding parental leave, military service, and unemployment persons in training. − Last update: Juni 27, 2008

Source: WIFO

\text{4} The share of part time employees in Austria is 21.8% and thus one of the highest in the EU.
Figure 1: Growth of GVA and Employees in Austria 1998-2007 (in %)
Year-by year growth rate, Gross value added

Notes: 1 excluding parental leave, military service and persons in training
Source: HV, Statistic Austria, WIFO-calculations
In contrast to the substantial growth in employment and GDP, however, unemployment rates did not start to decline until 2006. Despite increased use of active labour market policies\(^5\) the number of unemployed according to national estimates increased by around 3.800 in 2004 and another 8.800 in 2005. The unemployment rate according to the ILO definition was thus at 5.2\% in 2005; the unemployment rate according to national methodology of 7.3\% in 2005 represented a record high since the 1980’s.\(^6\) Declines in unemployment (amounting to almost 30.000 persons) were only registered as of 2006 (see Table 2).

**Figure 2: Development of Unemployment in Austria**

\(1990 = 100\)

\[\text{Figure 2: Development of Unemployment in Austria}\]

\[\text{1990} = 100\]

\[\text{Total} \quad \text{Foreigners} \quad \text{Native}\]

\[\text{Source: Statistic Austria, WIFO-calculations.}\]

At the same time there was a substantial increase in the number of economically active (number of unemployed and employees) that was carried by increased labour force participation of foreigners\(^7\), women and older cohorts (the latter due to pension reforms promoting the delay of exit from the labour force to retirement). The largest increases in this respect were registered in the number of foreign employees in Austria (between +3.6\% to +4.4\% annually in the period 2004 to 2007). The increase in the labour supply in foreign nationals was around 60.000 in the last four years. This represents the highest

---

\(^5\) In Austria, persons participating in active labour market measures are not registered as unemployed during their participation.

\(^6\) We focus on the national definition (i.e. registered unemployment) for the largest part of this study on account of better (more recent) data availability.

\(^7\) See section 3 for details.
increase since the 1988-1992 immigration wave, where the increase in the number of active foreign employees was around 100,000 (see section 3 below for details). The number of Austrian economically active natives, by contrast, increased somewhat more modestly at the beginning of the upturn but picked up in speed in the subsequent years (reaching an increase of 0.9% in 2007). Thus foreign workers accounted for 45% of the total increase in the number of economically active in the time period 2004 to 2007.

2.1.3 Forecasts 2008 - 2009

According to the recent (December 2008) economic forecast of the Austrian Institute for Economic Research (WIFO) 2007, however, was the peak of the current upswing. Forecasts for 2008, on account of reduced growth of the world economy and the impeding financial crises, assume a more modest growth of real GDP (of 1.8%) and a recession in 2009. According to this latest forecast GDP will decline by -0.5% in 2009 and for 2010 a modest real GDP growth of +0.9% is expected. In particular for the years 2008 and 2009 the current account surplus of the Austrian economy is expected to decline, on account of reduced exports to EU and OECD countries, which will not be compensated by higher exports to the newly industrialized countries and low consumption and investment growth is expected to continue in the next two years.

For the year 2008 the current WIFO forecast foresees a continued increase in employment of 2.4% and a further reduction in unemployment of around 11,600 unemployed. At the beginning (January) of 2008 the number of employees increased by 100,000 relative to the previous year. This implies an increase that was higher by one third than in autumn 2007. Although growth in the number of employees usually lags GDP growth by around two quarters, and the scarcity of skilled workers in 2007 may have prompted employers to retain workers despite lower orders, this development is rather unusual for the current business cycle situation. In part it may be due to changes in the registration requirements for the Austrian social security system. While until the end of 2007 employers were required to register employees with the social security system within three days after the start of work, which gave some leeway as to the timing of registration, as of January 1, 2008, employers are required to register new workers one day before the beginning of a new employment relationship.

---

8 This forecast is based on the assumption of a continuation of the migration trends of previous years, and does not include an explicit assumption on the potential change in migration regime with respect to the new member states in 2009.

9 One of the consequences of this change in legislation is that employers in the case of a control can not claim that unregistered (black market) workers have just started to work two days ago, as was allegedly customary in a number of branches in the Austrian economy. Thus it is believed that the new legislation led to an increased registration of a number of informal sector workers. While this view is supported by the fact that the majority of the job creation occurred in tourism and construction, where unregistered work was particularly high, the concrete quantitative impact of this effect is not clear.
Table 2: The Labour market in Austria (2004 – 2009)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008*</th>
<th>2009*</th>
<th>2010*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand of labour force</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active employment</td>
<td>37.2</td>
<td>55.9</td>
<td>66.9</td>
<td>86.0</td>
<td>–15.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Active Employees¹</td>
<td>31.9</td>
<td>51.5</td>
<td>65.5</td>
<td>78.0</td>
<td>–13.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Natives</td>
<td>20.0</td>
<td>35.0</td>
<td>43.6</td>
<td>54.2</td>
<td>–12.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Foreigners</td>
<td>11.9</td>
<td>16.5</td>
<td>21.9</td>
<td>23.8</td>
<td>–1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Self-employment</td>
<td>5.3</td>
<td>4.4</td>
<td>1.4</td>
<td>8.0</td>
<td>–2.0</td>
<td>±0.0</td>
</tr>
<tr>
<td><strong>Supply of labour force</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population(15-64)</td>
<td>15.6</td>
<td>18.5</td>
<td>17.4</td>
<td>24.9</td>
<td>20.2</td>
<td>27.6</td>
</tr>
<tr>
<td>Employees</td>
<td>45.9</td>
<td>42.4</td>
<td>50.0</td>
<td>74.4</td>
<td>12.0</td>
<td>23.0</td>
</tr>
<tr>
<td><strong>Surplus labour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment (LFS)</td>
<td>8.8</td>
<td>–13.5</td>
<td>–16.9</td>
<td>–11.6</td>
<td>27.0</td>
<td>15.0</td>
</tr>
<tr>
<td><strong>Unemployment rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eurostat definition²</td>
<td>5.2</td>
<td>4.8</td>
<td>4.4</td>
<td>3.5</td>
<td>3.9</td>
<td>4.1</td>
</tr>
<tr>
<td>National definition³</td>
<td>7.3</td>
<td>6.8</td>
<td>6.2</td>
<td>5.8</td>
<td>6.5</td>
<td>6.9</td>
</tr>
</tbody>
</table>


Source: WIFO

For 2009, however, a turning point in labour market development is expected on account of the recession. Employment is expected to decline by 15.000 employees (or -0.4%) and unemployment is estimated to increase by 27.000 Persons (or 13%). Furthermore it has to be expected that the majority of the new jobs will be created in the service sector, which in turn implies that a high share of these jobs will be associated with part-time employment and an even less dynamic development in terms of hours worked. For 2010 a modest employment growth of around 8.000 employment relationships and a further increase of unemployment (by 15.000 persons) is currently expected.

### 2.2 Institutional setting for labour migration from the NMS

After the substantial immigration of the early 1990’s the Austrian migration regime underwent substantial reform in the 1990’s and the first decade of the 2000’s.¹⁰ In general these reforms were guided by a combination of a move from the guest worker system, which still prevailed during the 1970’s and much of the 1980’s, to a more settlement based system and the attempt of the legislator to increase selectivity of migration regulations with the aim of improving the qualification of migrants. Today (and at the time of accession) the administrative procedures in the migration field with respect

---

to third country migrants are guided by two regulatory authorities: the ministry of the interior and the ministry of economic affairs and labour. The former regulates the inflow and resident status of immigrants and short term movers on the basis of residence law, the latter regulates access to the labour market on the basis of the law on foreign employment (Ausländerbeschäftigungsgesetz). With the signing of the accession treaty and the associated derogation periods, residents of the new member states do not require a residence title any more and are thus not subjected to the quota system of foreign residence law. They, however, still fall under the stipulations of the law of foreign employment.

Technically the stipulations of the accession treaties were implemented at the national level by means of the “EU-Erweiterungsanpassungsgesetz” (see Nowotny, 2007). This law foresees that:

Citizens of the new EU-member states are not subjected to residence law and thus do not need a residence title any more. In effect this implies a (weak) advantage over citizens from third countries with respect to labour market access (so called community preference), since they are not subject to the quota system for foreign residents. Thus they can receive a work permit if the regional committee at the local public employment service (PES) grants them one (see Nowotny, 2007).

Citizens of the new member states are, however, still subjected to the quota system of the foreign employment law. In effect this implies that members from the new EU member states can only access the Austrian labour market as key workers, qualified personnel in care, and seasonal workers. Under the provision of a unanimous decision of the regional councils at the Austrian PES, they can, however, also be given a legal work permit as “other workers” if a vacancy cannot be filled in the regional labour market.

As stipulated by the accession treaty, citizens from the new member states who acquire (or have acquired) legal access to the labour market for more than one year have free access to the labour market. The same applies to the spouse or children of such citizens. In addition citizens of the new member states have to be generally preferred over third country citizens with respect to labour market access and their right to access to the labour market cannot be made more restrictive than at the time of accession.

Furthermore, migration policy in the time period from 2004 to 2007 was marked by a number of pro-active measures. The most important of these was probably the reform of residence law in 2003 and 2006, by which a right of work for foreign students of an Austrian University (if this does not impede on the success of the studies) and an automatic right to work for other residents that legally resided in Austria for five years or more was introduced. This law also applies to new-member state citizens. In addition a bilateral agreement concerning the movement of commuters (Grenzgängerabkommen)
was completed with the Czech Republic mid 2005. This agreement thus augments the existing agreement with Hungary.\textsuperscript{13}

3 Migration trends since 2003

3.1 The extent of migration

3.1.1 Labour migration

A closer look at the structure of migration to Austria suggests that the primary sources for foreign labour supply growth did not originate from the new member states.\textsuperscript{14} While the number of foreign employees registered in Austria increased by 62,000 in the last four years, a more detailed analysis of the structure of foreign employees in Austria suggests that the primary source of immigration were German citizens.\textsuperscript{15} Their number among the foreign employees increased by 32,000 and thus more than doubled in the last four years.\textsuperscript{16} The number of employees from Poland, Hungary, Former Czechoslovakia and Poland increased by around 15,500 employees in the same time period. While this represents a stronger increase in the number of foreign employees from these countries than in the time period from 2000 to 2003 (where the number of foreign workers from Poland, Hungary, Former Czechoslovakia and Poland increased by 5,000 only), this figure seems small relative to the estimates of migration potentials that existed prior to accession.

\footnotesize
\textsuperscript{13} A similar agreement has been contemplated with Slovakia but has not yet been signed
\textsuperscript{14} The same applies to export growth which grew primarily due to increased demand from non-European OECD countries (see Untiedt et al, 2006)
\textsuperscript{15} A further cause for increased number of foreign employees in Austria in the time period considered are the changes in legislation, whereby foreign residents, which legally resided in Austria for more than five years automatically obtain the right to enter the labour market without requiring a work permit (see Biffl, 2007).
\textsuperscript{16} While German citizen were the third largest group of foreign workers in Austria in 2003, they are by now second the most important group. More detailed analyses of the migrant flows from Germany (see Walterskirchen, 2006) suggests that these migrants are primarily persons that reacted to the bad labour market conditions in Germany and often found employment as seasonal workers (in particular in tourism).
### Table 3: Foreign Employees in Austria by nationality

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Yugoslavia*</td>
<td>158,492</td>
<td>161,792</td>
<td>161,315</td>
<td>161,121</td>
<td>160,898</td>
<td>160,138</td>
<td>161,930</td>
<td>164,413</td>
<td>3,292</td>
</tr>
<tr>
<td>Turkey</td>
<td>57,128</td>
<td>56,831</td>
<td>56,285</td>
<td>55,689</td>
<td>54,588</td>
<td>53,479</td>
<td>54,101</td>
<td>55,126</td>
<td>-563</td>
</tr>
<tr>
<td>Germany</td>
<td>20,887</td>
<td>23,537</td>
<td>26,502</td>
<td>31,525</td>
<td>38,987</td>
<td>47,033</td>
<td>55,368</td>
<td>63,830</td>
<td>32,306</td>
</tr>
<tr>
<td>Poland</td>
<td>11,158</td>
<td>11,239</td>
<td>11,284</td>
<td>11,549</td>
<td>11,984</td>
<td>12,615</td>
<td>13,416</td>
<td>14,594</td>
<td>3,045</td>
</tr>
<tr>
<td>Hungary</td>
<td>10,399</td>
<td>11,266</td>
<td>11,967</td>
<td>12,657</td>
<td>13,628</td>
<td>14,693</td>
<td>15,785</td>
<td>18,042</td>
<td>5,385</td>
</tr>
<tr>
<td>Former Czechoslovakia</td>
<td>9,979</td>
<td>10,412</td>
<td>10,850</td>
<td>11,400</td>
<td>12,412</td>
<td>13,718</td>
<td>14,753</td>
<td>16,154</td>
<td>4,754</td>
</tr>
<tr>
<td>Romania</td>
<td>9,660</td>
<td>9,900</td>
<td>10,116</td>
<td>10,687</td>
<td>11,022</td>
<td>11,315</td>
<td>11,692</td>
<td>13,094</td>
<td>2,407</td>
</tr>
<tr>
<td>Other countries</td>
<td>42,147</td>
<td>44,337</td>
<td>46,113</td>
<td>55,735</td>
<td>58,781</td>
<td>61,195</td>
<td>63,651</td>
<td>67,327</td>
<td>11,592</td>
</tr>
<tr>
<td>NMS Total</td>
<td>41,196</td>
<td>42,817</td>
<td>44,217</td>
<td>46,293</td>
<td>49,046</td>
<td>52,341</td>
<td>55,646</td>
<td>61,884</td>
<td>15,591</td>
</tr>
<tr>
<td>Total</td>
<td>319,850</td>
<td>329,314</td>
<td>334,432</td>
<td>350,361</td>
<td>362,299</td>
<td>374,185</td>
<td>390,695</td>
<td>412,578</td>
<td>62,217</td>
</tr>
</tbody>
</table>

Notes: * without Slovenia

Source: BMWA, WIFO-calculations

### Table 4: Entry of Foreign Employees to employment in Austria by countries and groups of countries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10,100</td>
<td>12,356</td>
<td>12,602</td>
<td>6,297</td>
<td>8,658</td>
<td>11,205</td>
<td>4,713</td>
<td>3,698</td>
<td>1,397</td>
</tr>
<tr>
<td>NMS 10</td>
<td>1,171</td>
<td>1,287</td>
<td>1,100</td>
<td>477</td>
<td>685</td>
<td>923</td>
<td>694</td>
<td>622</td>
<td>177</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1,171</td>
<td>1,287</td>
<td>1,100</td>
<td>477</td>
<td>685</td>
<td>923</td>
<td>694</td>
<td>622</td>
<td>177</td>
</tr>
<tr>
<td>Estonia</td>
<td>6</td>
<td>12</td>
<td>11</td>
<td>5</td>
<td>12</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cyprus</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Latvia</td>
<td>13</td>
<td>29</td>
<td>23</td>
<td>10</td>
<td>24</td>
<td>22</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>23</td>
<td>36</td>
<td>51</td>
<td>19</td>
<td>34</td>
<td>48</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Hungary</td>
<td>3,593</td>
<td>3,588</td>
<td>3,058</td>
<td>1,915</td>
<td>2,236</td>
<td>2,591</td>
<td>1,678</td>
<td>1,352</td>
<td>467</td>
</tr>
<tr>
<td>Malta</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Poland</td>
<td>3,328</td>
<td>3,713</td>
<td>4,309</td>
<td>2,180</td>
<td>3,173</td>
<td>4,103</td>
<td>1,148</td>
<td>540</td>
<td>206</td>
</tr>
<tr>
<td>Slovenia</td>
<td>513</td>
<td>937</td>
<td>1,231</td>
<td>338</td>
<td>621</td>
<td>1,103</td>
<td>175</td>
<td>316</td>
<td>128</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2,360</td>
<td>2,745</td>
<td>2,811</td>
<td>1,350</td>
<td>1,884</td>
<td>2,398</td>
<td>1,010</td>
<td>861</td>
<td>413</td>
</tr>
<tr>
<td>EEA &amp; EU without Austria</td>
<td>20,343</td>
<td>25,321</td>
<td>20,225</td>
<td>20,322</td>
<td>25,317</td>
<td>20,224</td>
<td>21</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>16,721</td>
<td>16,856</td>
<td>13,365</td>
<td>12,779</td>
<td>15,336</td>
<td>13,062</td>
<td>3,942</td>
<td>1,520</td>
<td>303</td>
</tr>
<tr>
<td>Total</td>
<td>48,074</td>
<td>54,533</td>
<td>46,192</td>
<td>39,398</td>
<td>49,311</td>
<td>44,491</td>
<td>8,676</td>
<td>5,222</td>
<td>1,701</td>
</tr>
</tbody>
</table>

Source: BMWA, WIFO-calculations

This finding of increased but – relative to estimates of the migration potential - limited migration from the new member states is reconfirmed by a number of data sources on migratory movements. For instance Untied et al. (2006) report that data on first time registration of foreign employees in Austria, which is available for the time period from 2003 to 2005 only, indicate that in the first two years after enlargement around 100.000
foreign employees were registered for the first time in the social security files.\textsuperscript{17} Of these around a quarter (i.e. 24,958) were citizens of the 10 central and eastern European new member states, and around 45,000 came from other countries of the European economic area (see Table 4). Furthermore, the number of first time registrees to the Austrian social security system was only by some 1,000 employees higher in 2004 and 2005 than in the year before accession (2003). Again the most important change occurred with respect to citizens of the European economic Area (in particular in the year 2004). Increased labour migration in Austria thus primarily stems from the old EU countries according to these data too.

With respect to citizens from the new member states the most notable change was in the structure of first time registrations with the Austrian social security system. While in 2003 43\% of the new registrations required work permits, by 2005 this was only the case for slightly more than 10\%. This suggests that the majority of the newly registered workers from the new member states after 2004 entered the Austrian labour market under the exceptions from derogation period stipulated in the accession treaty.\textsuperscript{18}

### 3.1.2 Changes of residence

Data on population moves from and to Austria, which is available until 2007, also suggests that the migration impulse to Austria in the period since enlargement did not primarily stem from the new member states (see Table 5). According to this data, which measures cross-border changes of residence, net immigration from the 12 new member States (NMS 12), amounted to around 10,000 Persons per year in the years 2004 to 2007. Relative to the figures before enlargement, which were at around 6,500 in the years 2002 and 2003, this represents an increase of some 3,500 migrants per year. Furthermore relative to the total number of net migrants of around 60,000 in 2004 and 2005 and around 30,000 migrants in 2006 and 2007, migrants from the new member states account for 15\% to 30\% of total net migrant inflows in Austria.

\textsuperscript{17} The figures on first time registrees suggest higher migration than data on foreign employees because they do not take account of return migration and naturalisations. In particular naturalisations may have led to a substantial underestimation of the actual increase in the number of foreign workers in the period considered here, because many of the migrants of the migration wave from the early 1990’s became eligible for naturalisation in the time period considered (see Biffl, 2007, for data on naturalisations of foreign citizen in Austria)

\textsuperscript{18} These exceptions pertain in particular to relatives of migrants that had legal access to the labour market for more than one year prior to accession or attained such access during the derogation periods.
Table 5: Immigration and migration of foreigners by nations from and to Austria by countries and groups of countries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>47</td>
<td>30</td>
<td>17</td>
<td>47</td>
<td>36</td>
<td>11</td>
<td>49</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Latvia</td>
<td>80</td>
<td>52</td>
<td>28</td>
<td>72</td>
<td>57</td>
<td>15</td>
<td>87</td>
<td>62</td>
<td>25</td>
</tr>
<tr>
<td>Lithuania</td>
<td>181</td>
<td>140</td>
<td>41</td>
<td>240</td>
<td>185</td>
<td>55</td>
<td>255</td>
<td>136</td>
<td>119</td>
</tr>
<tr>
<td>Malta</td>
<td>22</td>
<td>18</td>
<td>4</td>
<td>15</td>
<td>5</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Poland</td>
<td>5,398</td>
<td>3,403</td>
<td>1,995</td>
<td>6,145</td>
<td>3,001</td>
<td>3,144</td>
<td>7,245</td>
<td>2,574</td>
<td>4,671</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3,658</td>
<td>2,455</td>
<td>1,203</td>
<td>3,678</td>
<td>2,338</td>
<td>1,340</td>
<td>3,759</td>
<td>429</td>
<td>3,330</td>
</tr>
<tr>
<td>Slovenia</td>
<td>720</td>
<td>556</td>
<td>164</td>
<td>670</td>
<td>521</td>
<td>149</td>
<td>586</td>
<td>1,924</td>
<td>-1,338</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1,344</td>
<td>1,152</td>
<td>192</td>
<td>1,353</td>
<td>1,111</td>
<td>242</td>
<td>1,434</td>
<td>980</td>
<td>454</td>
</tr>
<tr>
<td>Hungary</td>
<td>4,615</td>
<td>2,858</td>
<td>1,757</td>
<td>3,889</td>
<td>2,537</td>
<td>1,352</td>
<td>3,692</td>
<td>2,276</td>
<td>1,416</td>
</tr>
<tr>
<td>Cyprus</td>
<td>34</td>
<td>29</td>
<td>5</td>
<td>17</td>
<td>21</td>
<td>4</td>
<td>27</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>NMS 10</td>
<td>16,099</td>
<td>10,693</td>
<td>5,406</td>
<td>16,126</td>
<td>9,812</td>
<td>6,314</td>
<td>17,143</td>
<td>8,431</td>
<td>8,712</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2,149</td>
<td>992</td>
<td>1,157</td>
<td>1,315</td>
<td>1,037</td>
<td>278</td>
<td>1,484</td>
<td>1,045</td>
<td>439</td>
</tr>
<tr>
<td>Romania</td>
<td>9,223</td>
<td>3,627</td>
<td>5,596</td>
<td>4,794</td>
<td>3,723</td>
<td>1,071</td>
<td>5,332</td>
<td>3,480</td>
<td>1,852</td>
</tr>
<tr>
<td>Former Yugoslavia*</td>
<td>12,793</td>
<td>10,372</td>
<td>2,421</td>
<td>19,234</td>
<td>10,323</td>
<td>8,911</td>
<td>20,640</td>
<td>9,103</td>
<td>11,537</td>
</tr>
<tr>
<td>Germany</td>
<td>20,414</td>
<td>10,305</td>
<td>10,109</td>
<td>18,467</td>
<td>9,244</td>
<td>9,223</td>
<td>17,268</td>
<td>6,770</td>
<td>10,498</td>
</tr>
<tr>
<td>EU (14)</td>
<td>28,684</td>
<td>16,826</td>
<td>11,858</td>
<td>26,374</td>
<td>15,496</td>
<td>10,878</td>
<td>25,310</td>
<td>12,004</td>
<td>13,306</td>
</tr>
<tr>
<td>Total</td>
<td>106,905</td>
<td>74,191</td>
<td>32,714</td>
<td>100,972</td>
<td>73,495</td>
<td>27,477</td>
<td>117,822</td>
<td>68,650</td>
<td>49,172</td>
</tr>
</tbody>
</table>

Notes: * without Slovenia

Source: Statistic Austria, Migrationstatistic, WIFO-calculation

These data, however, also portray a slightly different picture of the structure of migration movements by country of origin, since the largest part of cross-border changes of residence among migrants from the new member states originates from Polish citizens and also the increases in German migrants are smaller than suggested by employment data. This can be related to a number of reasons: data on employees can differ from data on residents if cross-border commuting or temporary migration plays an important role in cross-border labour flows, or if family reunion and self-employment is a more important component in residential migration from certain countries. This could explain the higher share of Polish citizens in residential flows – since in all likelihood there are fewer commuters among the Polish workers in Austria than among the workers from neighbouring countries and since family reunification is likely to play a larger role over the distances involved in Austrian – Polish migration. The discrepancies with respect to the German migrants by contrast are likely to be a result of the high share of seasonal and temporary workers among the Germans in Austria; these may often work in Austria without changing their place of primary residence, and would thus not be considered migrants in residential migration data.

19 Furthermore self-employment also plays a larger role in Austro-Polish migration (see below)
Table 6: Stock of foreign citizens and foreign born by nationality (2004 – 2006)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>7,320,383</td>
<td>7,356,402</td>
<td>7,389,018</td>
<td>68,635</td>
<td>Austria</td>
<td>7,014,287</td>
<td>7,032,023</td>
<td>7,028,594</td>
<td>14,307</td>
</tr>
<tr>
<td>Turkey</td>
<td>119,658</td>
<td>115,165</td>
<td>110,805</td>
<td>-8,853</td>
<td>Turkey</td>
<td>140,395</td>
<td>138,140</td>
<td>146,597</td>
<td>8,457</td>
</tr>
<tr>
<td>Germany</td>
<td>84,676</td>
<td>93,617</td>
<td>105,194</td>
<td>20,518</td>
<td>Germany</td>
<td>340,867</td>
<td>346,843</td>
<td>363,446</td>
<td>16,603</td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>301,006</td>
<td>299,041</td>
<td>298,477</td>
<td>-2,529</td>
<td>Former Yugoslavia</td>
<td>44,683</td>
<td>46,104</td>
<td>50,576</td>
<td>6,473</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>7,109</td>
<td>12,719</td>
<td>10,749</td>
<td>3,640</td>
<td>Czech Republic</td>
<td>44,683</td>
<td>46,104</td>
<td>50,576</td>
<td>6,473</td>
</tr>
<tr>
<td>Hungary</td>
<td>16,862</td>
<td>19,778</td>
<td>13,940</td>
<td>-2,922</td>
<td>Hungary</td>
<td>26,332</td>
<td>35,530</td>
<td>29,679</td>
<td>3,857</td>
</tr>
<tr>
<td>Poland</td>
<td>34,334</td>
<td>28,915</td>
<td>39,962</td>
<td>5,628</td>
<td>Poland</td>
<td>51,367</td>
<td>49,552</td>
<td>58,916</td>
<td>9,364</td>
</tr>
<tr>
<td>Slovakia</td>
<td>8,655</td>
<td>10,232</td>
<td>10,242</td>
<td>1,587</td>
<td>Slovakia</td>
<td>15,909</td>
<td>18,381</td>
<td>16,390</td>
<td>481</td>
</tr>
<tr>
<td>Slovenia</td>
<td>(4,144)</td>
<td>6,977</td>
<td>(5,426)</td>
<td>1,282</td>
<td>Slovenia</td>
<td>14,898</td>
<td>16,843</td>
<td>15,971</td>
<td>1,073</td>
</tr>
<tr>
<td>Baltic Countries</td>
<td>x</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>(3,500)</td>
<td>x</td>
<td>x</td>
<td>201</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>5,076</td>
<td>4,754</td>
<td>4,432</td>
<td>-643</td>
<td>Bulgaria</td>
<td>9,120</td>
<td>9,804</td>
<td>9,321</td>
<td>201</td>
</tr>
<tr>
<td>Romania</td>
<td>20,210</td>
<td>26,825</td>
<td>20,998</td>
<td>789</td>
<td>Romania</td>
<td>42,607</td>
<td>49,410</td>
<td>47,863</td>
<td>2,556</td>
</tr>
<tr>
<td>NMS-Total</td>
<td>98,935</td>
<td>111,192</td>
<td>106,612</td>
<td>7,677</td>
<td>NMS-Total</td>
<td>207,767</td>
<td>228,975</td>
<td>230,730</td>
<td>22,963</td>
</tr>
<tr>
<td>Rest</td>
<td>148,773</td>
<td>157,074</td>
<td>171,898</td>
<td>23,124</td>
<td>Rest</td>
<td>228,259</td>
<td>243,428</td>
<td>265,516</td>
<td>37,258</td>
</tr>
<tr>
<td>Foreign-Total</td>
<td>753,048</td>
<td>776,088</td>
<td>792,986</td>
<td>39,937</td>
<td>Foreign-Total</td>
<td>1,059,145</td>
<td>1,100,467</td>
<td>1,153,410</td>
<td>94,265</td>
</tr>
</tbody>
</table>

Notes: Values in brackets – Values below 6,000 persons are subject to substantial statistical uncertainties, x – values below 3,000 cannot be interpreted.

Furthermore the data also indicate a substantial increase in net migration from Bulgaria and Romania in 2007. Here net migration increased from a level of around 2,000 to around 6,500 in the year 2007, an increase that is reflected in an increase of foreign employees from Romania by only 1,500 employees. This may be indication that migrants from the NMS2 have made increasing use of the improved possibility for family reunification, after not having to apply for residence titles any more.

3.1.3 Labour force survey data

Finally, inference can also be drawn from Austrian Labour Force Survey, which is the only data source which provides information on residents by country of birth in Austria. It does therefore not suffer from the mismeasurement that occurs in stock data due to naturalisation, which characterise other data sets. The Labour Force Survey data indicate that increases in the number of citizen of, citizens or persons born in the new member states (although increasing in the years since 2004) accounted for about 20% to 25% of the total change in stocks of foreign citizens and foreign born, while the largest increase in the stock of foreign citizens came from Germany, and the largest increase in
the foreign born of a single group was registered with natives of former Yugoslavia (see Table 6).\textsuperscript{21}

\section*{3.2 Regional distribution of foreign employment}

In sum, total migration from the new member states to Austria (irrespective of the data looked at) was substantially lower than was expected prior to enlargement. While this is not surprising given the fact that the estimates of migration potentials were made under the assumption of freedom of movement of labour, another expectation associated with enlargement was that migration would centre strongly on the Eastern provinces of Austria (i.e. Vienna, Lower Austria, Burgenland). As can be seen from Table 7, nearly 70\% of the employees from the major new member states (Poland, Hungary, former Czechoslovakia and Romania) – compared to less than 50\% of all foreign citizens – worked in the Eastern provinces of Austria. Due to the changes in immigration policy which, as stated in section 2.2, strongly preferred seasonal workers in the last years and thus preferred regions with a high share of tourism and construction in employment (such as Tyrol and Salzburg), this expected pattern of migration did not materialise. All of the Eastern provinces of Austria except for Burgenland\textsuperscript{22} experienced increases in foreign employees from the new member states, which were less than proportional to the 2004 share in total foreigner stocks. In total these provinces received slightly less than 50\% of the total increase in the share of foreign employees.\textsuperscript{23} Unemployment rates of foreigners (both overall as well as from the NMS) are, however, highest in Vienna (see Figure 3) and correlate strongly with aggregate unemployment rates.

\textsuperscript{20} Migration estimates based on the LFS, however, suffer from a number of other weaknesses. In particular the LFS underestimates the true number of foreigners in Austria due to an under sampling of temporary migrants, and the small number of migrants sampled in the LFS makes estimates of the share of foreigners in total population unreliable. Furthermore, in Austria changes in the sampling plan of the Austrian labour force survey make LFS data pre- and post-2004 incomparable. (Prior to 2004 the LFS was only conducted once a year, since 2004 it is conducted on a quarterly basis).

\textsuperscript{21} Differences between changes in the change of stock of foreign born and foreign citizen are accounted for by differences in return migration and naturalisation across country groups.

\textsuperscript{22} In all likelihood the Burgenland is an exception on account of the Grenzgängerabkommen.

\textsuperscript{23} Again this finding can be reconfirmed using data on migration flows rather than foreign employees (see Huber et al 2007)
Table 7: Foreign Employees from the new member states in Austria by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Total 1</th>
<th>From NMS 2</th>
<th>Total 1</th>
<th>From NMS 2</th>
<th>Total 1</th>
<th>From NMS 2</th>
<th>Total 1</th>
<th>From NMS 2</th>
<th>Total 1</th>
<th>From NMS 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vienna</td>
<td>114,604</td>
<td>14,650</td>
<td>118,628</td>
<td>15,518</td>
<td>123,759</td>
<td>16,468</td>
<td>129,572</td>
<td>17,947</td>
<td>14,968</td>
<td>3,297</td>
</tr>
<tr>
<td>Lower Austria</td>
<td>50,526</td>
<td>12,511</td>
<td>52,229</td>
<td>13,411</td>
<td>54,207</td>
<td>14,036</td>
<td>57,430</td>
<td>15,050</td>
<td>6,904</td>
<td>2,539</td>
</tr>
<tr>
<td>Burgenland</td>
<td>9,972</td>
<td>6,389</td>
<td>10,194</td>
<td>6,517</td>
<td>10,690</td>
<td>6,808</td>
<td>11,590</td>
<td>7,524</td>
<td>1,618</td>
<td>1,135</td>
</tr>
<tr>
<td>Carinthia</td>
<td>13,984</td>
<td>947</td>
<td>14,569</td>
<td>1,012</td>
<td>15,168</td>
<td>1,103</td>
<td>16,357</td>
<td>1,359</td>
<td>2,373</td>
<td>412</td>
</tr>
<tr>
<td>Styria</td>
<td>27,315</td>
<td>3,646</td>
<td>28,050</td>
<td>4,079</td>
<td>29,605</td>
<td>4,534</td>
<td>31,820</td>
<td>5,456</td>
<td>4,505</td>
<td>1,810</td>
</tr>
<tr>
<td>Upper Austria</td>
<td>48,673</td>
<td>5,987</td>
<td>49,569</td>
<td>7,065</td>
<td>50,554</td>
<td>7,662</td>
<td>52,791</td>
<td>7,534</td>
<td>5,118</td>
<td>1,547</td>
</tr>
<tr>
<td>Salzburg</td>
<td>28,162</td>
<td>1,493</td>
<td>28,626</td>
<td>1,628</td>
<td>30,090</td>
<td>1,785</td>
<td>32,522</td>
<td>2,136</td>
<td>4,360</td>
<td>643</td>
</tr>
<tr>
<td>Tyrol</td>
<td>39,747</td>
<td>1,957</td>
<td>39,735</td>
<td>1,728</td>
<td>39,815</td>
<td>1,798</td>
<td>40,634</td>
<td>2,260</td>
<td>4,887</td>
<td>603</td>
</tr>
<tr>
<td>Vorarlberg</td>
<td>26,432</td>
<td>692</td>
<td>26,532</td>
<td>713</td>
<td>26,798</td>
<td>740</td>
<td>27,576</td>
<td>740</td>
<td>1,134</td>
<td>48</td>
</tr>
</tbody>
</table>

Total: 355,415 48,272 365,970 51,384 380,714 54,367 401,282 60,306 45,867 12,034

Source: Austrian Social Security Data, WIFO-calculations

Notes: 1 All foreign citizens in Austria 2 employees from Poland Hungary, former Czechoslovakia and Poland

Figure 3: Unemployment rates of Foreigners by Austrian Provinces 2006 (in %)

Notes: Total: All foreign citizens in Austria. NMS: Poland, Hungary, former Czechoslovakia, Romania
Source: Austrian Social Security Data, own calculations
Table 8: Structure of active aged Population, Employment Rates and Unemployment Rates for Natives and Foreigners (2004 and 2006)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Skilled</td>
<td>Medium Skilled</td>
<td>High Skilled</td>
<td>Low Skilled</td>
<td>Medium Skilled</td>
</tr>
<tr>
<td>Share of Active aged Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>18.0</td>
<td>63.2</td>
<td>18.8</td>
<td>14.0</td>
<td>68.2</td>
</tr>
<tr>
<td>Foreign born Total</td>
<td>38.5</td>
<td>44.8</td>
<td>16.7</td>
<td>35.3</td>
<td>48.0</td>
</tr>
<tr>
<td>Employment Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>47.9</td>
<td>73.3</td>
<td>82.8</td>
<td>47.6</td>
<td>75.1</td>
</tr>
<tr>
<td>Foreign born Total</td>
<td>49.7</td>
<td>68.1</td>
<td>75.8</td>
<td>51.4</td>
<td>67.9</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>6.8</td>
<td>3.6</td>
<td>2.5</td>
<td>8.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Foreign born Total</td>
<td>15.2</td>
<td>8.9</td>
<td>6.0</td>
<td>13.7</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Notes: based on active aged population by place of birth. Low skilled = ISCED 2 or lower, Medium Skilled = ISCED 3&4, High Skilled=ISCED 5 or higher

Source: Austrian labour force survey, WIFO-calculations

3.3 Labour market status of migrants

3.3.1 Qualification structure of employed and unemployed foreigners

The changes in the sending country structure of migration have also led to a noticeable improvement in the qualification structure of migrants. In particular, because of the high share of medium level educated migrants among the German as well as migrants from the NMS the share of medium skilled foreign born in the active age population has increased noticeably (by 3.2 percentage points) between 2004 and 2006. This has led to rather different changes in employment and unemployment rate developments of natives and foreigners by skill groups. While employment rates increased for higher skilled natives and decreased for persons with low skill levels, they decreased slightly for the more skilled foreign born, but increased for low-skill foreign born. Similarly, while unemployment rates decreased in the high and medium skilled segment of the natively born (and increased for the low skilled), the opposite was the case for foreigners (see Table 8).
Table 9: Development of self-employed from the new member states in Austria

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>Change 2003-2005 absolute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>142</td>
<td>187</td>
<td>229</td>
<td>+87</td>
</tr>
<tr>
<td>Estonia</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>+3</td>
</tr>
<tr>
<td>Cyprus</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>+0</td>
</tr>
<tr>
<td>Latvia</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>-1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>4</td>
<td>6</td>
<td>23</td>
<td>+19</td>
</tr>
<tr>
<td>Hungary</td>
<td>567</td>
<td>618</td>
<td>813</td>
<td>+246</td>
</tr>
<tr>
<td>Malta</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>+2</td>
</tr>
<tr>
<td>Poland</td>
<td>1,022</td>
<td>2,410</td>
<td>4,109</td>
<td>+3,087</td>
</tr>
<tr>
<td>Slovenia</td>
<td>102</td>
<td>112</td>
<td>152</td>
<td>+50</td>
</tr>
<tr>
<td>Slovakia</td>
<td>181</td>
<td>352</td>
<td>660</td>
<td>+479</td>
</tr>
<tr>
<td>Total</td>
<td>2,032</td>
<td>3,698</td>
<td>6,004</td>
<td>+3,972</td>
</tr>
</tbody>
</table>

Notes: Data: End of November

Source: Public Employment Service Austria, WIFO-calculations

3.3.2 Self employment of foreigners

Furthermore, according to the Austrian Chamber of commerce, the number of registered enterprises increased substantially in the first years after accession. According to the Chamber of Commerce around 10,000 of these new enterprises were registered by entrepreneurs from the new member states in the years 2003 and 2005. These enterprises were often registered in construction services and centred in Vienna. This finding is also partially confirmed by registration data from the Austrian public employment service (see Table 9). According to this data around 4,000 new entrepreneurs from the new member states were registered in the time period 2003 to 2005. In absolute terms, most of these new entrepreneurs are of Polish origin.

24 Unfortunately more recent data is not available.
25 The differences between Chamber of Commerce data of 10,000 and the PES is sizeable, however. This is primarily due to the fact that first the PES measures the average annual stock of entrepreneurs, while the Chamber of Commerce measures new registrations and that here are higher incentives to deregister with the PES than with the Chamber of Commerce.
4 Changes in the structure of employment and unemployment

While the years since 2004 were in general marked by rather positive macroeconomic developments they were also marked by a less than proportionate reduction in unemployment. Thus it is also interesting to analyse the changes in the structure of employment and unemployment in this period. Given that in the pre-accession debate on the effects of migration the most sizeable effects were expected on foreign workers and less skilled, these are also the most interesting groups to observe. Furthermore before enlargement it was also often argued that cross-border labour mobility – in particular in Austria where regional aspects play an important role – could potentially have a regionally asymmetric effect, with the border regions more strongly affected. Thus besides focusing on employment and unemployment changes of foreigners and by skill groups in this section we also focus on regional indicators.

4.1 Unemployment of foreigners

One of the most noticeable changes in the structure of unemployment in Austria since the turn of the century was the substantial increase in the unemployment of foreign nationals residing in Austria. In the period from 2000 to 2005 (when aggregate unemployment also increased) unemployment among foreign citizens increased by almost 2.5 percentage points, while the increase in unemployment of natives was around 1 percentage point (see Table 10) and even after the reduction in unemployment in 2006 and 2007, foreign unemployment was still by 1.3 percentage points higher than in the year 2000, while native unemployment was only by approximately 0.2 percentage points higher.

Table 10: Unemployment rates of foreigners by nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Yugoslavia*</td>
<td>7.8</td>
<td>9.0</td>
<td>10.4</td>
<td>10.8</td>
<td>11.0</td>
<td>11.5</td>
<td>10.6</td>
<td>11.3</td>
</tr>
<tr>
<td>Turkey</td>
<td>9.0</td>
<td>10.6</td>
<td>12.1</td>
<td>12.6</td>
<td>13.2</td>
<td>14.1</td>
<td>12.8</td>
<td>11.7</td>
</tr>
<tr>
<td>Germany</td>
<td>6.9</td>
<td>6.9</td>
<td>7.4</td>
<td>7.2</td>
<td>6.7</td>
<td>6.4</td>
<td>5.6</td>
<td>5.1</td>
</tr>
<tr>
<td>Poland</td>
<td>6.8</td>
<td>7.9</td>
<td>9.3</td>
<td>9.4</td>
<td>9.8</td>
<td>10.2</td>
<td>9.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>3.9</td>
<td>4.1</td>
<td>4.8</td>
<td>4.6</td>
<td>4.7</td>
<td>5.2</td>
<td>5.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Former Czechoslovakia</td>
<td>5.1</td>
<td>5.6</td>
<td>6.3</td>
<td>6.4</td>
<td>7.1</td>
<td>7.3</td>
<td>7.0</td>
<td>6.4</td>
</tr>
<tr>
<td>Romania</td>
<td>7.5</td>
<td>8.3</td>
<td>9.6</td>
<td>9.9</td>
<td>9.2</td>
<td>9.7</td>
<td>9.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Total Unemployment rate of foreigners</td>
<td>7.5</td>
<td>8.5</td>
<td>9.8</td>
<td>9.8</td>
<td>10.0</td>
<td>10.6</td>
<td>9.7</td>
<td>8.8</td>
</tr>
<tr>
<td>Natives</td>
<td>5.7</td>
<td>5.8</td>
<td>6.5</td>
<td>6.6</td>
<td>6.7</td>
<td>6.8</td>
<td>6.4</td>
<td>5.9</td>
</tr>
<tr>
<td>Foreign-Native Differential</td>
<td>1.8</td>
<td>2.7</td>
<td>3.2</td>
<td>3.2</td>
<td>3.3</td>
<td>3.8</td>
<td>3.4</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Notes: Based on the national definition of unemployment and employment – * without Slovenia

Source: HV, WIFO-calculations

This increase in foreign unemployment also led to an increase in the native-foreign unemployment rate differential. It increased from 1.8 percentage points in 2000 to 2.4 percentage points in 2007 and to even higher levels in the years of increasing unemployment. Part of this increase is due to the fact that foreign workers are more
strongly affected by the business cycle on account of the sectors they work in.\(^{26}\) The native-foreign unemployment rate differential in 2005, however, was the highest since the beginning of records in the early 1990's. This suggests that foreign workers are facing increased labour market integration problems. Most of this increase, however, occurred before enlargement\(^{27}\), thus suggesting that it reflects internal problems in the labour market for foreigners rather than an impact of enlargement.

Furthermore, when focusing on the structure of unemployment rates by nationalities (see Table 10) it also appears that the groups of foreigners facing the largest problems in the labour market are not the foreigners from the new member states but rather the traditional "Gastarbeiter" groups from Turkey and former Yugoslavia. The unemployment rates among Germans, Hungarians and (to a lesser degree) Czech and Slovak citizens were lower or equal to those of natives\(^{28}\), and also Poles and Romanians have unemployment rates below the total average for foreigners in Austria. Only citizens from former Yugoslavia and Turkey have unemployment rates above the average of foreigners in total. The labour market problems of foreigners are thus closely related to the problems of the Turkish and former Yugoslav migrant groups.

In part these problems of foreign workers are associated with the low qualification of foreign workers in Austria. According to recent studies (see Belot and Hatton, 2008, Biffl, 2006) Austria is the country with the lowest share of high educated migrants among the OECD countries. Furthermore in particular the migrants from the traditional sending countries of former Yugoslavia and Turkey have very high shares of low qualified workers (see Bock-Schappelwein et al., 2008)

Considering the changes in unemployment rates among different foreigner groups, however, suggests a substitution process between the newly emerging German migrants (see next section for details) and the more traditional groups.\(^{29}\) Despite substantial immigration from Germany the unemployment rates among German citizens decreased (by -1.7 percentage points) in the time period considered in Table 10 while that of Turkish citizens increased by 2.7 percentage points.\(^{30}\)

\(^{26}\) The highest shares of foreign workers are registered in agriculture and forestry (with a foreigner share of 35.9%), restaurants and hotels (33.7%), textiles and leather (23.5%), private households (22.5%) and construction (19.7%) (see Biffl, 2007). More than 50% of the employed foreigners in Austria work in only four NACE-2digit industries (business services, transport, hotels and restaurants and metal processing), which account for only a third of total Austrian employment.

\(^{27}\) Focusing on the native-foreign unemployment rate differentials as indicator of the diverging labour market conditions of natives and foreigners in Austria, it increased by 2.4 percentage points between 2000 and 2003, while the subsequent decrease (from 2004 to 2007) was 0.8 percentage points.

\(^{28}\) The low unemployment rate among Hungarians is, however, due to the high share of commuters and temporary migrants in the Hungarian labour force in Austria.

\(^{29}\) From a sectoral point of view this potential competition arises primarily in the tourism sector). Similar evidence of increased competition among different foreigner groups is provided by Biffl and Bock-Schappelwein (2004), who find that in particular citizen of third countries are coming under increased pressure, since their work permit may be withdrawn when they become unemployed.

\(^{30}\) This figure may, however, be slightly biased downward due to naturalisations of Turkish citizen in the time period considered (see below)
Figure 4: Unemployment rate and employment rate of foreigners, by educational attainment

Unemployment rate (%)

Employment rate (%)

Source: Eurostat.

4.2 Employment and unemployment by skill groups

Parallel to the changes in employment and unemployment of foreigners, Austria also experienced substantial changes in the structure of employment and unemployment by skill groups since the turn of the century (see figure 4). In particular this period was marked by a substantial increase in unemployment rates of the low-skilled relative to the high skilled. In the year 2000 the unemployment rate of the low skilled still lay at just over 8.2% according to Eurostat sources. In 2006 the unemployment rate of the low skill group was at 9.4%. Thus the unemployment rate increase for the low skilled was +1.2 percentage points in this time period. The increases in the unemployment rates of the high skilled in the same time period was only +0.3 percentage points and for the medium skilled there was even a slight decline (by -0.1 percentage points). Thus the majority of
the increase in unemployment between 2000 and 2006 is due to the increase in the unemployment rate of the low-skilled in Austria, and skill differences in unemployment rates (i.e. the difference between the unemployment rate of the low-skilled and the high skilled) increased from 5.9 percentage points in 2000 to 6.8 percentage points in 2006.

This increase in skill differentials in unemployment rates occurred despite a relatively positive development of employment rates of the low skill groups. While the employment rate of all skill groups declined between 2000 and 2004 (and the aggregate employment rate stagnated.\textsuperscript{31}) – with the decline for low skilled labour amounting to 3.4 percentage points, relative to 4.4 percentage points for the high and 2 percentage points for the medium skill groups – there has been a noticeable increase in the employment rate of the low skilled since 2004 (by 5.2 percentage points), which was higher than for the high (+4.1 percentage points) and the medium skill groups (+3.1 percentage points).

\section{4.3 Regional changes in employment and unemployment}

A further concern of Austrian policy was that regions closer to the border - due to the combined impact of migration and commuting – could potentially experience negative labour market developments.\textsuperscript{32} Considering the development of the number of employees and unemployment at the provincial (NUTS 2) level, however, no clear correlation between the time of accession (2004) and regional development of employees and unemployment in the provinces bordering on the new member states (Vienna, Lower Austria, Burgenland, Styria and Carithia) relative to the other provinces emerges. Among the border regions some (such as Vienna and Burgenland) experienced below average growth rates in the number of employees since 2004, while the other border regions experienced above average growth. Similarly unemployment increased by more than average since 2004 in Vienna and Burgenland, but less than average in all of the remaining border provinces.

Rather than enlargement the decisive impact on regional employment and unemployment in the post enlargement period came from differences in the export intensity. Good export growth in the years 2004 to 2007 led to above average employment growth (and more favourable unemployment rate developments) primarily in the export oriented industrial provinces of Styria, Lower Austria, Upper Austria and Vorarlberg, while regions which are more strongly focused on locally traded services satisfying internal demand (such as Vienna and the Burgenland) developed less favourably.

\textsuperscript{31} This stagnation in the aggregate employment rate between 2000 and 2004 despite the decline in the employment rate for all skill groups was due to the structural change of the working age population from (the low employment rate) less skilled to the (high employment rate) high skilled.

\textsuperscript{32} In Austria there are marked differences in the regional structure of foreign employment. The highest foreign worker share is found in Vorarlberg followed by Vienna and Salzburg (see Biffl, 2007). Furthermore citizen from the new member states disproportionately often settle in the border provinces of Austria (see Huber, 2002). This plus expected commuting led most analysts to believe that migrants from the new member states would also primarily work in the eastern parts of Austria after enlargement.
Some of the Austrian provinces (most notably Vienna but also Burgenland and Styria) located near the border to the new member states, however, belong to the provinces with traditionally high unemployment rates. Among these, the highest unemployment rates were registered in Vienna. The registered unemployment rate in Vienna was at 8.5% in 2007. The reasons for these substantial labour market problems are, however, more strongly associated with a combination of continuing structural change and de-
industrialisation in the city (since 2000 manufacturing employees in the city declined by around a quarter and employees in construction decreased by a fifth) in combination with stagnating public sector employment (see Huber and Mayerhofer (2005) for a recent study on labour market development in Vienna).  

Furthermore Austrian regions close to the border with the new member states (aside from Vienna) are often characterised by a below average level of economic development, a high share of agricultural employees and a low share of service sector employees and in many of these regions low wage industries (both in services and manufacturing) dominate the industrial employment structure. The labour market situation reflects the structural problems of the regions, there is so far little evidence that labour market developments have started to diverge after enlargement.  

Table 11: Development of Employees and Unemployment by economic regions in border and non-border regions  
End of July; Percentage changes from previous year  

<table>
<thead>
<tr>
<th></th>
<th>Employees</th>
<th>Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>East-Border areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human capital-intensive</td>
<td>+1.3</td>
<td>+0.8</td>
</tr>
<tr>
<td>Physical capital-intensive</td>
<td>+0.4</td>
<td>-3.4</td>
</tr>
<tr>
<td>Rural</td>
<td>+2.0</td>
<td>-1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-East-Border areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human capital-intensive</td>
<td>+0.5</td>
<td>+0.4</td>
</tr>
<tr>
<td>Physical capital-intensive</td>
<td>+5.0</td>
<td>+0.6</td>
</tr>
<tr>
<td>Rural</td>
<td>+1.6</td>
<td>+1.1</td>
</tr>
</tbody>
</table>

Source: HV, AMS, WIFO-calculations  

Focusing on the more disaggregate district (NUTS4) level and grouping regions by region types according to a typology developed by Mayerhofer and Palme (2001a) which classifies Austrian districts into urban (human capital intensive), capital intensive and rural regions and defines a border region as one within a travelling time of 90 Minutes from the closest town in the new member states and comparing border to non-border regions (see Table 11) provides an equally inconclusive picture. Urban centres and their environs (human capital intensive regions) in the border regions performed slightly better in terms of employee growth than their counterparts in non border regions in 2004 and 2005 but slightly worse thereafter, and better in terms of unemployment growth in 2005 and 2007 but worse in the other years. Similarly, rural border regions performed better in

---

33 In addition some recent evidence (presented in Biffl et al 2008) also suggests that Vienna is particularly strongly affected by the increasing problems of integrating foreign citizen in the labour market.

34 Interestingly while for most of the post World War II history Austria was characterized by an East-West differential in growth rates, in the 1990s a West-East differential existed. This was reversed again at the beginning of the century.

35 See the map in the appendix for a definition of these regions.
2004 in terms of employees and unemployment, while they performed worse throughout 2005 to 2007. The only region type where employee growth was consistently lower in border regions than in non-border regions were industrial regions (physical capital intensive regions), but here too unemployment developments oscillate substantially and heterogeneity among individual regions tends to be too large to draw any firm conclusions.\footnote{This result is consistent with the results reported in Untied et al (2006), who use a more formal difference in difference approach to test the potential impact of enlargement on Austrian border regions relative to non border regions and find few to no significant effects.}

5 Effects of migration on the national labour market and the economy

Studies which focus on the impact of migration and enlargement on the Austrian labour market mostly pre-date accession. These studies followed a number of methodological approaches and centred around the potential macro-economic impact of migration, its micro-economic implications on individual workers, potential regional impacts and on estimating migration potentials from the NMS to Austria. For instance Breuss (2001, 2002a and 2002b) simulates the macro-economic impact of enlargement. In accordance with other macro-economic model simulations (such as those of Keuschnigg and Kohler, 1998 and 1999) he finds that Austria should be the largest beneficiary of enlargement among the old EU-member states. According to his results Austrian GDP should have been 0.9% higher six years after enlargement than in a baseline Scenario without enlargement. Thus, macro-economic simulations prior to enlargement, which, however, did not exclusively focus on migration, suggested positive GDP and employment effects.

Table 12: Macro-Economic Studies of Effects of enlargement and Migration

<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bock-Schappelwein et al (2009)</td>
<td>Simulation using a dynamic CGE Model (TaxLab)</td>
<td>Improved skill structure of the 2000 to 2006 migration to Austria led to more favourable effects of migration relative to the 1990s. Migration of the early 2000’s will contribute increase GDP by 3% and employment by 3.5%. In the short run a maximal increase of the unemployment rate of 0.5% is forecast</td>
</tr>
<tr>
<td>Hofer (2008)</td>
<td>Simulation based on a lon term macro-economic model (A-LMM)</td>
<td>Migration of 25,000 persons per year will increase GDP by 2.7% until 2025, will reduce GDP/capita by 0.05%, and increase the unemployment rate by 0.2 percentage points</td>
</tr>
<tr>
<td>Breuss (2001)</td>
<td>Simulation based on OEF Model considering Trade, Factor Mobility and Productivity gains</td>
<td>Enlargement +0.15% pro Jahr</td>
</tr>
<tr>
<td>Keuschnigg and Kohler (1999)</td>
<td>Simulation based on CGE Model</td>
<td>Long term GDP increase of 1.1%</td>
</tr>
<tr>
<td>Breuss and Schebeck (1998)</td>
<td>Simulation based on WIFO Makromodels</td>
<td>Enlargement will bring increase in GDP of +0.13% per Year</td>
</tr>
</tbody>
</table>

More recently three macro-economic simulation studies appeared which exclusively focus on the macro-economic effects of migration. Prettner and Stiglbauer (2007) – using a multivariate time series model to simulate the effects of a migration of 200,000 migrants within 10 years (which they consider a realistic estimate for East-West migration after the end of derogation periods) – find that this increases the unemployment rate by 0.6 percentage points within this period. Hofer (2008) by contrast uses a long run CGE model
to simulate the macro-economic implications of various scenarios of the population forecasts undertaken by the Austrian Statistical office. He finds that the increase of migration of 25,000 persons per year implied by these forecast will increase GDP by 2.7% until 2025 but will reduce GDP/capita by 0.05% and increase the unemployment rate by 0.2 percentage points. Finally, Bock-Schappelwein et al (2009) simulate the economic impact of both the migration to Austria at the beginning of the 1990’s as well as the 2000’s using a CGE mode which can take account of the differing skill structure of these two migration waves. They find that, due to the improved skill structure of migrants, the latter wave had a more favourable effect on the macro economic development of Austria. According to their results the migration of the early 2000’s in the long run (over a simulation horizon over 15 years) will contribute to increasing GDP by 3% and employment by 3.5%, while in the short run a maximal increase of the unemployment rate of about 0.5% is forecast.

Further recent studies with a slightly different focus include Hunya and Iara (2006) as well as Mayr (2005) and Mayr (2006). Hunya and Iara (2006) analyse the labour market effects of the accession of Romania and find that in an unrestricted regime it is most realistic to expect an immigration of about 43,500 Romanian nationals within the first decade after accession and conclude that this migration will in all likelihood have negative effects on the Austrian labour market, while they cannot preclude that low-skilled domestic employees and blue collar worker may face retarded wage growth and increased unemployment risks. Mayr (2005 and 2006) by contrast analyses the effects of migration on public sector budgets in Austria. She finds that migrants make a modest net-contribution to the Austrian budget.37

Micro-economic studies (see Winter-Ebmer 1994, 1996a, 1996b, Winter-Ebmer and Zimmermann 1998, Huber and Hofer, 2001, Hofer and Huber 1999), by contrast, highlighted the distributional implications of migration and trade liberalisation. These studies too primarily considered the effects of massive migration in the years 1998 to 2002 when the number of foreign workers increased by around 100,000 in Austria, since this facilitates identification. These studies established a number of stylized facts with respect to the likely changes in income distribution and relative employment/unemployment probabilities. In particular they suggest that:

- High qualified workers tend to profit from the immigration of less qualified foreign workers. Their wages increase in response to immigration. Low qualified workers employment and wage opportunities, by contrast, are reduced by the increased competition from foreign workers. These negative effects on low qualified workers tend to be small. For instance Hofer and Huber (1999) find that an increase in of the

37 In addition most of the recent studies on migration issues in Austria suggest a change in the focus of interest in the Austrian migration debate. A number of recent studies such as Biffl (2006, 2007) and Bock-Schappelwein et (2008) have focused on the integration of foreign workers in Austria and on issues of over- and under-qualification. In general these studies suggest substantial problems of integration of second generation foreigners in the education system and high rates of over-qualification among the foreign born, which, however, are mainly due to the specific problems of the Turkish and former Yugoslavian groups rather than to the migrants from the new member states.
share of migrants in employment by 1 percentage point reduces wage growth for blue collar workers significantly by 2.9%, while the effect on white collar is positive but insignificant.\textsuperscript{38}

- **Effects of migration** depend strongly on the overall economic environment and the size of migratory movements. In particular marginal effects (per migrant) seem to be lower in times of modest immigration than in periods of rapid immigration. This is evidenced by the fact that individual level data regression coefficients are substantially higher in analyses for periods of high migration (such as those analysed by Winter-Ebmer and Zweimüller (1996, 1996a, and 1996b) than for analyses based on periods of normal migration (e.g. Hofer and Huber, 1999, Huber and Hofer 2001).

### Table 13: Results of Micro-Econometric Studies on the Effects of Migration on Native Workers

<table>
<thead>
<tr>
<th>Author</th>
<th>Group</th>
<th>Variable</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter – Ebmer and Zweimüller</td>
<td>Workers aged 15-57</td>
<td>Entry to Unemployment</td>
<td>Increase in foreigner share by one standard deviation increases unemployment risk by 0.8 percentage points</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Duration of Unemployment</td>
<td>Increase of foreigner share by 1% increases unemployment duration by 4% to 6%</td>
</tr>
<tr>
<td>Winter-Ebmer and Zimmermann</td>
<td>Young workers under 35</td>
<td>Individual Unemployment Risk</td>
<td>Small and mostly insignificant effects</td>
</tr>
<tr>
<td>Huber and Hofer (2001)</td>
<td>Workers Aged 19 to 56</td>
<td>Wage Growth</td>
<td>Significant Effects only for blue-collar workers. Increase in foreigner share by 1% reduces wage growth by 0.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change of Industry and non-employment risk</td>
<td>Unemployment risk of blue-collar workers is increased by migration, but not for white collar workers</td>
</tr>
<tr>
<td>Winter-Ebmer and Zimmermann</td>
<td>Sectoral employment</td>
<td>Employment growth of native Workers</td>
<td>Increase in foreigner share by 1% reduces employment growth by -0.1%</td>
</tr>
<tr>
<td>Huber and Hofer (2002)</td>
<td>Workers Aged 19 to 56</td>
<td>Wage Growth</td>
<td>Significant Effects of migration only on blue-collar workers. For women there is no significant effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change of Industry and non-employment risk</td>
<td>Significant effects of migration for the unemployment risk of blue-collar workers. For women there are no significant effect</td>
</tr>
<tr>
<td>Prettnar and Stiglbauer</td>
<td>Sectoral employment</td>
<td>Employment</td>
<td>Migration has no negative effect with employment of natives, but is positively correlated with overall employment</td>
</tr>
<tr>
<td>(2008)</td>
<td></td>
<td>Unemployment</td>
<td>Migration has no significant effect on Unemployment of natives, but is positively correlated with total unemployment</td>
</tr>
<tr>
<td>Bock-Schappelwein et al</td>
<td>Workers aged 19 - 55</td>
<td>Wages</td>
<td>Migration since 2000 had less pronounced distributional effects most of estimates are insignificant, little evidence of detrimental wage</td>
</tr>
<tr>
<td>(2009)</td>
<td></td>
<td>Employment</td>
<td>Migration since 2000 had insignificant effects throughout</td>
</tr>
</tbody>
</table>

- Immobile workers, which cannot react to increased labour market competition by moving out of sectors or regions most strongly affected, have a higher chance of

---

\textsuperscript{38} Similar results are found by Winter-Ebmer and Zweimüller (1996).
suffering declines in income and/or job opportunities than mobile workers (see for example Hofer and Huber, 2003 and Winter-Ebmer and Zweimüller, 1996).

• Due to the segmentation of the Austrian labour market newly migrating workers are most likely to come into competition with existing foreign workers. Here Huber and Hofer, 2001 find that an increase of the share of foreign employees by 1% increases the competing labour supply by 1.46% for foreigners but by only 0.94% for natives, on account of the sectoral segregation of employment of natives and foreigners.

Again in a more recent study Bock-Schappelwein et al. (2009) re-examine the effects of migration for the more recent migration since the year 2000. They find that in contrast to the 1990’s recent migration had less pronounced distributional effects. In particular while for immobile workers and workers working in high migration sectors of the economy wage increases were reduced by around 0.5% in this time period, most of their estimates turn out to be insignificant, and they find little evidence of detrimental wage and/or mobility effects of migration both for low wage and existing foreign workers in the period 2000 to 2006. Bock-Schappelwein et al. (2009) attribute this finding to the changing skill structure of the post 2000 migration to Austria.

In sum the studies on the macro-economic impact thus conclude that migration has beneficial macro-economic effects, while the studies analysing the labour market effects highlight the distributional consequences of migration. It is suggested that these effects work against the less qualified, foreign workers and immobile, but are likely to remain relatively small. Furthermore evidence on the post 2000 migration to Austria suggests that the effects have been even smaller for the most recent migration episode, which was also characterised by more highly skilled migration than that of the early 1990’s. Typical policy conclusions in this literature thus suggested that a mix of active labour market programs, increased training activities and measures aimed at better integration of foreign workers into the labour market should be pursued to reduce any negative distributive consequences of migration after enlargement (see Huber and Hofer, 2001).

6 Summary

This country report surveys the economic and labour market developments of Austria in the years since enlargement to discuss whether noticeable shifts in economic development, which can be causally linked to the enlargements of the EU in 2004 and 2007, can be found. Since the public policy debate before enlargement was characterised by concerns about the potential effects of enlargement on migration, the labour market position of the less skilled and foreigners as well as potentially asymmetric impacts on regions, we pay particular attention to these aspects of economic development in Austria since 2004. In general we find few clearly visible effects of enlargement. Economic development in Austria since the first round of the so called “Eastern Enlargement” in 2004 has been marked by a noticeable improvement in the business cycle, which was primarily driven by higher exports to countries outside the EU 27. For 2009, however,
business cycle outlooks, due to the international financial crises are more bleak as are expectations with respect to the development of employment and unemployment.

We also find that despite strong employment growth, unemployment rates increased in the first two years after enlargement and still have not reached the levels attained at the end of the last economic upswing in the year 2000. At the same time the economic activity of employees increased substantially since 2004. Half of this increase can be accounted for by increased migration.

Focusing in more detail on the development of migration, however, we also find that increased migration in particular in the period 2004 – 2007 was not due to a surge in migration from the new member states, but rather due to increased migration from the old EU member states, in particular Germany. Migration from the new member states by contrast increased only modestly since enlargement. Although there is some anecdotal evidence of circumvention of the existing restrictions towards immigration, actual labour movements from the NMS to Austria were small relative to ex ante forecasts of post-enlargement migration potentials. This, however, was also to be expected given derogation periods on the freedom of movement of labour.

Furthermore, we find no clear cut evidence that either regional economic development or labour market outcomes of foreigners or low skill groups have been severely affected by enlargement, but some evidence that the Austrian labour market has experienced increasing difficulties in integrating workers from the traditional sending countries of migrants since the beginning of the year 2000.

7 Literature


Hunya, Gabor and Anna Iara (2006) The Impact of Romania’s Accession to the EU on the Austrian Economy, wiw Research Reports 326


8 Appendix

Figure A1: Austrian Border regions and region types

Source: WIFO
Abstract

This study presents an overview of labour mobility in Bulgaria in the context of the significant socio-economic transformation after 1990 and the enlargement process. It describes the steps in the institutional setting of labour migration and its main patterns, outlining the changes in the stocks and flows of migration before and after the enlargement. Based on the existing literature the study summarizes the effects of migration on the national economy and labour market. The study emphasized that the design of an effective national migration policy needs a clear distinction between the short-term impacts of labour emigration and its long-term effects on the socio-economic development.
Contents

1 Introduction ................................................................................................................................. 1
  1.1 Overview of the Bulgarian labour market ................................................................................ 1
    1.1.1 The macroeconomic environment .................................................................................. 1
    1.1.2 Demographic trends ........................................................................................................ 2
    1.1.3 Labour market parameters ............................................................................................. 4
  1.2 Institutional setting for labour migration .............................................................................. 5
    1.2.1 Regulations of migration ................................................................................................. 5
    1.2.2 Labour market institutions ............................................................................................. 6

2 Patterns of labour mobility in (to) Bulgaria .............................................................................. 7
  2.1 Relevant data sources and limitations ................................................................................... 7
  2.2 Stocks and flows of New Member States (NMS) migrants before and after EU enlargement .......................................................................................................................... 8
  2.3 Characteristics of NMS migrants .......................................................................................... 8
    2.3.1 Emigrants: number of people and destinations ................................................................. 8
    2.3.2 Profile of the Bulgarian potential emigrant ...................................................................... 8
  2.4 Balance of payments as a source of information on illegal NMS migrants ......................... 10

3 Effects of migration on the national labour market and economy ............................................. 11
  3.1 Migration effects on LMF ..................................................................................................... 11
  3.2 Migration effects on the economy ......................................................................................... 12
  3.3 Impact of the brain drain/brain waste .................................................................................... 13

4 Conclusion ................................................................................................................................ 16

5 References .................................................................................................................................. 19
1 Introduction

The degree of labour mobility and migration in Bulgaria has varied depending on the period under observation. As free movement of people was limited in the period 1944-1989, there were no significant migration processes. Several emigration flows due to ethnic-political factors occurred in the period 1986-1990. With the progress of the reforms undertaken to move from the planned to a market economy, economic factors began to dominate as a push factor for emigration. Since the country’s accession to the EU in 2007, mainly socio-economic factors have been predetermining people’s intentions to change their place of residence.

1.1 Overview of the Bulgarian labour market

1.1.1 The macroeconomic environment

Quite contradictory economic and social processes occurred in Bulgaria in the period 1990-2006. Starting the transition with radical changes of the economic environment – such as the liberalization of prices and trade, privatization of large state enterprises and liquidation of existing cooperatives in the agricultural sector – the speed of the reform slowed down significantly after 1994. As a consequence there was no constructive process following the economic destruction. The massive job cuts due to the privatization of the large state enterprises was not compensated by new job creation. Foreign investments by that time were incidental, the development of small and medium-sized business was in its dawn, and the land restoration in the agricultural sector had just started. The latter is still an ongoing process, limiting the sector’s capacity to create employment. All this caused exceptionally high unemployment, affecting more than half a million people and remaining stable at this level up to 2003. The unemployment rate was over 13% in the period 1995-2000, and employment decrease continued, going down by 300 thousand people. This unfavourable economic development forced people to look for employment alternatives outside the country and stimulated emigration. According to some information sources, in the period 1993-2000 emigration amounted to 221 thousand people or an average of 22 thousand per year.

In late 1996 the country experienced a crisis in the banking system and hyperinflation. The latter eradicated the savings of the population and contributed to its further impoverishment. In mid-1997 the country introduced a Currency Board regime. The effects of the financial restraints were positive and the economy was stabilized. After 1998 GDP resumed growth. The growth of employment followed that of GDP with a lag of two to three years. However, the collapse of all incomes (wages, pensions, benefits, etc.) as well as the exhausted household and state financial resources had an impact on social developments. The polarization of society has increased.

The improved macroeconomic environment after 1998 was more favourable for social and labour market developments. The upward economic growth after 2000 (by an average
5%) contributed to an rise in employment by nearly 3% per year on average (after 2002). Economic growth and the increased job opportunities absorbed unemployment, which was halved to 9.6% in 2006. Today, the country even faces labour shortages in several branches and skills and is looking for imported labour.

Table 1: Main economic indicators in Bulgaria, 1995-2006 (growth rate in %)

<table>
<thead>
<tr>
<th>Years</th>
<th>GDP</th>
<th>Inflation</th>
<th>Real wage</th>
<th>Employment</th>
<th>Unemployment*</th>
<th>Direct foreign investment (million euro)**</th>
<th>Trade balance deficit (export-import) % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>2.9</td>
<td>-</td>
<td>-</td>
<td>1.0</td>
<td>11.4</td>
<td>-</td>
<td>-0.2</td>
</tr>
<tr>
<td>1996</td>
<td>-10.1</td>
<td>121.5</td>
<td>-18.7</td>
<td>-0.2</td>
<td>11.1</td>
<td>137.3</td>
<td>-1.7</td>
</tr>
<tr>
<td>1997</td>
<td>-6.9</td>
<td>1058.9</td>
<td>-17.2</td>
<td>-3.8</td>
<td>14.0</td>
<td>570.2</td>
<td>5.5</td>
</tr>
<tr>
<td>1998</td>
<td>4.0</td>
<td>18.7</td>
<td>23.4</td>
<td>-0.1</td>
<td>12.2</td>
<td>605.1</td>
<td>-2.9</td>
</tr>
<tr>
<td>1999</td>
<td>2.3</td>
<td>2.6</td>
<td>6.9</td>
<td>-2.9</td>
<td>13.8</td>
<td>866.0</td>
<td>-7.7</td>
</tr>
<tr>
<td>2000</td>
<td>5.4</td>
<td>10.3</td>
<td>1.0</td>
<td>-3.5</td>
<td>18.2</td>
<td>1103.3</td>
<td>-5.5</td>
</tr>
<tr>
<td>2001</td>
<td>4.1</td>
<td>7.4</td>
<td>-0.2</td>
<td>-0.4</td>
<td>17.5</td>
<td>903.4</td>
<td>-7.5</td>
</tr>
<tr>
<td>2002</td>
<td>4.9</td>
<td>5.8</td>
<td>1.6</td>
<td>0.4</td>
<td>17.3</td>
<td>980.0</td>
<td>-6.6</td>
</tr>
<tr>
<td>2003</td>
<td>4.5</td>
<td>2.3</td>
<td>3.4</td>
<td>6.3</td>
<td>14.3</td>
<td>1850.5</td>
<td>-10.8</td>
</tr>
<tr>
<td>2004</td>
<td>5.6</td>
<td>6.1</td>
<td>0.9</td>
<td>1.9</td>
<td>12.7</td>
<td>2735.9</td>
<td>-11.5</td>
</tr>
<tr>
<td>2005</td>
<td>6.2</td>
<td>5.0</td>
<td>5.4</td>
<td>1.5</td>
<td>11.4</td>
<td>3103.3</td>
<td>-16.2</td>
</tr>
<tr>
<td>2006</td>
<td>6.0</td>
<td>7.3</td>
<td>2.1</td>
<td>3.9</td>
<td>9.6</td>
<td>4364.0</td>
<td>-19.0</td>
</tr>
</tbody>
</table>

*Registered unemployment
**www.bnb.bg

Source: Statistical Yearbook for the respective years.

Macroeconomic stability created a favourable climate for foreign investments, and their volume increased about 4 times after 2000. The newly opened jobs contributed to the employment increase, as well as to the introduction of new management practices. Another positive aspect was that the stability of the economic development made it more predictable, so that employers could have more strategic views on the business development and respective needs of labour. The positive economic features contributed to some extent to changes in the pattern of labour mobility – emigration decreased and stabilized at about 14-20 thousand per year, while the number of immigrants increased from 18,000 in 2001 to 55,600 in 2006.

1.1.2 Demographic trends

Alongside the macroeconomic context, there is also another important factor that has negatively influenced the social and labour market developments during the period observed – the demographic factor.
The demographic trends show a stable long downturn tendency and clearly outline the decreasing inflows to the labour market and the ageing of the Bulgarian population (Fig. 1).

**Figure 1: Some demographic trends in Bulgaria**

![Graph showing birth rates, death rates, and natural growth from 1990 to 2006.](image)

Source: Statistical Reference Book for respective years, NSI, Sofia.

The ageing of the population in Bulgaria, as in many European countries, presupposes changes in the labour force structure in the medium and long run, as well as changes in the pattern of consumption and public services. Policy-makers should not neglect this fact, since the adjustment to the new demographic conditions needs time and relevant preparatory economic and social reforms. Several steps were undertaken in Bulgaria after 2005 in reaction to the negative impacts of the demographic development on the social and economic ones: public debates on the issue, social and economic analysis, and the preparation of a National Strategy for Demographic Development (2006-2020), supplemented with relevant operational documents, such as annual action plans.

**Figure 2: Population trends by age groups in Bulgaria (1985-2020)**

![Bar chart showing percentage of population by age groups from 1985 to 2020.](image)


According to some studies, the negative demographic trends may be even more serious, taking into consideration the dimensions of external emigration and its structure. Data show that for the period 1989-2001 the balance of external migration flows was negative.

---

2 Demographic Development of Republic of Bulgaria, Bulgarian Academy of Science, National Statistical Institute, UN Population Fund, Sofia, 2005, pp. 113-117.
by 670,000 people. Nearly half of the potential emigrants were young, well-educated people. Additionally, the long-term negative effects of emigration will be accelerated by the fact that through emigration Bulgaria is experiencing an ‘export’ of women of fertile age, which will lead to a lower level of the birth rate in the future.\(^3\)

1.1.3 Labour market parameters

**Activity rate:** The improved economic environment and the newly introduced policies stimulated labour force participation. The level of economic activity of both men and women in the period observed increased, reaching 51.8% in 2006 (57.4% for men and 46.8% for women); nevertheless, this is still below the level of 1993.

![Figure 3: Economic activity – total and by gender](image)

Source: LFS for respective years, NSI.

**Employment rate:** The better employment opportunities resulted in a significant increase in the employment rate, by 6.8 percentage points in 2000-2007.

![Figure 4: Employment trend – total and by age groups](image)

Source: LFS for respective years, NSI.

As outlined in Figure 4, the rising trends differed among the age groups, being highest for the age group 55-64 and lowest for young people (15-24). These trends reflect the policy measures aimed at motivating employers to hire people of pre-retirement age (55-64), while for the youngest age group the efforts are for increasing their quality by furthering

\(^3\) National Demographic Strategy of the Republic of Bulgaria 2006-2020, p. 11.
their education. The upward labour demand has eliminated the lack of employment opportunities as a factor of emigration. Today, there is even a shortage of labour supply.

**Unemployment:**

The most impressive feature of the labour market is the decrease of unemployment by over 10 percentage points from 16.4% in 2000 (536,700 people) to 6.1% (215,300 people) in the third quarter of 2007. However, among the unemployed the share of long-term unemployed is still high (63% of total unemployment), as well as that of youth unemployed (20%). Nevertheless, today unemployment can no longer be considered as a factor pushing emigration, as it was during the period 1990-2000.

**Wage level:** One factor that continues to be of high importance regarding emigration is the price of labour. Labour in Bulgaria is still being paid at a relatively low level as compared with the EU level, although since 2000 the income policy has been consistent and focused on a gradual increase of labour incomes. Some of these policies include regular increases of minimum payments, increases of social insurance thresholds, further the development of social protection policy by improvements of the pension system and social assistance. The better economic environment is also reflected in the rate of real wage growth. The significant erosion of real incomes, and wages in particular, was one of the main negative features of transition.

Thus, although the wage level in Bulgaria continues to be one of the lowest in the EU, during the past five years there has been a stable upward tendency. This increase can be regarded as a result of the quite consistent income policy of the governments in force since 2000. At the micro level, the growth in real wages reflected the changes in employers’ attitudes who had become aware of the fact that the wage level is an important tool to keep the workforce. This awareness was strongly provoked by the processes of liberalization of labour migration (e.g. waiving visa regimes) and especially after the country’s accession to EU.

**Illegal employment:** Increasing wages are in many cases not accompanied by relevant social insurance. Illegal employment appears in many forms, but the most popular are envelop money employment, no contract employment, social insurance paid at minimum level or not paid at all, etc. Thus the lack of decent work conditions should be considered a push emigration factor.

1.2 Institutional setting for labour migration

1.2.1 Regulations of migration

The legal framework regulating migration includes a number of documents, namely:
Bulgarian Citizenship Act, stipulates the conditions and procedure of acquisition, loss and reinstatement of Bulgarian citizenship.

Civil Registration Act, stipulates the conditions and rules for civil registration of physical persons living in the Republic of Bulgaria. Civil registration of the physical persons in Bulgaria is based on the data in their civil status records and the data in other records specified by the law.

Employment Promotion Act, governs the public sphere along with employment promotion and professional provision, as well as the mediation and provision of information on employment of Bulgarian citizens in foreign countries, and employment of Bulgarian and foreign citizens in the Republic of Bulgaria.

Regulation of the procedure for providing mediation services to foreign employers, stipulates the procedure for providing mediation services by the Employment Agency to foreign employers in case of employment of Bulgarian citizens, the content of the mediator and labour contract, as well as the contracting procedure.

Mutual Employment Agreements with other countries, etc.

1.2.2 Labour market institutions

The institutional and legal background of migration policy develops alongside the creation of new institutional and legal framework of the state and the economy.

The institutional framework includes ministries (Ministry of Internal Affairs, Ministry of Labour and Social Policy), agencies (Employment Agency, State Agency for the Refugees), committees (Committee for Bulgarians living abroad), as well as other institutions.

In May 2007 an Inter-Institutional Working Group was established, dealing with migration problems and headed by the Deputy Prime Minister. The social partners are included through the National Tripartite Council and the working groups within it. The non-government organizations are also involved in the whole net of institutions by participating in projects and programmes and in the public discussions on the topic.

In cooperation with the Ministry of Labour and Social Policy, the International Organization for Migration (IOM) Bulgaria seeks to establish mechanisms to regulate labour migration and to guarantee the rights of Bulgarian migrants abroad. IOM Bulgaria supports the establishment of strategies for diminishing irregular labour migration and trafficking of people, as well as for the comprehensive reintegration of returning Bulgarian labour migrants. IOM Bulgaria’s labour migration policies are based on the


5 The Czech Republic, France, Germany, Spain, Luxemburg, Portugal and Switzerland.
assumption that regulated migration may serve as an effective response to the migration challenges resulting from traditional labour imbalances and from new trends emerging in consequence of the increasingly globalizing world.

IOM Bulgaria supports the selection of qualified labour migrants seeking employment in the Czech Republic through providing information and guidance for meeting the selection criteria and through clarifying the conditions for staying and working in the country.

Through the established network of Information Consultancy Migration Centres IOM offers up-to-date information on the regimes regulating the freedom of movement, rules and regulations and opportunities for regular labour migration and the risks of irregular migration to potential migrants and vulnerable groups.

2 Patterns of labour mobility in (to) Bulgaria

2.1 Relevant data sources and limitations

Data sources on emigration from and immigration to Bulgaria are quite limited. One of the main sources is the census, conducted periodically in the country. The National Statistical Institute publishes data on migration based on the collected census information. Two censuses were been conducted after 1989 – in 1992 and in 2001. The latest census contains the relatively richest information in the studied field as compared to the preceding censuses.

The Agency for Refugees provides information on immigrants in Bulgaria.

The monitoring of the International Organization for Migration (IOM) for 1992, 2001 and 2003 was a source of information for the respective period.

Some surveys of the UN Population Fund are also a source of information, since they are dedicated to the opportunities for adoption concerning refugees in the Bulgarian socio-economic environment.

Certain scientific studies and sociological surveys should be mentioned here as well. In many cases the information they present comes from non-reprehensive sociological observations on particular problems of migration movements and thus is used mostly as complementary information. 

6 http://www.imigrace.mpsv.cz/?lang=bg&article=home
7 www.iom.bg
8 Beleva, I., Kotzeva, M., Bulgaria – Country Study of International Skilled Migration, 2001, ILO, background paper; Vladimirov, Katzarski, Baszhakov, Todorov, Bulgaria after 1997: Current Situation and Development Tendencies, Sofia, 2001; The migration – the European Integration and the Brain Drain from Bulgaria, 1996,
The balance of payments provides information on the transactions entering the country but does not distinguish among remittances.

2.2 Stocks and flows of New Member States (NMS) migrants before and after EU enlargement

As Bulgaria joined the EU only in 2007, we are able to present more information on stocks and flows before the accession, since there are no available data for the years 2007-2008.

2.3 Characteristics of NMS migrants

Bulgarian emigrants after 1989 numbered between 500,000 and 700,000 according to some information sources. Most of the emigrants within Europe keep their Bulgarian citizenship. The distribution of Bulgarian emigrants within Europe is as follows: UK 80,000; Spain 120,000; Germany 50,000; Greece about 120,000; Austria 30,000; the Czech Republic 10,000; Italy 50,000; France 15,000; Portugal 12,000. Bulgarians emigrating to the US and keeping their Bulgarian citizenship numbered about 200,000, in Canada 45,000. Approximately 15,000 to 20,000 Bulgarian emigrants live in Australia and in South Africa.

2.3.1 Emigrants: number of people and destinations

According to a 2007 survey the number of potential emigrants (migrants intending to re-settle, and short-term – for less than a year) is 12.1% as compared with 14.8% in 2001 (population census survey). The National Migration and Integration Strategy states that in 2006 the intention for long-term emigration decreased by about 50% as against 2001. The present number of people (16-60 years) who intend to stay abroad for a period of up to five years is about 35,000.

The preferred destinations are Spain and Germany, next come the USA, Greece, the UK, Canada, France and Italy.

2.3.2 Profile of the Bulgarian potential emigrant

Gender: The 2007 survey data show that the number of potential male emigrants is higher than female migration. This is particularly true for long-term labour migrants:


Family Patterns and Migration, National Representative Survey, 2007, MLSP, UNFPA, CCS, ASA, Sofia.

Ibid.
here the share of men in total emigrants is 60%. Concerning emigrants who intended to re-settle and short-term emigrants, the gender proportion is more balanced. The survey also shows that women dominate among the people willing to continue their education abroad (69.2% of all people willing to study abroad).

**Education:** As for the educational level of potential emigrants, we distinguish among the following educational categories: primary or lower, secondary general, secondary vocational, and higher education including doctoral degrees. According to survey data, potential long-term labour emigration is highest among people with primary and lower education. The intensity of emigration among people with secondary vocational education is also high as far as long-term emigrants are concerned. However, their share among short-term emigrants is particularly high – every 10th person with secondary education declared that he/she would seek for opportunities for short-term employment abroad. Among the potential long-term labour emigrants, those with primary or lower education (27.7%) and with secondary vocational education (27.7%) dominate. Within the structure of short-term labour emigrants, people with secondary vocational education have the highest share (34.1%).

**Skills and occupations:**

The following table presents the most specific skill and occupational features of the different groups of potential emigrants.

The data in the table show several interesting features:

- People with no particular occupation have declared the highest intention to emigrate.

- However, there are also qualified people who intend to emigrate – 6.6% of the operators of machines, equipment and transport vehicles, nearly 5% of qualified workers, 4% among the applied specialists.

- There are also about 10% of qualified industrial workers, 9% of workers in the public sector and applied specialists who are ‘somewhat likely’ to emigrate.

According to some authors, not more than 10% of the people who state migration intentions in the current year would actually realize them. This conclusion is based on evidence from the first empirical studies of the National Statistical Institute in the early 1990s, when observations were conducted at border checkpoints with several years intervals in between.\(^\text{12}\)

**Other features: dependent family members, etc.**

The survey points out that the emigration intensity depends on the presence/absence of children and their number in the family: the highest number of people with the intention to re-settle comes from the group with one child – 42% of the cases. The survey’s outcomes did not show any differences depending on the number of children among long-term labour migrants – about 37% of the respondents in the groups with no child and with one child stated the respective intention. The share of people without children dominated among those stating short-term emigration intentions (40.5%).

Table 2: Migration intention by occupations and skills

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Total</th>
<th>Not likely to emigrate</th>
<th>Somewhat not likely</th>
<th>Somewhat likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial personnel</td>
<td>100.0</td>
<td>79.6</td>
<td>10.8</td>
<td>7.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Analytical specialists</td>
<td>100.0</td>
<td>82.1</td>
<td>8.3</td>
<td>7.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Applied experts</td>
<td>100.0</td>
<td>72.8</td>
<td>14.1</td>
<td>9.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Subsidiary personnel</td>
<td>100.0</td>
<td>77.2</td>
<td>11.4</td>
<td>8.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Workers in public services, security, trade</td>
<td>100.0</td>
<td>75.1</td>
<td>11.1</td>
<td>9.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Producers in agriculture, forest, industry, fishing</td>
<td>100.0</td>
<td>88.5</td>
<td>7.7</td>
<td>0.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Qualified industrial workers</td>
<td>100.0</td>
<td>72.7</td>
<td>12.8</td>
<td>9.9</td>
<td>4.6</td>
</tr>
<tr>
<td>Operators of machines, equipment</td>
<td>100.0</td>
<td>68.9</td>
<td>16.4</td>
<td>8.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Low-qualified workers</td>
<td>100.0</td>
<td>77.8</td>
<td>12.4</td>
<td>6.0</td>
<td>3.8</td>
</tr>
<tr>
<td>No particular occupation</td>
<td>100.0</td>
<td>67.0</td>
<td>12.4</td>
<td>7.2</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Source: Family patterns and migration, p. 87.

2.4 Balance of payments as a source of information on illegal NMS migrants

The balance of payments is a source of information as far as remittances are concerned. However, it should be emphasized that from a methodological point of view this source of information is not exact, since it contains not only the volume of remittances but also some other transfers to the country (government programmes, in the near past the EU subsidies under the Phare Programme, etc.).

Table 3: Balance of payments – standard form

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(BGN million)</td>
<td>998.3</td>
<td>924.1</td>
<td>1039.9</td>
<td>1198.9</td>
<td>1601.6</td>
<td>1775.3</td>
<td>1382.4</td>
<td>1281.3</td>
</tr>
</tbody>
</table>

Source: http://www.bnb.bg/bnb/home.nsf/

The data in Table 3 present the dynamic of the transfers, including remittances. In the period 2000-2007 the transfers doubled. Considering the above-mentioned
methodological specificity and assuming that state transfers have not changed significantly, either the number of emigrants abroad has increased, or the amounts of money they could afford to send home has increased, or people’s belief in the banking system has increased.

3 Effects of migration on the national labour market and economy

First of all, it should be pointed that research on the effects of migration on the national labour market and the economy has been very limited. What is more, the existing studies are focused on a different aspect: they examine the factors which influence people’s inclination to emigrate. This approach is understandable since the main aim is how to stimulate people not to emigrate. Nevertheless such an aim has to be based on existing expertise on the negative effects of emigration. The latter have not been investigated so far and only experts’ opinions about the effects (based on assumptions and not on estimates) could be cited.

3.1 Migration effects on LMF

In Bulgaria, the high unemployment during a relatively long period of time was relieved through labour emigration. In other words, high unemployment and the lack of enough job opportunities stimulated emigration. Thus, as an instrument to relieve labour market tensions, emigration had a positive effect on the labour market, but only in the short run. In the medium and long run, negative impacts have already appeared. Together with demographic fluctuations migration has been the most important contributor to shortages in labour supply in the long run. The lack of skilled professionals and highly educated people limits the possibilities for economic development and growth.

The effects of emigration on the labour force can be studied both from the viewpoint of their positive and negative impacts. The negative impact is related to the labour force decrease. This negative effect for Bulgaria is undisputable: the decrease of available labour force during the period 1992-2001 is calculated to be 22 thousand people per year according to census data. However, in the short run the emigration by that time decreased the pressure of labour supply since the demand for labour was very low. But in the long run, as seen at present, the impact is quite negative, since there is a shortage of labour in the country. It was assumed that emigrants might return when the economy revived. This hypothesis, however, has been confirmed only partially: some people have returned, but the majority of Bulgarian emigrants have settled abroad or intend to come back when they retire, which means that these people are completely lost for the labour market.

Immigration could balance the demand and supply of labour. Therefore the present government intends to use a number of instruments to stimulate the immigration of people of working age, in particular those living abroad and defining their nationality as Bulgarian.
The positive effects of migration on the labour force are related to the quality of the labour force and the incomes earned. The quality of emigrants as labour force improves only in case they find a job relevant to their qualification and good conditions for work prosperity. This case is more relevant for highly educated young emigrants. In the case of Bulgaria, the mass emigration due to lack of jobs in the country and high unemployment induced well-educated middle-aged people to emigrated and in many cases to accept jobs below their qualification level. The work in these low-qualified positions has led to a deterioration of the labour force quality.

The remittances, of course, are a positive aspect of emigration. Many families (particularly in small towns and villages, where job shortage still exists) have been surviving on these incomes.

### 3.2 Migration effects on the economy

These effects can also be separated into positive and negative ones. One positive aspect is pointed out below.

- Generating foreign exchange remittances, increasing the rate of savings and using them as an investment capital – although this effect can be found only in the medium term. According to some recent evaluations (Vladimirov et al., 2000), 43% of emigrants who have returned invested their savings in an own business and 31% of them in buying real estate.\(^\text{13}\) The authors underlined that these estimates may be too optimistic, thus supporting the view that remittances were beneficial for emigrants’ families but had no strategic significance for the home country. The individuals who return home do not become agents of modernization; their goal is to guarantee for themselves a relatively safe well-being and material situation. They gradually lose their experience and qualifications gained abroad because of the lack of conditions for their implementation in the home country. Many examples from our own life experience maybe provided in this context.

According to some authors the main problem with remittances in Bulgaria is that they tend to avoid the banking system, as happened especially during the first 12 years of transition.\(^\text{14}\) Sharing this opinion the authors made some recommendations related to that fact. The current account of Bulgaria’s balance of payments for the last three years shows increasing tendencies of net current transfers, from USD 230.1 million in 1998 to 299.7 million in 1999, 289.7 million in 2000 and over 1200 million in 2007.\(^\text{15}\) The problem is that the net current transfers include also other transfers, and it is unclear what is actually the amount of remittances. Anyway, even if some of the remittances avoid the banking system, they can be calculated at over

---


\(^{15}\) Statisticheski spravochnik, 2001, National Statistical Institute, Sofia, p. 90.
USD 120 million per year. In case there is an annual inflow of such an amount of money (this is one tenth of the foreign investment in the county in 2000) the question is whether such inflows supported economic development. Bulgaria experienced economic decline and the highest unemployment among the Central and East European countries for nearly ten years after the transition started. However, with the stability of the economic development after 2000 it may be assumed that the positive effects of the remittances have increased. In any case, we agree with the view that ‘remittances have been beneficial for emigrants’ families, but have no strategic significance for the home country\textsuperscript{16}.

### 3.3 Impact of the brain drain/brain waste

**Positive and negative aspects of the brain drain impact**

Undoubtedly, international skilled migration has proved to have economic consequences for both the host and sending countries. Despite the consensus existing in recent years on the view that net effects have been more favourable for host countries, it is still difficult to evaluate the overall effect of skilled migration on the sending countries – positive, negative or strongly negative. The peculiarities of the undertaken reforms in transition economies make some of the effects more influential or less influential compared to other developing countries. In general, the costs of acquiring a professional qualification are quite substantial for the society due to the strong element of state subsidization in the Bulgarian educational system. By migrating, the young university graduates or scientists remove the opportunity for the government to realize any return on the investment it had made in their education. For this reason the issue continues to attract public debate. Therefore one should consider the whole spectrum of possible impacts of skilled migration on the country in the short, medium and long term.

**In particular** the positive impacts of skilled emigration maybe attributed to:

- The opening of Bulgarian science towards the latest scientific achievements and integrating Bulgarian scientists into the world scientific community. Empirical studies show that a substantial part of academic staff considers the brain drain as a fee that Bulgaria has to pay in the process of globalization and integration.

- The possible return of part of skilled emigrants that will positively influence the country’s future development through the implementation of their professional, organizational and managerial experience accumulated while staying abroad. Moreover, a 1996 survey showed that 20% of those who had left the country after 1989 had returned. The most recent studies on emigration intentions of youths have shown that the majority of those who have been planning to leave the country will stay abroad for some period. They do not reveal a firm intention to live permanently in the potential

\textsuperscript{16} Vladimirov et al., Bulgaria after 1997, ...
host countries. Emigration seems to be a temporary solution and appears as a response to the adverse economic conditions in the transition period in Bulgaria.

- The increasing share of students leaving the country to study abroad has to be appreciated positively since it is expected to enhance the human capital of the labour force and in long run to contribute to the country’s economic prosperity. However, increasing evidence exists that a substantial part of Bulgarians studying abroad do not return home and find jobs in the destination country. Since most young people go to obtain their tertiary education or to get a PhD degree, this process has resulted in depleting the nation’s productive capacity. The students going abroad have very often been attracted not only by the higher living standards but also by the better communication and the access to new technologies and the latest achievements in their fields of interest – issues that seem to be of increasing importance for young people.

**Negative impacts** of skilled emigration may be associated with:

- **Negative impact on the labour supply in the long run.** Since the beginning of the transition, demographic change and skilled emigration have been the two main contributors to the changes in the size and composition of the population of working age. Bulgaria has recently experienced, and is projected to continue to experience, a reduction in the rate of increase in the population of working age. The main cause of this decline has been both the reduction in birth rates during the past three decades and the increase, although modest, in the death rate. These quite unfavourable demographic trends combined with the net migration are expected to negatively affect the labour supply in the long run. Kalchev and Totev (2000) point out that in 1997 Bulgaria reported the lowest natural increase (-7.0 per 1000 persons of the population); the lowest birth rate (7.7 per 1000 persons of population); the second highest death rate (14.7 per 1000 persons of population) and the lowest total fertility rate of 1.09, among the 20 main European countries.\(^{17}\) While in mid-1960s the birth rate in Bulgaria was around 16.0 births per 1000 of population, by the mid-1990s it had fallen by almost 50% to less than 9 births per 1000 of population. The death rate displayed a modest decline compared to the birth rate. As a result, a slowdown in the growth of the population of working age and of the labour force was observed. There was a decline in the inflow of young people to the working-age population and a larger outflow of older people from the same population. These developments have been accompanied by substantial changes in the demographic composition of the Labour Force. The proportion of young people decreased from 29.2% in 1992 to 20.1% in 2000. Having in mind that in recent years the share of young people in the total emigration flow has been steadily increasing, a further deterioration in the age structure of the labour force can be expected.

\(^{17}\) Data used in the comparison were taken from the publication 'Recent demographic Development in Europe', issued by the Council of Europe, 1998.
The problem of 'sunk costs' and depriving the country of the opportunity for further development of some strategic and prosperous scientific fields. It is of particular interest to obtain quantitative estimates of the investment costs spent on education in the country. Unfortunately such estimates do not exist for Bulgaria. Total expenditures on science and education, amounting to 0.4% and 4.3% of the budget in 1999, were relatively low compared to the developed countries. At the same time the brain drain affected those fields where the training of skilled professionals is the most expensive (such as medicine, biology, IT technologies). The implication is that the opportunity cost of preparing a student is higher in less developed than in the developed countries. Preparation of 'scarce-skills' specialists is a bigger effort for developing countries where society is facing hardships related to limited financial resources and widespread poverty than for the developed ones. Scarce-skills emigration generates not only the problem of 'sunk costs' but also of depriving the sending countries of the opportunity for further development of some strategic and prosperous scientific fields.

The detrimental influence of the brain drain on the network of institutions and in particular on their capacity for further development. During the first years of transition, R&D institutions had virtually been depleted of their staff. About 60% of the total outflow in Bulgarian science are accounted for by the employees of these institutions. R&D institutions were specialized in doing research in the most advanced areas of technological innovations. With their collapse Bulgaria has been deprived of the possibility to develop those strategic areas. The departure of the outstanding scientists has not been followed by any sizable inflow of young people into research institutions. The low compensation, lack of interest in research output and the diminished prestige of the profession have been preventing young skilled specialists from joining the research and academic staff. As a result the ageing of Bulgarian science has emerged to be a major challenge for the government that needs to be addressed. The tremendous decline in the total number of scientific and academic staff and the changes in its composition are detailed in Table 12 and Graph 4.

During the past decade Bulgaria has increasingly become an exporter of computer programmers and other types of IT specialists to the huge international market of Information and Communication Technologies (ICT skills). In the long run this trend would eventually have a negative impact on the future development of strategic economic branches and the implementation of new technologies in industrial restructuring.
Table 4: Composition of Bulgarian scientists by subject

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural science</td>
<td>25853</td>
<td>25871</td>
<td>25192</td>
<td>23906</td>
<td>20874</td>
</tr>
<tr>
<td>Technical science</td>
<td>7421</td>
<td>7255</td>
<td>6813</td>
<td>6001</td>
<td>4455</td>
</tr>
<tr>
<td>Medical science</td>
<td>4817</td>
<td>4760</td>
<td>4673</td>
<td>4417</td>
<td>3451</td>
</tr>
<tr>
<td>Agricultural science</td>
<td>1653</td>
<td>1767</td>
<td>1576</td>
<td>1422</td>
<td>1147</td>
</tr>
<tr>
<td>Human science</td>
<td>6861</td>
<td>7035</td>
<td>7061</td>
<td>7198</td>
<td>7345</td>
</tr>
</tbody>
</table>

Source: Statisticheski spravochnik, 2000, National Statistical Institute, p.36, 2007,p.50

Graph 4: Dynamic of Bulgarian scientists as of 31.12.

Source: Statisticheski spravochnik for the respective years, NSI, Sofia.

Finally, when the impact of the brain drain on the home economy is considered, it has to be taken into account that its adverse impact is additionally aggravated by the existing ‘brain waste’ within the country. Under hard budget constraints, science and education have experienced a loss of human capital in the shape of skilled professionals who had been trained at considerable costs and later on switched to another field.

4 Conclusion

Globalization and close economic and social integration act as a strong incentive for people’s mobility. Bulgaria has been facing migration problems along with the political, economical and social transformation since 1990, which completely changed the labour mobility environment. As a result, migration flows have increased significantly. This fact raises new problems as well as the need for new policies.

Migration flows consist of emigrants, immigrants and refugees. Bulgaria is a net exporter of people, since the number of emigrants prevails, while that of immigrants and refugees is still negligible.
Emigration has become a serious **problem for Bulgaria due to its negative impact on population growth and the present shortage of labour that occurred along with the economic revival since 2000.**

According to the 2001 census the main characteristics of potential long-term emigrants were well-educated young people, including women of fertile age, while low-qualified people declared their intention for short-term, seasonal labour emigration. The volume of the migration potential changed insignificantly over the years, from 19.4% in 2001 to 20.2% in 2007.

There was a shift in the time horizon of the emigration model – the intention for short-term mobility in the respective year increased from 26% in 2001 to 42.4% in 2007. As far as the destination is concerned, potential emigrants prefer Spain, Italy, the USA, Turkey and Germany.

The total number of **immigrants**, according to latest census data, was 18,688 (2001). The statistics on permanently resident foreigners show an increase to 55,653 in 2006. There is an upward trend, which is however determined by people coming from less developed countries. Among those there are certain groups of immigrants who regard Bulgaria just as a transit country in their emigration ‘journey’. This fact multiplies the problems for the policy-makers since the effects of the applied measures and programmes for economic and social integration of immigrants meet no relevant returns.

At present the government undertakes more systematic steps for developing a consistent policy in the field of migration, including the elaboration of strategic documents and action plans related to emigration and immigration. These steps have been provoked by widespread debates concerning demographic trends and labour shortages. The aim of the elaborated policy is to reduce and stabilize emigration flows and to stimulate immigration as a possible instrument for improving the demographic balance and increasing labour supply.

The core of the emigration policy is to prevent young people from future emigration. The particular measures and tasks for reducing the number of emigrating young people includes measures to promote employment and reduce unemployment among young people, and to improve working conditions, remuneration and quality of employment.

By expecting that the present upward immigration trends in the country will continue, the National Emigration and Immigration Strategy of the Republic of Bulgaria (May 2008) underlines the need for: (a) intensive public debates about the socio-economic role of

---

18 Family patterns and migration, National Representative Survey, 2007, p. 87.
19 There are also policies for ensuring equal access to quality education; relief in crediting for the purchase of housing, furnishing and improving dwelling conditions; creating conditions for overcoming poverty and social isolation among disadvantages youngsters; stimulating family formation, child rising and upbringing; easing the transition from school to employment; increasing the knowledge of youths about their labour/insurance rights and obligations; elaborating relevant policy for encouraging the return of young people, who have graduated from universities abroad as well as employers to hire such people to work.
immigration; (b) developing an immigration policy that stimulates Bulgarians living abroad to settle in the country; (c) improving the existing legislation so as to unify the legal norms concerning immigration problems; (d) further developing the information system for immigrants and creating an administrative register of immigrants in the country; (e) spreading knowledge among the population about the manners, customs, traditions and culture of immigrants by conducting information campaigns; (f) regulating the procedures for granting legal recognition of the education and professional qualification of immigrants, etc.
5 References


Demographic Development of the Republic of Bulgaria, Bulgarian Academy of Science, National Statistical Institute, UN Population Fund, Sofia, 2005, p. 113-117.

Beleva, I., Kotzeva, M., Bulgaria – country study of international skilled migration, 2001, ILO, background paper;


Vladimirov, Katzarski, Baszhakov, Todorov, Bulgaria after 1997: Current situation and development tendencies, Sofia, 2001;
The migration – the European integration and the brain drain from Bulgaria, 1996, Centre for Study of the Democracy, Sofia;

Minchev, V., Bulgarian emigration at the beginning of the 21 century; estimations and profiles”, Economic Thought Journal, 2004/5, Sofia;

Kalchev, Totev, Emigration processes and the socio-economic development in Bulgaria, Migration Studies, Estratto, Roma, 2000

Jekova, V., External and Internal Migration of the population in Bulgaria, Economic Studies N2, 2006, p.193

Family Patterns and Migration, National Representative Survey, 2007, MLSP, UNFPA, CCS, ASA, Sofia.
Abstract

In this report we analyse the impact of migration from the new member states to Germany and the possible implications of a free movement of workers. We moreover assess the economic conditions for absorbing additional labour supply. The German economy experienced an economic downturn in the business cycle in the beginning of this decade which was accompanied by increasing unemployment. As a consequence of the economic conditions and the transitional restrictions for the free movement of workers, immigration from the new member states has been very modest in Germany. Migrants from the NMS are better educated than other foreigner groups, but the average education is slightly below that of the native population. However, the unemployment rates of the migrants from the NMS in Germany are relatively high.

The economic conditions in Germany have substantially improved in 2006 and 2007. The unemployment rate has declined from its post-war peak of 10.6 per cent in 2005 to 7.3 per cent in 2008\(^1\). In 2009, the economic outlook is gloomy; obstacles for the economy remain due to the ongoing financial market crises, cautious consumers, and an economic downturn by Germany's main trading partners.

However, the empirical literature finds that the effects of immigration on wage and employment are small in Germany. A 1.0 per cent increase of the labour force through immigration reduces wages by 0.1 per cent and increases the unemployment rate by 0.1 percentage points according to most studies. This finding is confirmed by a CGE simulation we present in this report. Thus, it is unlikely that immigration from the new member states will affect labour markets in Germany to a large extent. Nevertheless, the high unemployment rate among the immigrant population from the NMS is reason for concern labour market policies have to address, irrespective of the time when the free movement of workers is introduced in Germany.

\(^1\) Source: Labour Force Survey adjusted series.
Contents

1 Introduction .................................................................................................................. 1

2 The German Economy and the German labour market, 2000-2008.......................... 2
   2.1 The development of the economy and labour markets before EU enlargement .......................................................... 2
   2.2 The development of the economy since EU enlargement ........................................... 2
   2.3 Labour market developments since enlargement .................................................. 3
   2.4 Outlook .............................................................................................................. 4

3 Institutional framework and labour migration from the new member states........... 5
   3.1 The institutional and legal background .................................................................. 5
   3.2 Key migration trends .......................................................................................... 7
   3.3 The human capital characteristics of migrants .................................................... 13
   3.4 Labour market participation of migrants from the NMS and the candidate countries ......................................................... 15

4 Impact of migration on the German economy and the labour market: A review of the literature ......................................................................................................... 17
   4.1 Microeconometric studies ................................................................................... 18
   4.2 Structural models ............................................................................................... 18
   4.3 CGE and other macroeconomic models ................................................................ 19

5 A simulation of the macroeconomic effects of free movement ................................ 20
   5.1 Description of the model .................................................................................... 20
   5.2 Results ............................................................................................................... 21

6 Conclusions ............................................................................................................... 25

7 References ............................................................................................................... 27
1 Introduction

Germany has been the main destination for migrants from the new member states (NMS) in the EU-15 before the EU’s Eastern enlargement. This position has changed in the course of the enlargement process: In 2000, 58 per cent of the immigrants from NMS-8 and 46 per cent of the immigrants from Bulgaria and Romania in the EU-15 resided in Germany. By the end of 2007, this share has dropped to 30 per cent in case of the NMS-8 and to 10 per cent in case of the NMS-2. The net inflow of migrants from both the NMS-8 and the NMS-2 has been moderate since 2004. The diversion of migration flows from the new member states away from Germany towards other destinations such as the UK and Ireland in case of the NMS-8 or Italy and Spain in case of the NMS-2 can be traced back to several factors such as high unemployment and slow economic growth in Germany at the beginning of this decade. The main factor, however, is the selective application of the transitional arrangements for the free movement of workers. While other destinations such as Ireland and the UK have opened their labour markets, Germany largely maintained the restrictions on labour mobility for the new member states which had already been in place before enlargement.

The objective of this country study is to analyse the impact of migration from the new member states on the German economy and on the German labour market. Given the large size of the German economy and its geographical proximity to the new member states, Germany is still one of the most affected receiving countries in the EU, although its immigration share has substantially declined during the last years. The German case is also highly relevant from a policy perspective, since the decision on the prolongation for the third phase of the transitional arrangements on the free movement of workers for the NMS-8 is due in 2009 and for the second phase in case of Bulgaria and Romania by the end of 2008. Therefore, we also discuss the implications of a removal of the remaining immigration barriers under the current conditions in the German labour market in this report.

We start with an analysis of the macroeconomic situation in Germany since the beginning of this decade. The slow-down of economic growth and high unemployment has been the main background for the suspension of the free movement of workers from the new member states in Germany. However, the situation in the labour market has considerably improved during the last two years, such that the situation on the German labour market, even if we consider the financial and economic crisis, will not be worse than the EU-15 average in 2009 (Section 2). Section 3 briefly presents the institutional conditions for labour mobility from the new member states in Germany, the key trends in migration from the new member states and the candidate countries, the human capital

---

2 The abbreviation “NMS-8” summarises the eight new member states which joined the EU at the 1st of May, 2004: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia.

3 The NMS-2 comprises Bulgaria and Romania, who joined the EU at the 1st of January, 2007.
characteristics of the immigrant workforce, and the participation of immigrants from the NMS in the German labour market. Section 4 reviews the literature on the impact of migration from the new member states on wages, employment, and economic growth in Germany, and in Section 5 we present our simulation results which are based on an applied equilibrium model. Finally, Section 6 draws conclusions for the free movement of workers.

2 The German Economy and the German labour market, 2000-2008

2.1 The development of the economy and labour markets before EU enlargement

The year 2000 marks a turning point in the macroeconomic development in Germany. The German economy entered a period of stagnation and recession after the year 2000 which lasted for 5 years. Investment in capital declined sharply from +9.9 per cent in 2000 to -7.6 in 2002 and was still reduced by 2.3 per cent in 2003. Together with shrinking private consumption (+2 per cent in 2000 to -1 per cent in 2002) and declining growth rates of international trade, which suffered from a downturn of the world economy at that time, this resulted in a recession of the German economy: The real GDP shrank in the first quarter of 2002, and the second, third, and fourth quarter of 2003. As a consequence, the real GDP declined by -0.2 in 2003. Nevertheless, in the last quarter of 2003 exports began to rise, caused by an upswing in the world business cycle.

The labour market lagged the macroeconomic downturn after 2000. In 2000 and 2001 unemployment was still reduced by 211,000 persons in 2000 and 37,000 persons in 2001. Consequently, employment expanded by 675,000 in 2000 and by 175,000 persons in 2001. In 2002 unemployment started to increase by 209,000 persons and increased by another 316,000 persons in 2003. At the same time, employment shrank by 241,000 persons (2002) and 421,000 persons (2003). These figures tend to under-state the actual increase in unemployment, since a revision of the labour market statistics reduced unemployment by approximately 150,000 persons and active labour market policies by another 81,000 persons statistically.

Altogether, employment declined in Germany by about 660,000 persons in the two years before the EU admitted the eight new member states from Central and Eastern Europe in May 2004.

2.2 The development of the economy since EU enlargement

The period from 2004 to 2007 can be divided in two sub periods of two years each. The first sub period is characterised by slow economic growth (1.1 per cent in 2004 and 0.8 per cent in 2005). Growth in West Germany was hereby more stable than growth in East Germany. The West German economy achieved a real GDP growth of 1.3 per cent in 2004
and 0.9 per cent in 2005, while the GDP growth in East Germany declined from 1 per cent in 2004 to 0.2 per cent in 2005.

After 2005, the German economy experienced a robust upswing of the business cycle, particularly in West Germany. The real GDP increased there by 3 per cent in 2006 and by 2.5 per cent in 2007, while the growth rate in East Germany stands at 2.2 per cent in both 2006 and 2007.

The upswing is based on two pillars. First, rising investments is the prime pillar which is so far not affected by the financial market crises in the world economy. The second pillar of the upswing is rising exports due to the growing competitiveness of the German economy. Even the appreciation of the Euro against the Dollar had no large impact on exports and reduced the dynamic growth of exports only moderately. The weak part of the current upswing is still consumer spending, which did not increase during the last three years as is usually expected at this stage of the business cycle. Since fears of an economic downturn evolve in 2008, consumer spending seems to remain at a low level.

The weakness of consumer spending corresponds with the rising international competitiveness of the German economy. In the last decade, moderate wage negotiations accelerated the competitiveness of the German export industries but weakened consumption.

Beside a reduction in unit labour costs, external factors fostered the export boom of the German economy. The investment demand of foreign countries expanded the demand for German goods. Moreover, the German economy also benefited from higher oil price by rising exports to OPEC countries. Finally, it is worth noting that the real estate market in Germany is not much affected by the crisis of real estate markets in the US and other countries, since the German economy did not experience a bubble in this market. Costly estate price adjustments are therefore unlikely to happen in Germany. Nevertheless, German banks are heavily engaged in US financial markets. This led to a near bankruptcy of the IKB bank as well as the “Landesbank” of Saxony and may harm other banks, too.

2.3 Labour market developments since enlargement

The labour market in the years 2004 to 2007 followed the trend of the business cycle. In 2004, the unemployment rate amounted to 10.1 per cent and achieved its post-war peak of 11.1 per cent in 2005. Following the labour market and social security reform in Germany which was implemented by the first of January, 2005, Germany experienced a substantial decline in unemployment. The unemployment rate was reduced to 7.8 per cent (7.4 per cent ILO concept) by May 2008, its lowest value since 1993. This large reduction of the unemployment rate is unusual for the German business cycle and outpaced previous upswings (IAB, 2008).

The present increase in employment particularly reduces long-term unemployment in Germany: It was reduced by 17.3 per cent in 2007, which is stronger than the decline in unemployment in general (-15.3 per cent). The employment growth in West Germany
was with 1.6 per cent 0.1 per cent slower than in the Eastern part. Nevertheless, the gap between the unemployment rates of 6.8 per cent in West Germany and 13.9 per cent in Eastern Germany remains at 7.1 percentage points still very high. This is particularly relevant for migration from the NMS, since the overwhelming share of the NMS migrants resides in West Germany.

The present upswing in the German labour market also changes the structure of employment. In past business cycles, the German economy lost in particular jobs subject to social security contributions during downturns, while it created more jobs in segments of the labour market not subject to social security contributions during upswings. In 2006 and 2007, this turned upside down. The growth of jobs which are subject to social insurance contributions is now stronger than the growth of employment in general. This development reduces pressures on the social security system.

The present upswing of the German economy is accompanied by a shrinking population and declining immigration. The population in Germany declined between 2004 and 2005 slightly from 83,534 million to 82,262 million, while the labour force increased from 38,749 million to 39,659 million. At the same time, net immigration declined in Germany to about 70,000 persons p.a., which falls short from its long-term average of some 200,000 person p.a.

2.4 Outlook

The real growth of GDP in 2008 was slower than in 2007; the growth rate declined to 1.3 per cent. The economic situation is exceptionally uncertain. The downswing of the world economy and the global financial market crises has terminated the economic upswing in Germany already in the last quarter of 2008. Additionally, the German government bailed out at least three banks, the IKB, the Hypo Real Estate and several state owned banks (Bayerische Landesbank) and set up a rescue plan for the bank branch. The second biggest private bank in Germany, Commerzbank and several banks from car companies (VW-Bank, Mercedes-Benz Bank) applied for this plan. The financial market turmoil is likely to affect the real economy via the channel of investment. Additionally, the economic downturn in other European countries like the UK, Spain, Ireland, and outer European countries like the US harms Germany’s exports. That’s why business confidence (as measured by the IFO-Index) dropped to a five year low and the industrial production contracted sharply in 2008. Against this background, the German government plans to stimulate economic activity by an increase in government spending and a temporary tax deduction for investments.

Economic forecasts are extremely uncertain. The recent economic outlook of most research institutes predict a GDP decline of 2.0 per cent (RWI-Essen), 2.2 per cent (IFO) and 2.7 per cent (IfW) under the condition that the rescue plan helps to avoid a big bank failure. Furthermore, lower inflation is expected to slightly increase households spending while exports decline sharply and investment is strongly reduced. All research institutes
expect the recession to last at least until 2010 (IFO, IfW), which leads to strong labour market effects.

According to the economic forecast of the IFO Institute, the economic downturn is transferred to the labour markets already in 2009. After good labour market figures in 2008, where the employment increased above 40.3 million persons and unemployment is at a 7.8 per cent low, a contracting economy in 2009 will increase unemployment according to an IFO forecast by at least 200,000 persons. This increase already reflects a reduction in potential employment by 130,000, which is damping the rise in unemployment. Due to this comparable slow increase, the IFO-Institute expects the German unemployment rate at 8.0 per cent in 2009, which is below both the Eurozone and the EU-27 estimates. However, the economic and labour market conditions in 2009 depend heavily on the reaction of exports on the economic and financial crises.

Altogether, the unemployment rate in Germany has fallen substantially during the last three years. In 2009, it will fluctuate around the average unemployment rate in the Eurozone and the EU-15. Moreover, it is worthwhile noting that the German economy is characterised by large regional imbalances in unemployment rates, particularly between West and East Germany. Since the overwhelming share of the migrants from the NMS moves to West Germany, and particularly to the prosperous regions in the South of West Germany, the unemployment rate in the affected parts of Germany is well below the national average.

3 Institutional framework and labour migration from the new member states

3.1 The institutional and legal background

Germany decided to utilise the transitional arrangements for the free movement of workers when the NMS-8 joined the EU at May 1, 2004. The same rules as for workers from the NMS-8 apply for workers from Bulgaria and Romania after their accession to the Community at January 1, 2007. The entry for workers from the NMS is regulated by the “Act on the Access to Labour Markets in the Context of the EU Enlargement” from April 28, 2004. This law suspends the free movement of workers. The access to the German labour market for workers from the new member states is largely regulated by bilateral agreements, which have been concluded already before enlargement. These agreements open up the access to certain branches of the German economy and certain activities there. The employment of workers from the NMS requires a temporary or permanent work permit. Short-term temporary work permits are inter alia granted to seasonal workers, to contract workers, to so-called ‘new guestworkers’ in certain sectors, and to some workers and commuters in border regions (“Grenzarbeitnehmer”). Quantitatively

4 „Gesetz über den Arbeitsmarktzugang im Rahmen der EU-Erweiterung“, Bundesgesetzgesetzblatt I 2004, 28th of April, 2004 (now § 284 Sozialgesetzbuch III (SGB III)).
important among these categories are only the permits for seasonal workers, and, to a lesser extent, permits for contract workers.

For longer term and permanent work permits beyond these categories similar rules as for other nationals from third countries apply, although a preferential treatment is granted to workers from the new member states compared to non-EU nationals. The German immigration act\(^5\) distinguishes less-qualified, qualified and highly qualified workers. Less-qualified workers can receive residency permits only for humanitarian, political or family reasons. For qualified workers, a temporary work and residency permit is only granted if the position cannot be filled with German or other EU citizens. In contrast, highly qualified workers can receive a permanent work and residency permit upon arrival. The German immigration act defines scientists with a specific expertise and other senior academic staff as highly qualified persons. Individuals in leading positions in the business sector can receive a permanent residency permit as well if their income is twice as high as the social security ceiling for the health insurance, which corresponds to an annual income of about 85,000 Euros in 2007. Note that workers from the NMS receive a preferential treatment vis-à-vis non-EU citizens particularly in the category of qualified workers. Moreover, citizens from the new member states who have worked legally for more than 12 month in Germany qualify for a permanent work and residency permit.\(^6\)

Germany also applies transitional arrangements for the free trade of services. Based on the accession treaties, the posting of workers is restricted in the construction sector, the cleaning sector, and similar branches. The entire list comprises about 330 activities for which restrictions can be imposed.

To sum up, Germany maintained the restrictions for the labour market access for citizens from the new member states which have been in place already before enlargement. It grants, however, about 300,000 permits p.a. for seasonal workers mainly in agriculture both before and after enlargement, and between 20,000 and 40,000 permits p.a. for contract workers with a declining tendency. Similar to third-country nationals, workers from the NMS can also apply for other work permits if they fulfil the criteria of the German immigration law. Moreover, family reunification is an important channel of entry since the size of the immigrant community from the new member states is relatively large.

The EU enlargement changed – beyond the preferential treatment of nationals from the NMS vis-à-vis third country nationals – mainly the legal opportunities for self-establishment, which are not subject to transitional arrangements. Individuals from the NMS can thus work as self-employed and establish businesses without any legal restrictions in Germany. The regulation of businesses in the crafts sector has been furthermore relaxed.

---

\(^5\) The German Immigration Act (Gesetz zur Steuerung und Begrenzung der Zuwanderung und zur Regelung des Aufenthalts und der Integration von Unionsbürgern und Ausländern (Zuwanderungsgesetz)) was reformed by July 30, 2004, and became effective by January 1, 2005.

\(^6\) For details see § 284, SGB III.
by January 2004, which facilitates the establishment of small businesses for foreigners. This creates opportunities to circumvent the restrictions on the free movement of workers. The available evidence suggests that these opportunities have been used: Although the number of self-employed persons from the NMS is not recorded, it is possible to draw conclusions from the registration of businesses at the German Chambers of Handicrafts. Since May 1st, 2004, approximately 14,000 citizens from the NMS-8 have registered a business with the Chambers of Handicrafts. This corresponds to a share in all registered businesses of 1.6 per cent, compared to a share of NMS-8 nationals in the German population of 0.6 per cent (Untiedt et al., 2007, p. 87).

### 3.2 Key migration trends

By the end of 2007, about 554,000 nationals from the NMS-8 and 131,000 nationals from Bulgaria and Romania resided in Germany (see Table 3.1). This corresponds to 0.8 per cent of the German population or to 9.4 per cent of the foreign population in Germany. The migration stock figures in Germany before and after EU enlargement are not comparable, since the Federal Statistical Office of Germany revised the migration statistics in 2004. According to the official statistics, the number of foreign residents from the NMS-8 has increased by 120,000 persons from 2004 to 2007, and the number of foreign residents from the NMS-2 has increased slightly by 20,000 persons during the same period of time. Taking the statistical revision into account, the actual increase in the number of foreign residents may amount to about 200,000 persons instead of the 140,000 persons reported in the migration statistics. This corresponds to an annual influx of about 50,000 persons since the EU’s eastern enlargement in 2004. It is about one-fourth or one-fifth of the migration potential which has been estimated by Boeri/Brücker et al. (2001) and Alvarez-Plata et al. (2003) under the counterfactual assumption that the free movement of workers is introduced in Germany immediately after EU enlargement.

Net immigration figures for NMS-10 nationals as reported by the Federal Statistical Office of Germany are at about 40,000 to 65,000 persons p.a. (see Table 3.2), slightly higher as the increase in the stock of foreign residents during the period 2003 to 2007. This can be traced back inter alia to naturalisations. The main source country for immigration from the NMS is Poland with 385,000 residents in 2007, followed by Romania with 85,000 residents and Hungary with 56,000 residents (see Table 3.1).

Germany is the main destination for migrants from the candidate and potential candidate countries in the EU-15. Turkey and the former Yugoslavia have been, together with Italy, the main source countries of guestworker recruitment in Germany during the 1960s and early 1970s. Although net immigration flows from these countries have declined since the first oil price shock in 1973, Germany remains the main target for migrants from these

---

7 The NMS-10 refer here to the twelve new member states except Cyprus and Malta, i.e. the NMS-8 and the NMS-2.
countries. In the early 1990s, particularly immigration from the successor states of the former Yugoslavia accelerated in the course of the civil wars in these countries. However, the number of foreign nationals from the six candidate and potential countries has declined in Germany from 3.1 million persons in 2000 to 2.4 million persons in 2007 (see Table 3.1), which has been caused both by an increasing number of naturalisations, particularly in the Turkish community and the repatriation of refugees from the former Yugoslavia. Note that the 2000 reform of the immigration act in Germany facilitates the naturalisation of immigrants and descendents of immigrants which have stayed for longer time-spans. This is particularly relevant for communities with a long migration tradition such as the Turkish community in Germany and the communities from the successor states of the former Yugoslavia.

To sum up, immigration from the new member states has increased only slightly in Germany after the EU enlargement in 2004 and fell short of the projections of potential migration which have been undertaken under the counterfactual assumption of applying the free movement of workers in Germany. The moderate increase can be traced back to the diversion of migration flows towards other destinations such as the UK and Ireland, which has been caused by the opening of the labour markets there, but also by the economic slowdown in Germany at the beginning of this decade.
<table>
<thead>
<tr>
<th>Year</th>
<th>N (in Persons)</th>
<th>% of total pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>18,327</td>
<td>0.02</td>
</tr>
<tr>
<td>1996</td>
<td>18,771</td>
<td>0.02</td>
</tr>
<tr>
<td>1997</td>
<td>19,583</td>
<td>0.03</td>
</tr>
<tr>
<td>1998</td>
<td>20,782</td>
<td>0.03</td>
</tr>
<tr>
<td>1999</td>
<td>22,038</td>
<td>0.04</td>
</tr>
<tr>
<td>2000</td>
<td>24,400</td>
<td>0.04</td>
</tr>
<tr>
<td>2001</td>
<td>26,700</td>
<td>0.04</td>
</tr>
<tr>
<td>2002</td>
<td>28,400</td>
<td>0.04</td>
</tr>
<tr>
<td>2003</td>
<td>30,186</td>
<td>0.04</td>
</tr>
<tr>
<td>2004</td>
<td>30,301</td>
<td>0.04</td>
</tr>
<tr>
<td>2005</td>
<td>31,983</td>
<td>0.04</td>
</tr>
<tr>
<td>2006</td>
<td>33,316</td>
<td>0.04</td>
</tr>
<tr>
<td>2007</td>
<td>34,266</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**Table 3.1 Migrant Stocks in Germany, 1995-2007**

<table>
<thead>
<tr>
<th>Year</th>
<th>N (in Persons)</th>
<th>% of total pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** National Statistics.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>1,133</td>
<td>675</td>
<td>-366</td>
<td>966</td>
<td>2,258</td>
<td>2,594</td>
<td>2,663</td>
<td>1,348</td>
<td>357</td>
<td>812</td>
<td>2,460</td>
<td>1,616</td>
</tr>
<tr>
<td>Estonia</td>
<td>635</td>
<td>517</td>
<td>274</td>
<td>233</td>
<td>184</td>
<td>326</td>
<td>324</td>
<td>315</td>
<td>306</td>
<td>53</td>
<td>244</td>
<td>131</td>
</tr>
<tr>
<td>Hungary</td>
<td>-9</td>
<td>-358</td>
<td>-3,874</td>
<td>1,138</td>
<td>2,421</td>
<td>1,817</td>
<td>2,433</td>
<td>889</td>
<td>-520</td>
<td>1,114</td>
<td>3,071</td>
<td>4,016</td>
</tr>
<tr>
<td>Latvia</td>
<td>872</td>
<td>1,079</td>
<td>825</td>
<td>973</td>
<td>766</td>
<td>584</td>
<td>923</td>
<td>732</td>
<td>453</td>
<td>694</td>
<td>1,051</td>
<td>564</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1,035</td>
<td>974</td>
<td>643</td>
<td>585</td>
<td>838</td>
<td>1,407</td>
<td>1,609</td>
<td>1,600</td>
<td>1,238</td>
<td>2,486</td>
<td>3,070</td>
<td>2,085</td>
</tr>
<tr>
<td>Poland</td>
<td>16,544</td>
<td>5,744</td>
<td>1,043</td>
<td>5,433</td>
<td>13,638</td>
<td>13,703</td>
<td>15,049</td>
<td>13,811</td>
<td>15,372</td>
<td>29,737</td>
<td>50,681</td>
<td>48,341</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>578</td>
<td>318</td>
<td>789</td>
<td>575</td>
<td>2,288</td>
<td>2,134</td>
<td>1,615</td>
<td>1,729</td>
<td>1,144</td>
<td>1,515</td>
<td>2,736</td>
<td>2,067</td>
</tr>
<tr>
<td>Slovenia</td>
<td>18</td>
<td>-296</td>
<td>454</td>
<td>-163</td>
<td>-11</td>
<td>-26</td>
<td>199</td>
<td>-87</td>
<td>-234</td>
<td>-16</td>
<td>-119</td>
<td>-122</td>
</tr>
<tr>
<td>NMS-8</td>
<td>20,806</td>
<td>8,653</td>
<td>-1,120</td>
<td>9,740</td>
<td>22,382</td>
<td>22,539</td>
<td>24,815</td>
<td>20,337</td>
<td>18,116</td>
<td>36,395</td>
<td>63,194</td>
<td>58,698</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>-2,309</td>
<td>-664</td>
<td>54</td>
<td>412</td>
<td>2,653</td>
<td>3,669</td>
<td>5,353</td>
<td>4,478</td>
<td>3,257</td>
<td>1,476</td>
<td>147</td>
<td>553</td>
</tr>
<tr>
<td>Romania</td>
<td>-345</td>
<td>449</td>
<td>689</td>
<td>3,461</td>
<td>4,185</td>
<td>7,427</td>
<td>1,770</td>
<td>6,372</td>
<td>4,547</td>
<td>3,856</td>
<td>3,234</td>
<td>3,080</td>
</tr>
<tr>
<td>NMS-2</td>
<td>-2,654</td>
<td>-215</td>
<td>743</td>
<td>3,873</td>
<td>6,838</td>
<td>11,096</td>
<td>7,123</td>
<td>10,850</td>
<td>7,804</td>
<td>5,332</td>
<td>3,381</td>
<td>3,633</td>
</tr>
<tr>
<td>Albania</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Bosnia</td>
<td>39,447</td>
<td>-16,110</td>
<td>-77,042</td>
<td>-89,069</td>
<td>-23,013</td>
<td>-6,929</td>
<td>2,332</td>
<td>1,362</td>
<td>521</td>
<td>-12</td>
<td>139</td>
<td>419</td>
</tr>
<tr>
<td>Croatia</td>
<td>-7,127</td>
<td>-4,977</td>
<td>-8,942</td>
<td>-9,708</td>
<td>-1,144</td>
<td>1,082</td>
<td>-112</td>
<td>-725</td>
<td>-304</td>
<td>-1,784</td>
<td>-1,755</td>
<td>-1,558</td>
</tr>
<tr>
<td>Macedonia</td>
<td>-1,532</td>
<td>-952</td>
<td>-26</td>
<td>483</td>
<td>1,011</td>
<td>797</td>
<td>2,760</td>
<td>295</td>
<td>981</td>
<td>460</td>
<td>547</td>
<td>569</td>
</tr>
<tr>
<td>Serbia</td>
<td>13,752</td>
<td>5,597</td>
<td>-13,252</td>
<td>14,796</td>
<td>39,689</td>
<td>-56,254</td>
<td>-7,640</td>
<td>10,802</td>
<td>-6,516</td>
<td>-5,311</td>
<td>-1,669</td>
<td>-251</td>
</tr>
<tr>
<td>Turkey</td>
<td>30,371</td>
<td>29,690</td>
<td>10,003</td>
<td>2,816</td>
<td>6,153</td>
<td>10,084</td>
<td>18,703</td>
<td>21,754</td>
<td>14,197</td>
<td>5,752</td>
<td>2,949</td>
<td>-189</td>
</tr>
<tr>
<td>Cand-6</td>
<td>74,911</td>
<td>16,248</td>
<td>-89,187</td>
<td>-80,582</td>
<td>22,696</td>
<td>-51,220</td>
<td>16,043</td>
<td>12,184</td>
<td>8,879</td>
<td>-895</td>
<td>211</td>
<td>-1,010</td>
</tr>
<tr>
<td>EU-14</td>
<td>37,659</td>
<td>18,588</td>
<td>-7,937</td>
<td>-9,802</td>
<td>-961</td>
<td>7,426</td>
<td>3,193</td>
<td>-10,295</td>
<td>-10,365</td>
<td>-28,251</td>
<td>-5,739</td>
<td>-757</td>
</tr>
<tr>
<td>Foreigners total</td>
<td>227,246</td>
<td>148,890</td>
<td>-21,768</td>
<td>-33,455</td>
<td>118,235</td>
<td>86,455</td>
<td>188,272</td>
<td>152,769</td>
<td>102,696</td>
<td>55,180</td>
<td>95,717</td>
<td>74,693</td>
</tr>
</tbody>
</table>

Source: National Statistics.
### Table 3.3  
Immigration of foreign nationals by country of origin, 1995-2006

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>10,205</td>
<td>9,041</td>
<td>7,815</td>
<td>7,896</td>
<td>9,551</td>
<td>11,341</td>
<td>11,298</td>
<td>10,351</td>
<td>8,556</td>
<td>8,972</td>
<td>8,609</td>
<td>7,844</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,570</td>
<td>1,366</td>
<td>1,184</td>
<td>1,035</td>
<td>839</td>
<td>935</td>
<td>914</td>
<td>886</td>
<td>843</td>
<td>777</td>
<td>697</td>
<td>577</td>
</tr>
<tr>
<td>Hungary</td>
<td>18,757</td>
<td>16,636</td>
<td>11,231</td>
<td>13,328</td>
<td>14,913</td>
<td>16,049</td>
<td>17,421</td>
<td>16,531</td>
<td>14,256</td>
<td>17,364</td>
<td>18,546</td>
<td>18,634</td>
</tr>
<tr>
<td>Latvia</td>
<td>2,120</td>
<td>2,308</td>
<td>2,275</td>
<td>2,343</td>
<td>2,119</td>
<td>1,960</td>
<td>2,145</td>
<td>2,058</td>
<td>1,868</td>
<td>2,315</td>
<td>2,419</td>
<td>2,023</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3,009</td>
<td>2,947</td>
<td>2,466</td>
<td>2,181</td>
<td>2,306</td>
<td>3,054</td>
<td>3,508</td>
<td>3,830</td>
<td>3,193</td>
<td>4,756</td>
<td>5,309</td>
<td>4,806</td>
</tr>
<tr>
<td>Poland</td>
<td>87,238</td>
<td>77,405</td>
<td>66,106</td>
<td>72,210</td>
<td>74,144</td>
<td>79,650</td>
<td>88,020</td>
<td>124,610</td>
<td>146,943</td>
<td>151,743</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>7,719</td>
<td>6,485</td>
<td>6,907</td>
<td>6,472</td>
<td>9,015</td>
<td>10,755</td>
<td>11,424</td>
<td>10,566</td>
<td>11,714</td>
<td>11,292</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>2,502</td>
<td>2,151</td>
<td>1,822</td>
<td>1,995</td>
<td>1,903</td>
<td>1,862</td>
<td>2,605</td>
<td>2,286</td>
<td>1,992</td>
<td>1,442</td>
<td>1,086</td>
<td></td>
</tr>
<tr>
<td>NMS-8</td>
<td>133,120</td>
<td>118,339</td>
<td>104,914</td>
<td>101,356</td>
<td>112,856</td>
<td>120,100</td>
<td>128,965</td>
<td>128,862</td>
<td>129,294</td>
<td>172,677</td>
<td>195,679</td>
<td>198,005</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>8,028</td>
<td>6,287</td>
<td>6,334</td>
<td>5,211</td>
<td>8,041</td>
<td>10,308</td>
<td>13,295</td>
<td>13,040</td>
<td>13,204</td>
<td>11,426</td>
<td>8,868</td>
<td>7,526</td>
</tr>
<tr>
<td>Romania</td>
<td>24,814</td>
<td>17,069</td>
<td>14,247</td>
<td>17,032</td>
<td>18,803</td>
<td>24,191</td>
<td>20,328</td>
<td>23,803</td>
<td>23,456</td>
<td>22,873</td>
<td>23,353</td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td>32,842</td>
<td>23,356</td>
<td>20,581</td>
<td>22,243</td>
<td>26,844</td>
<td>34,499</td>
<td>33,623</td>
<td>36,843</td>
<td>36,660</td>
<td>34,657</td>
<td>31,741</td>
<td>30,879</td>
</tr>
<tr>
<td>Albania</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Bosnia</td>
<td>55,173</td>
<td>11,127</td>
<td>6,901</td>
<td>8,397</td>
<td>10,333</td>
<td>10,396</td>
<td>12,817</td>
<td>10,470</td>
<td>8,311</td>
<td>7,004</td>
<td>6,579</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>14,921</td>
<td>12,290</td>
<td>10,006</td>
<td>9,824</td>
<td>12,293</td>
<td>14,069</td>
<td>13,861</td>
<td>12,738</td>
<td>11,230</td>
<td>10,118</td>
<td>8,956</td>
<td>8,310</td>
</tr>
<tr>
<td>Macedonia</td>
<td>4,000</td>
<td>2,835</td>
<td>3,060</td>
<td>3,051</td>
<td>3,503</td>
<td>3,411</td>
<td>5,421</td>
<td>3,913</td>
<td>3,620</td>
<td>2,827</td>
<td>2,578</td>
<td>2,463</td>
</tr>
<tr>
<td>Turkey</td>
<td>73,592</td>
<td>73,224</td>
<td>55,981</td>
<td>47,958</td>
<td>47,097</td>
<td>49,114</td>
<td>54,587</td>
<td>57,187</td>
<td>48,207</td>
<td>40,680</td>
<td>34,749</td>
<td>29,589</td>
</tr>
<tr>
<td>Cand-6</td>
<td>201,802</td>
<td>142,376</td>
<td>107,175</td>
<td>129,083</td>
<td>161,392</td>
<td>110,005</td>
<td>115,035</td>
<td>109,809</td>
<td>92,810</td>
<td>82,394</td>
<td>69,993</td>
<td>58,197</td>
</tr>
<tr>
<td>EU-14</td>
<td>177,240</td>
<td>172,483</td>
<td>151,667</td>
<td>137,275</td>
<td>137,284</td>
<td>132,719</td>
<td>125,319</td>
<td>113,464</td>
<td>101,921</td>
<td>95,902</td>
<td>92,345</td>
<td>93,539</td>
</tr>
<tr>
<td>Foreigners total</td>
<td>788,337</td>
<td>707,954</td>
<td>615,286</td>
<td>605,500</td>
<td>673,873</td>
<td>649,249</td>
<td>688,259</td>
<td>658,341</td>
<td>601,759</td>
<td>602,080</td>
<td>579,301</td>
<td>558,467</td>
</tr>
</tbody>
</table>

Source: National Statistics.
Table 3.4  Emigration of foreign nationals by country of destination, 1995-2006

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>9,072</td>
<td>8,366</td>
<td>8,181</td>
<td>6,930</td>
<td>7,293</td>
<td>8,747</td>
<td>8,635</td>
<td>9,003</td>
<td>8,199</td>
<td>8,160</td>
<td>6,149</td>
<td>6,228</td>
</tr>
<tr>
<td>Estonia</td>
<td>935</td>
<td>849</td>
<td>910</td>
<td>802</td>
<td>655</td>
<td>609</td>
<td>590</td>
<td>571</td>
<td>537</td>
<td>724</td>
<td>453</td>
<td>446</td>
</tr>
<tr>
<td>Hungary</td>
<td>18,766</td>
<td>16,994</td>
<td>15,105</td>
<td>12,190</td>
<td>12,492</td>
<td>14,232</td>
<td>14,988</td>
<td>15,642</td>
<td>14,776</td>
<td>16,250</td>
<td>15,475</td>
<td>14,618</td>
</tr>
<tr>
<td>Latvia</td>
<td>1,248</td>
<td>1,229</td>
<td>1,450</td>
<td>1,370</td>
<td>1,353</td>
<td>1,376</td>
<td>1,222</td>
<td>1,326</td>
<td>1,415</td>
<td>1,621</td>
<td>1,368</td>
<td>1,459</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1,974</td>
<td>1,973</td>
<td>1,823</td>
<td>1,596</td>
<td>1,468</td>
<td>1,647</td>
<td>1,899</td>
<td>2,230</td>
<td>1,955</td>
<td>2,250</td>
<td>2,239</td>
<td>2,721</td>
</tr>
<tr>
<td>Poland</td>
<td>70,694</td>
<td>71,661</td>
<td>70,171</td>
<td>60,673</td>
<td>58,572</td>
<td>60,441</td>
<td>64,601</td>
<td>67,655</td>
<td>72,648</td>
<td>94,873</td>
<td>96,262</td>
<td>103,402</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>7,141</td>
<td>6,167</td>
<td>6,118</td>
<td>5,897</td>
<td>6,727</td>
<td>8,621</td>
<td>9,809</td>
<td>9,725</td>
<td>9,422</td>
<td>10,067</td>
<td>8,978</td>
<td>9,225</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2,484</td>
<td>2,447</td>
<td>2,276</td>
<td>2,158</td>
<td>1,914</td>
<td>1,888</td>
<td>2,406</td>
<td>2,373</td>
<td>2,226</td>
<td>2,337</td>
<td>1,561</td>
<td>1,208</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>10,337</td>
<td>6,951</td>
<td>6,280</td>
<td>4,799</td>
<td>5,388</td>
<td>6,639</td>
<td>7,942</td>
<td>8,562</td>
<td>9,947</td>
<td>9,950</td>
<td>8,721</td>
<td>6,973</td>
</tr>
<tr>
<td>Romania</td>
<td>25,159</td>
<td>16,620</td>
<td>13,558</td>
<td>13,571</td>
<td>14,618</td>
<td>16,764</td>
<td>18,558</td>
<td>17,431</td>
<td>18,909</td>
<td>19,375</td>
<td>19,639</td>
<td>20,273</td>
</tr>
<tr>
<td>NMS-2</td>
<td>35,496</td>
<td>23,571</td>
<td>19,838</td>
<td>18,370</td>
<td>20,006</td>
<td>23,403</td>
<td>26,500</td>
<td>25,993</td>
<td>28,856</td>
<td>29,325</td>
<td>28,360</td>
<td>27,246</td>
</tr>
<tr>
<td>Albania</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Bosnia</td>
<td>15,726</td>
<td>27,237</td>
<td>83,943</td>
<td>97,466</td>
<td>33,346</td>
<td>17,325</td>
<td>10,485</td>
<td>9,108</td>
<td>7,790</td>
<td>8,015</td>
<td>6,865</td>
<td>6,160</td>
</tr>
<tr>
<td>Croatia</td>
<td>22,048</td>
<td>17,267</td>
<td>18,948</td>
<td>19,532</td>
<td>13,437</td>
<td>12,987</td>
<td>13,973</td>
<td>13,463</td>
<td>11,534</td>
<td>11,902</td>
<td>10,711</td>
<td>9,868</td>
</tr>
<tr>
<td>Macedonia</td>
<td>5,532</td>
<td>3,787</td>
<td>3,014</td>
<td>2,568</td>
<td>2,492</td>
<td>2,614</td>
<td>2,661</td>
<td>3,318</td>
<td>2,639</td>
<td>2,767</td>
<td>2,031</td>
<td>1,894</td>
</tr>
<tr>
<td>Serbia</td>
<td>40,364</td>
<td>34,303</td>
<td>44,479</td>
<td>45,057</td>
<td>48,477</td>
<td>89,269</td>
<td>35,989</td>
<td>36,303</td>
<td>27,958</td>
<td>25,677</td>
<td>18,375</td>
<td>11,507</td>
</tr>
<tr>
<td>Turkey</td>
<td>43,221</td>
<td>43,534</td>
<td>45,978</td>
<td>45,142</td>
<td>40,944</td>
<td>39,030</td>
<td>35,884</td>
<td>35,433</td>
<td>34,010</td>
<td>34,928</td>
<td>31,800</td>
<td>29,778</td>
</tr>
<tr>
<td>Cand-6</td>
<td>126,891</td>
<td>126,128</td>
<td>196,362</td>
<td>209,755</td>
<td>138,696</td>
<td>161,225</td>
<td>98,992</td>
<td>97,625</td>
<td>83,931</td>
<td>83,289</td>
<td>69,782</td>
<td>59,207</td>
</tr>
<tr>
<td>EU-14</td>
<td>139,581</td>
<td>153,895</td>
<td>159,604</td>
<td>146,077</td>
<td>138,245</td>
<td>125,293</td>
<td>122,126</td>
<td>123,759</td>
<td>112,286</td>
<td>124,153</td>
<td>98,084</td>
<td>94,296</td>
</tr>
<tr>
<td>Foreigners total</td>
<td>561,091</td>
<td>559,064</td>
<td>637,066</td>
<td>638,955</td>
<td>555,638</td>
<td>562,794</td>
<td>496,987</td>
<td>505,372</td>
<td>499,063</td>
<td>546,900</td>
<td>483,584</td>
<td>483,774</td>
</tr>
</tbody>
</table>

Source: National Statistics.
3.3 The human capital characteristics of migrants

Labour Force Survey data suggests that the education level of migrants from the new member states is only slightly below that of natives in Germany (see Box 1 for a description of the data sources). The share of less skilled individuals in the working age population from the NMS-8 is at 20 per cent and that of the workforce from the NMS-2 is at 18 per cent somewhat higher than that of the native working age population (14 per cent) in 2006 (see Table 3.5). At the upper end of the skill spectrum, the shares of high skilled workers are at 27 per cent in case of the NMS-8 and 23 per cent of the NMS-2 similar to those of the native workforce (26 per cent). Particularly well educated is the foreign workforce from the Czech Republic, Hungary, Latvia, and Poland. A comparison of the 2000 and 2006 data suggests that the share of less-skilled workers in the working age population has slightly increased over time, although the difference is within the range of measurement error in the LFS data.

Box 1 Limitations of the Labour Force Survey data

The analysis in this and the following section is based on data derived from the European Labour Force Survey (LFS). The LFS is an EU wide household survey collecting data about labour force participation and other socio-economic factors which was first implemented in 1960 by the six original EU Member States. Today, the survey – hosted by Eurostat – covers all 27 States and is a key research instrument by providing unique time series data about economic and social developments in Europe.

We refer in our analysis to the working age cohorts (15 to 64 years) and the second quarter results of the LFS in 2000 and 2006. Ireland is not included due to missing data. Immigrants are identified by the concept of citizenship. In the context of our analysis, certain limitations of the LFS data have to be considered: First, immigrants may generally be under-represented in the LFS as the survey is usually carried out in the national language of the respective country. Second, seasonal workers may be under-represented due to their short duration of stay. Third, as it takes a long time span until new migration waves (households) rotate in the sample, migrants in the current year LFS are possibly under-represented. Fourth, since the immigrant communities from many countries are small, response rates are low and may be not representative. In particular the last aspect may bias our analysis. Thus, all findings have to be interpreted with care.

Although the average education level of immigrants from the NMS is slightly below that of natives, it is well above those of other foreigner groups in Germany. The share of less skilled workers in the working age population of the candidate countries amounts to 52 per cent and that of highly skilled workers only to 6 per cent. Among the migrant population from the other EU-15 countries in Germany, which comprises largely migrant communities from the Southern EU member states which have been established during
the guest worker recruitment episode in Germany, the share of less skilled individuals amounts to 36 per cent and the share of highly skilled individuals to 21 per cent.

Table 3.5  
Education level of immigrants and natives in Germany, 2000 and 2006

<table>
<thead>
<tr>
<th></th>
<th>2000 Low</th>
<th>Medium</th>
<th>High</th>
<th>2006 Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>11.75</td>
<td>34.61</td>
<td>53.64</td>
</tr>
<tr>
<td>Estonia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Hungary</td>
<td>4.29</td>
<td>69.87</td>
<td>24.90</td>
<td>6.35</td>
<td>63.06</td>
<td>30.59</td>
</tr>
<tr>
<td>Latvia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>27.13</td>
<td>45.39</td>
<td>27.48</td>
</tr>
<tr>
<td>Lithuania</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>42.98</td>
<td>41.19</td>
<td>15.83</td>
</tr>
<tr>
<td>Poland</td>
<td>12.34</td>
<td>58.79</td>
<td>24.00</td>
<td>22.51</td>
<td>50.77</td>
<td>26.73</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>4.53</td>
<td>77.27</td>
<td>18.20</td>
</tr>
<tr>
<td>Slovenia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>22.49</td>
<td>67.94</td>
<td>9.57</td>
</tr>
<tr>
<td>NMS-8</td>
<td>10.89</td>
<td>60.79</td>
<td>24.16</td>
<td>19.80</td>
<td>53.29</td>
<td>26.91</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>8.48</td>
<td>65.79</td>
<td>25.73</td>
</tr>
<tr>
<td>Romania</td>
<td>14.65</td>
<td>55.73</td>
<td>22.11</td>
<td>23.41</td>
<td>55.52</td>
<td>21.07</td>
</tr>
<tr>
<td>NMS-2</td>
<td>14.65</td>
<td>55.73</td>
<td>22.11</td>
<td>17.76</td>
<td>59.41</td>
<td>22.83</td>
</tr>
<tr>
<td>Bosnia</td>
<td>38.63</td>
<td>43.15</td>
<td>8.24</td>
<td>48.50</td>
<td>41.51</td>
<td>9.43</td>
</tr>
<tr>
<td>Croatia</td>
<td>39.59</td>
<td>46.36</td>
<td>6.68</td>
<td>29.54</td>
<td>58.64</td>
<td>11.81</td>
</tr>
<tr>
<td>Turkey</td>
<td>58.79</td>
<td>30.42</td>
<td>3.52</td>
<td>58.42</td>
<td>37.55</td>
<td>4.03</td>
</tr>
<tr>
<td>Cand-3</td>
<td>53.68</td>
<td>34.30</td>
<td>4.48</td>
<td>51.97</td>
<td>41.84</td>
<td>6.13</td>
</tr>
<tr>
<td>EU-14</td>
<td>38.66</td>
<td>37.38</td>
<td>16.24</td>
<td>35.68</td>
<td>42.96</td>
<td>21.36</td>
</tr>
<tr>
<td>Natives</td>
<td>14.05</td>
<td>56.29</td>
<td>25.34</td>
<td>13.52</td>
<td>60.48</td>
<td>25.99</td>
</tr>
<tr>
<td>Total</td>
<td>15.97</td>
<td>55.00</td>
<td>24.49</td>
<td>15.50</td>
<td>59.13</td>
<td>25.36</td>
</tr>
</tbody>
</table>

Note: Numbers refer to second quarter.


Not surprisingly, migrants from the new member states in Germany are younger than natives. The share of the 15 to 29 age cohorts in the working age population from the NMS-8 and the NMS-2 is at 29 per cent substantially higher than among the native workforce (20 per cent), while that of the 50 to 64 age group is at 12 per cent (NMS-2) and 15 per cent (NMS-8) well below that of natives (25 per cent). However, they are only slightly younger than the immigrant communities from the candidate countries. Comparing the 2006 with the 2000 age structure suggests that the age of the migrant workforce from the new member states has only slightly increased.

Another interesting feature is the high share of females in the labour force from the new member states. In 2006, about 64 per cent of the immigrant labour force from the NMS-2 and 55 per cent of the labour force from the NMS-8 are females, compared to 37 per cent in the immigrant labour force from the candidate countries and 38 per cent in that of the
EU-14 countries. In the German labour force, the share of females amounts to 46 per cent in 2006.

Altogether, we observe that the immigrant workforce from the new member states is more female, better educated, and slightly younger than that of other foreigner groups. Compared to the native workforce, the average education levels is slightly lower. Particularly the share of less-skilled workers is higher than in the native workforce.

The picture is less bright if we compare the human capital characteristics of migrants from the new member states in Germany with that of other main destinations in the EU such as the UK. The average education level of NMS immigrants in Germany is below that of the NMS communities in other destinations, and it has deteriorated over time. This suggests that migrants from the new member states are less favourably (self-)selected with regard to their education levels compared to other destinations (see the analysis in Deliverable 2). This phenomenon can be explained according to the Roy-Borjas model by differences in the returns to human capital between different destinations (Borjas, 1987), but also by different immigration policies (Brücker and Ringer, 2008). According to the first line of reasoning, a higher wage inequality and the exclusion of migrants from welfare benefits in the UK may have resulted in a better skill composition of migrants there compared to Germany. According to the second line of reasoning, the regulation of immigration in Germany e.g. by seasonal work permits and family reunification may have resulted in a less favourable skill structure of the immigrant population from the NMS compared to other destinations which have opened their labour markets.

3.4 Labour market participation of migrants from the NMS and the candidate countries

The labour market performance of migrants from the NMS is only slightly better than that of the total foreign workforce in Germany. Although the skill structure of the immigrant workforce from the NMS deviates not largely from that of natives, both the inactivity and the unemployment rates in the immigrant workforce from the new member states are well above that of natives. The share of unemployed individuals in the working age population from the NMS-8 amounts to 12 per cent and in the working age population from the NMS-2 to 9 per cent in 2006, compared to 7 per cent in the native population. Moreover, the share of the inactive persons amounts to 29 per cent in the working age population from the NMS-8 and to 30 per cent in that of the NMS-2 in 2006, compared to 24 per cent in the native population. The latter result is particularly surprising since the workforce from the NMS-8 is younger than the native workforce. The share of unemployed individuals in the workforce from the NMS has substantially increased between 2000 and 2006, which indicates that they have been more than proportionally affected by the economic slow-down in the early 2000s.

---

8 This share of unemployed individuals in the working age population should not be confused with the unemployment rate, which is usually calculated as the share of unemployed persons in the civil labour force.
Unemployment and inactivity shares differ across individual sending countries. The unemployment shares are particularly low in the immigrant communities from Bulgaria, Slovenia, and Romania, and particularly high in case of Poles and Hungarians. Inactivity rates are well below the average in case of immigrants from Hungary, Slovenia, and Lithuania, but high in case of immigrants from Bulgaria, Slovakia, and Poland.

In case of the candidate countries, the shares of unemployed and inactive individuals in the working age population are at 13 per cent and 37 per cent, respectively, even higher than those of the working age population from the NMS. The unemployment risk is particularly high in the Turkish workforce.

While high unemployment and low activity rates can be largely explained by the human capital characteristics of the workforce from the candidate countries, the relatively poor labour market performance of the immigrant workforce from the new member states in Germany is puzzling. Unemployment and inactivity rates are well above those of their counterparts which have migrated to other EU member states, particularly to the UK (Deliverable 2). The observable differences in the human capital characteristics between the migrant population from the NMS in the UK and Germany cannot explain these differences alone. An important factor is of course the slow-down of economic growth and increasing unemployment in Germany in the early 2000s, which has affected the immigrant population from the new member states more than proportionally. Moreover, the available data suggests that the difference in the unemployment risk between individuals from the new member states and natives is particularly high for better qualified individuals, which indicates that the human capital acquired in the NMS cannot be easily transferred into the German labour market (Untiedt et al., 2007, p. 100).

Moreover, immigrants from the NMS are more than proportionally represented in sectors such as agriculture, hotels and restaurants, and other low-paid activities in the service sector where unemployment risks are particularly high (Untiedt et al., 2007, pp. 94-97). This raises the question whether the highly regulated labour market access in Germany has contributed to the unfavourable sectoral employment structure of workers from the NMS. Although seasonal work permits are granted for short-term periods only, they may have created networks and immigration opportunities which may explain the high employment shares in agriculture which we can observe in the migrant workforce from the NMS today.
<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed</td>
<td>Unemployed</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Estonia</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Hungary</td>
<td>62.61</td>
<td>6.34</td>
</tr>
<tr>
<td>Latvia</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Lithuania</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Poland</td>
<td>58.05</td>
<td>7.60</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Slovenia</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>NMS-8</td>
<td>58.83</td>
<td>7.39</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Romania</td>
<td>69.76</td>
<td>2.70</td>
</tr>
<tr>
<td>NMS-2</td>
<td>69.76</td>
<td>2.70</td>
</tr>
<tr>
<td>Bosnia</td>
<td>59.04</td>
<td>8.17</td>
</tr>
<tr>
<td>Croatia</td>
<td>67.23</td>
<td>5.43</td>
</tr>
<tr>
<td>Turkey</td>
<td>47.57</td>
<td>10.60</td>
</tr>
<tr>
<td>Cand-3</td>
<td>51.02</td>
<td>9.74</td>
</tr>
<tr>
<td>EU-14</td>
<td>68.73</td>
<td>5.43</td>
</tr>
<tr>
<td>Natives</td>
<td>66.32</td>
<td>5.39</td>
</tr>
<tr>
<td>Total</td>
<td>65.66</td>
<td>5.59</td>
</tr>
</tbody>
</table>

Note: Numbers refer to second quarter.


4 Impact of migration on the German economy and the labour market: A review of the literature

The effects of immigration on labour markets and economic growth in Germany have been analysed in numerous studies. We can distinguish three strands in the literature: First, micro-econometric studies, which use the variance of the immigrant share at the regional or sectoral level for the identification of the wage and employment effects of migration. Second, structural models, which simulate the wage and employment effects of migration on the basis of estimated parameters of the production function and wage rigidities. Third, applied general equilibrium models and short-term macroeconomic models considering inter alia the effects of migration on structural change and the interaction between migration and international goods and capital markets. Interestingly enough, all three strands of the literature suggest that the macroeconomic effects of immigration on wages and unemployment are small or even neutral.
4.1 Microeconometric studies

The overwhelming share of the microeconomic studies uses the regional variance of the foreigner share for the identification of both the wage and employment effects of immigration. Since migrants tend to move more than proportionally into prosperous regions with high wage levels and low unemployment rates, this literature may however suffer from an endogeneity problem. An important part of the international literature therefore focuses on natural experiments, where the migration influx is determined inter alia by political rather than by economic forces to circumvent the endogeneity problem (e.g. Card, 1990; Hunt, 1992; Carrington and DeLima, 1996). Other parts of the literature use instrumental variables or difference-in-difference estimates in order to control the potential endogeneity of the locational choices of migrants (e.g. Borjas et al., 1997; Gavasto et al., 1999).

Since natural experiments do not exist at the regional level in Germany, the empirical literature relies on instrumental variable and difference-in-difference estimates. This literature uses both data from the German Socio-Economic Panel (GSOEP) and administrative data derived from the social security records such as the IAB employment sample (IABS). This literature finds only small wage effects (between 0 and -0.3 per cent at an increase of the foreigner share of 1 per cent) and tiny unemployment effects (between 0 and 0.2 percentage points at an increase of the foreigner share of 1 per cent) (DeNew and Zimmermann, 1994a; 1994b; Haisken-DeNew and Zimmermann, 1995; Mühleisen and Zimmermann, Winter-Ebmer and Zimmermann, 2000; Pischke and Velling, 1997; Winkelmann and Zimmermann, 1993). Altogether, the findings of this literature are very similar to the international literature which finds that the results for the wages cluster about -0.1 per cent (Nijkamp et al., 2005) and for the unemployment rate at +0.1 percentage points at an increase of the foreigner share of 1 per cent (Nijkamp et al., 2006).

This literature has been recently challenged by Borjas (2003), who uses the variance of the foreigner share across education and experience cells of the labour market at the national level for the identification of the wage effects. Under the assumption that the education and experience characteristics of the migrant workforce are exogenous, this allows an unbiased estimation of the labour market effects of migration. He finds in the US a relatively large elasticity of -0.3, which is however not confirmed by the findings in Ottaviano and Peri (2006). A study based on a similar design as that of Borjas (2003) by Bonin (2006) finds a smaller elasticity of -0.1 for Germany, which by and large reconciles the findings of the regional level studies.

4.2 Structural models

Borjas (2003) and Ottaviano and Peri (2006) have estimated the wage effects of migration also within the framework of a structural model, which derives the labour demand from a nested production function. This production function groups the labour force by education, experience and – in case of Ottaviano and Peri (2006) – by national
origin. However, these models focus on the wage effects only and ignore the effects of migration on (un-)employment, which are particularly relevant in the European and German context. Brücker and Jahn (2008) address the labour market effects of migration in a structural framework where wages and employment are simultaneously determined. Following the wage curve literature (Blanchflower and Oswald, 1995; 1994), they assume that an equilibrium relationship exists between the wage level and the unemployment rate (See Final Report, Chapter 5). They find that a 1 per cent immigration to Germany reduces wages by about 0.1 per cent in the short-run and increases the unemployment rate by about 0.1 percentage points in the short-run, while migration is largely neutral for the labour market in the long-run when capital stocks adjust to labour supply shocks. Similar wage and employment effects have been recently estimated for Germany by D'Amuri, Ottaviano, and Peri (2008) and Felbermayr, Geis, and Kohler (2008).

Altogether, the empirical literature provides very small estimates for both the wage and employment effects of migration in Germany. An increase in the foreign share of 1 per cent – which corresponds to an increase in the population of about 800,000 persons and in the labour force of about 400,000 workers – is likely to reduce the wages by no more than 0.1 per cent and to increase the unemployment by 0.1 percentage points.

Migration affects the different groups in the labour market in different ways. We have therefore analysed (see Table 5.3 in the Final Report) how the different groups are affected in terms of their wages and unemployment risks. We find that in Germany, workers with no vocational training are more affected by declining wages (-0.05 per cent) than workers with a higher education (-0.03 per cent) in the short-term. In the long-term, we find that migration from the NMS-8 reduces wages of the worker with no vocational training by 0.05 per cent, while wages of all other workers are not affected by migration.

### 4.3 CGE and other macroeconomic models

Migration from the NMS affects the economy by different channels. While the models sketched above measure the direct effects of an increasing labour supply, there are a number of other links between migration, international trade, capital movements and sectoral change which affect macroeconomic aggregates such as investment, consumption etc. The long-term effects of these changes are addressed in computable general equilibrium (CGE) models.

One of the first models reflecting migration has been developed by Keuschnigg and Kohler (1999). However, since transitional and bilateral agreements were not obvious at that time, they overestimated migration and therefore their macroeconomic impact. Building on this approach, Heijdra et al. (2002) include the adjustment of capital stocks and the unemployment vacancy ratio in a search unemployment framework. They assume that migration from the NMS will expand the unskilled labour force by 6.15 per cent and the skilled labour force by 0.85 per cent. This shock leads to an increase in GDP by 1.8 per cent and a 0.4 percentage point rise in short term unskilled unemployment.
and a 0.11 percentage point reduction in skilled unemployment. It is worth noting that the migration effects outpace the trade effects of enlargement in this setting.

In other types of models, Untiedt et al. (2007) and Baas et al. (2007) address the impact of EU enlargement and the free movement on the sectoral structure of the economy and consider particularly the change in the structure of employment. They find that the EU enlargement leads to a 1 per cent higher GDP, higher wages and lower unemployment. If Germany had opened its labour market, the GDP would rise by 1.44 per cent at the cost of a slightly lower rise in wages (0.25 per cent) and a slightly lower reduction of unemployment (0.25 percentage points). Interestingly, labour mobility reduces employment in the agricultural sector by 1.22 per cent. The big winners of labour redistribution and migration are the service sectors (+0.64 per cent) and the manufacturing sector (+0.8 per cent).

In contrast to this CGE literature, Barrell et al. (2007) use a traditional macro-econometric model – the National Institute Global Econometric Model (NiGEM) – for an assessment of the migration effects in the context of the EU enlargement. Beside trade and capital movements, these models reflect dynamic effects like capital stock adjustments and labour augmented technological change. They find that immigration from the NMS of the present size increases the German GDP by 0.02 per cent in 2005 and by 0.14 per cent in 2015. The impact of migration on unemployment is at 0.04 percentage points strong, given the small size of the labour inflow. In the medium term, however, the German labour market adjusts and migration even reduces unemployment in 2015 by 0.01 per cent.

5 A simulation of the macroeconomic effects of free movement

5.1 Description of the model

The model is outlined in detail in the final report. It is multi-sectoral CGE model which takes the interactions between migration, trade, and capital movements into account. The model and the simulations rely on Untied et al. (2007), who have estimated the macroeconomic effects of migration in the context of Eastern enlargement for Germany. The main difference between their study and the simulations presented here is the consideration of the adjustment of capital stocks. Capital stock adjustment is important in the context of migration since domestic investment or international capital mobility reduces the effects of an additional labour supply through migration on the labour market. As a consequence, the GDP and GDP per capita effects of migration are larger if we consider the adjustments of capital stocks, while the wage and unemployment effects are smaller.

For an assessment of the potential effects of the free movement of workers we employ three policy scenarios and a benchmark scenario:
• The first policy scenario is based on the assumption that Germany maintains the status quo in its immigration policies. Germany thus applies the same set of immigration restrictions for workers from the NMS-8 and the NMS-2 until the end of the transitional periods. This implies an increase in the foreign population from the NMS-10\(^9\) of 38,000 persons p.a.

• The second policy scenario assumes that the free movement is introduced for the NMS-8 by 2009. Immigration flows from the NMS-8 to Germany are hard to predict, since a large part of the potential migrants have already migrated to the UK, Ireland and other destinations in the EU. We therefore assume that 100,000 persons p.a. will migrate from the NMS-8 to Germany in case of a free movement, which is substantially more than present immigration flows, but about 50 per cent of the inflows which have been predicted by Alvarez-Plata et al. (2003) in case of introducing the free movement already in 2004.\(^10\)

• The third policy scenario assumes that the free movement is introduced for the NMS-10 by 2009. This increases the influx of foreigners from the NMS-10 from 100,000 to 110,000 persons compared to the second policy scenario.

The benchmark scenario relies on the assumption of zero migration. All scenarios are evaluated over a period of seven years. Note that the policy scenarios are based on assumptions and should not be misunderstood as forecasts.

We simulate all scenarios with and without capital stock adjustment. The scenario with adjustment of the capital stock is based on an estimate of the speed of adjustment (see Deliverable 4 for details). As capital stock adjustment is heavily driving macroeconomic results, we provide both simulations for transparency.

5.2 Results

Table 5.1 presents the results of our simulations for the status quo scenario, the free movement for the NMS-8 scenario and the free movement for the NMS-2 scenario. Under the status quo, the German labour force increases by 0.32 per cent through migration from the NMS, in the NMS-8 scenario by 0.85 per cent and in the NMS-10 scenario by 1 per cent. The additional labour force leads to an increase in GDP, rising unemployment and declining wages. The GDP effect is particularly strong with 0.62 in the NMS-8 and 0.73 in the NMS-10 scenario; it is two-thirds of Germany’s trade gain caused by the EU-Enlargement.

\(^{9}\) Like in Untied et.al. (2007) NMS-10 refers to the NMS-8 countries and the NMS-2 countries. Malta and Cyprus are not included in this aggregate figure.

\(^{10}\) This corresponds to roughly two-thirds of the migration flows in the scenario applied by Untiedt et al. (2007).
Table 5.1  The impact of free movement on key macroeconomic variables of the German economy

<table>
<thead>
<tr>
<th></th>
<th>Base Year</th>
<th>Capital adjustment</th>
<th>No capital adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Status Quo</td>
<td>NMS-8</td>
<td>NMS-10</td>
</tr>
<tr>
<td>GDP</td>
<td>2211200</td>
<td>0.23</td>
<td>0.62</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>26790.51</td>
<td>-0.21</td>
<td>-0.37</td>
</tr>
<tr>
<td>Private Consumption</td>
<td>1239350</td>
<td>0.17</td>
<td>0.45</td>
</tr>
<tr>
<td>Investment</td>
<td>377050</td>
<td>0.18</td>
<td>0.48</td>
</tr>
<tr>
<td>Government Consumption</td>
<td>453240</td>
<td>0.19</td>
<td>0.5</td>
</tr>
<tr>
<td>Taxes</td>
<td>231490</td>
<td>0.22</td>
<td>0.57</td>
</tr>
<tr>
<td>Exports Intra EU</td>
<td>514790</td>
<td>0.36</td>
<td>0.96</td>
</tr>
<tr>
<td>Exports Extra EU</td>
<td>311461</td>
<td>0.35</td>
<td>0.93</td>
</tr>
<tr>
<td>Imports Intra EU</td>
<td>-405720</td>
<td>0.2</td>
<td>0.53</td>
</tr>
<tr>
<td>Imports Extra EU</td>
<td>-278971</td>
<td>0.21</td>
<td>0.55</td>
</tr>
<tr>
<td>Wages</td>
<td>29.45</td>
<td>-0.05</td>
<td>-0.13</td>
</tr>
<tr>
<td>Capital</td>
<td>841910</td>
<td>0.14</td>
<td>0.38</td>
</tr>
<tr>
<td>Labour Force</td>
<td>42551</td>
<td>0.32</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Notes: ‘NMS-8’ and ‘NMS-10’ refer to migration scenarios with free labour mobility for NMS-8 only or NMS-10 countries.

Source: Own estimates.

The unemployment and wage effects are based on our estimations of the German wage curve in Deliverable 4. We therefore observe an increase in unemployment by 0.12 percentage points in the NMS-8 and 0.14 percentage points in the NMS-10 scenario. The effect of the free movement is captured by the difference between the status quo and the NMS-8 and the NMS-10 scenario: Opening the German labour market for the NMS-8 in 2009 increases unemployment by a mere 0.08 percentage points and reduces wages by 0.08 per cent according to our scenario after 7 years of free movement. This would increase to 0.1 per cent if Germany opens the labour market for the NMS-10.

Furthermore, opening labour markets leads to enhanced exports and imports, whereby exports rise sharper than imports. This leads to an increasing trade surplus for Germany. Interestingly enough, the trade surplus is even higher without capital adjustment. This result is caused by a reduction of capital outflow through a capital stock adjustment. Consequently, investment is higher in the capital stock adjustment scenarios as is GDP and consumption in general.

The standard assumption that migrants do not bring capital reduces the capital endowment per worker in the short-run. As a consequence, the GDP per capita is slightly declining. Note that the per capita GDP level is not a welfare measure – earnings of the native population can increase at the same time.

In Table 5.2 we provide the sectoral impact of migration. In all three scenarios, production in manufacturing gains most from labour mobility (0.8 in the NMS-8 and 0.9 in the NMS-10 scenario), while production in non-tradable services gains below average (0.5 in the NMS-8 and 0.6 in the NMS-10 scenario). This corresponds to the rapid rise of exports (0.9 per cent) and a lower growth of imports (0.5 per cent).
The scenarios without capital stock adjustment yield higher wage and employment effects, while the effects on GDP are smaller. These results are similar to those obtained by Untiedt et al. (2007) and Baas et al. (2007).

However, the models differ slightly in their assumptions. In this model we assumed sectoral mobility of labour and an adjustment of the capital stock, while in Untiedt et al. (2007) sectoral mobility is only assumed in the free movement scenario and the capital stock is fixed.

Thus, in Untiedt et al. (2007) there is a strong negative impact of migration on agricultural production. This assumption reflects bilateral agreements between Germany and the NMS-countries, which restrict labour market participation of migrants to specific sectors. These restrictions are removed with the application of the community rules on the free movement of workers. Therefore, migrants move from the agricultural sector to other sectors of the economy according their occupation and education. This leads to efficiency gains for the whole economy but harms the previously favoured sectors.

In our model, domestic and foreign investment is one of the main channels how economies adjust to an increasing labour supply. Note that we have not assumed a complete adjustment of capital stocks. Instead we estimated the actual adjustment processes. We therefore prefer the scenario which considers capital stock adjustment here.
### Table 5.2 The Sectoral Impact of Free Movement in Germany

<table>
<thead>
<tr>
<th>District</th>
<th>Base Year</th>
<th>Capital adjustment</th>
<th>No capital adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Status  NMS-8  NMS-10</td>
<td>Status  NMS-8  NMS-10</td>
</tr>
<tr>
<td>Agriculture, hunting and forestry</td>
<td>47730.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.30 0.30</td>
</tr>
<tr>
<td>Fishing</td>
<td>420.00</td>
<td>0.10 0.40 0.40</td>
<td>0.00 0.00 0.00</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>12590.00</td>
<td>0.20 0.60 0.70</td>
<td>0.20 0.50 0.50</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1357440.00</td>
<td>0.30 0.80 0.90</td>
<td>0.30 0.70 0.90</td>
</tr>
<tr>
<td>Electricity, gas and water supply</td>
<td>91220.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.30 0.30</td>
</tr>
<tr>
<td>Construction</td>
<td>189440.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.20</td>
</tr>
<tr>
<td>Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods</td>
<td>343810.00</td>
<td>0.20 0.60 0.80</td>
<td>0.20 0.50 0.60</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>62070.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.20</td>
</tr>
<tr>
<td>Transport, storage and communication</td>
<td>261690.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.30 0.30</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>221390.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.20</td>
</tr>
<tr>
<td>Real estate, renting and business activities</td>
<td>676450.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.20</td>
</tr>
<tr>
<td>Public administration and defense; compulsory social security</td>
<td>175940.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.30</td>
</tr>
<tr>
<td>Education</td>
<td>114210.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.30</td>
</tr>
<tr>
<td>Health and social work</td>
<td>204850.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.20</td>
</tr>
<tr>
<td>Other community, social and personal service activities</td>
<td>153330.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.20 0.20</td>
</tr>
<tr>
<td>Activities of household</td>
<td>6620.00</td>
<td>0.20 0.50 0.60</td>
<td>0.10 0.30 0.30</td>
</tr>
<tr>
<td>Total</td>
<td>3919200.00</td>
<td>0.20 0.60 0.70</td>
<td>0.20 0.40 0.50</td>
</tr>
</tbody>
</table>

Source: Own estimates.
6 Conclusions

Germany has experienced a substantial immigration from the new member states during the 1990s, but only a negligible influx since the EU’s Eastern enlargement. This can be traced back to the slow-down of economic growth and increasing unemployment in the beginning of this decade, but also on the application of transitional arrangements for the free movement of workers and the subsequent diversion process. Average education levels of migrants from the NMS are slightly below those of natives in Germany. However, other important destinations for migration from the NMS receive a younger and better educated workforce from there.

The German economy has recovered from the economic slow-down since 2005. The unemployment rate has declined from 10.6 per cent in 2005 to 7.3 per cent in 2008 (7.3 per cent ILO concept). The German economy still grew in 2008, although the growth rate of the GDP has started to decline vis-à-vis the previous years. For the year 2009, all economic forecasts expect that the GDP will shrink substantially in the course of the financial crisis and the global recession. However, the actual downturn of the economy is difficult to assess since all macroeconomic forecasts are extremely uncertain under the current conditions. Against this background, all research institutes in Germany (DIW, IfW, HWWI, IFO and the German government) expect the financial market crisis to spill-over to the real economy and predict a severe recession with a sharp increase in unemployment. Most research institutes expect that the unemployment rate will increase to 8.1 per cent (ILO concept) or more. However, the sharp rise in unemployment in Germany is not exceptional in Europe. It will fluctuate about the average of the EU-15 countries. Altogether, the German economy is seriously affected by the financial crisis and its subsequent downturn in the business cycle, but imbalances in the German labour market are not more severe than in the other member states of the EU.

Numerous studies have analysed the labour market effects of immigration in Germany. The findings of these studies cluster about an elasticity of wages with respect to the foreigner share of -0.1, i.e. that wages tend to decline by 0.1 per cent if the foreigner share increases by 1 per cent. Moreover, the unemployment rate is expected to increase by 0.1 percentage points if the foreigner share increases by 1 per cent. These small figures are confirmed by the simulation of the EU enlargement effects here: If we assume that the introduction of the free movement increases the labour force from the NMS-10 by 110,000 person p.a., then we achieve an immigration of about 1 per cent of the German labour force within 7 years. Over this period of time, wages would decline again by about 0.1 per cent and the unemployment rate by 0.1 percentage points, i.e. by an amount which is close to measurement error.

Altogether, the conditions of the German economy and the German labour market are not different to the situation in most other EU-15 countries and the potential effects of migration on wages and unemployment are small. Migration will moreover adjust to the economic conditions in the receiving countries as the experience from previous business cycles has demonstrated. It is therefore unlikely that an opening of the labour market will aggravate imbalances in the German labour market substantially. It is, however,
worthwhile noting that the unemployment risks of migrants from the NMS are high in Germany, in particular in comparison to other destination countries. It is therefore necessary to improve the integration of immigrants into the labour market. The free movement of workers might help in this context, since it may improve the unfavourable sectoral structure of employment of migrants from the NMS and increase incentives for return migration for those who are affected by unemployment risks.
7 References


Abstract

Denmark applied gentle transition rules on migration from the NMS in May 2004 and further eased the access to its labour market in 2006 and 2007. We summarise the available evidence on the extent, composition and effects of migration from the NMS to Denmark after 2004. While the inflows from the NMS increased substantially in 2006 and 2007 with respect to their initial levels, the share of the NMS workers in the Danish labour force remains relatively low. Most migrants come from Poland and the Baltic States, are relatively young and many are employed in the construction and agricultural sectors. There is no evidence that migration from the NMS has led to any imbalances on the Danish labour market. Instead, it has helped fill labour shortages and sustain economic growth. According to the revised (29 June 2007) agreement of the transitional scheme, Denmark will introduce the Community rule of free movement without restrictions in May 2009.
## Contents

1. Macroeconomic and labour market developments in Denmark in 2004-2007 .......... 1  
2. Institutional setting for labour migration from the NMS................................. 4  
3. Migration trends since 2003 ............................................................................. 5  
   3.1 Relevant data sources............................................................................... 5  
   3.2 The extent of migration............................................................................. 5  
   3.3 Labour migration and demographic characteristics of migrants ............... 10  
4. The effects of migration from the NMS..............................................................14  
5. Summary.....................................................................................................15  
6. References.................................................................................................16
1. Macroeconomic and labour market developments in Denmark in 2004-2007

After a period of economic downturn in 2001-2003, GDP growth rates improved substantially in 2004-2007 (Figure 1), driven by higher demand for exports and private consumption (Table 1). Construction was the most rapidly developing sector of the economy, growing by 11 per cent in 2006. However, over the coming years, economic activity is expected to slow down again, as the demand for exports and private consumption weakens and construction activity contracts.

**Figure 1: Danish GDP growth, in per cent**

* Eurostat forecast

Source: Statistics Denmark, Eurostat
Table 1: Output and demand growth, in per cent

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008*</th>
<th>2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, fishing and quarrying</td>
<td>-0.4</td>
<td>1.8</td>
<td>-0.6</td>
<td>2.4</td>
<td>-1</td>
<td>-3.9</td>
<td>-5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.1</td>
<td>-2.7</td>
<td>-3.1</td>
<td>1.6</td>
<td>-2.9</td>
<td>4.9</td>
<td>3.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity, gas and water supply</td>
<td>3.3</td>
<td>-6.1</td>
<td>-0.7</td>
<td>0.7</td>
<td>-3.1</td>
<td>6.2</td>
<td>15.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>-6.8</td>
<td>-1.3</td>
<td>2.6</td>
<td>-0.3</td>
<td>4.3</td>
<td>11.1</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale and retail trade;</td>
<td>-1.2</td>
<td>-0.5</td>
<td>1.3</td>
<td>1.5</td>
<td>3.8</td>
<td>1.4</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport, post and telecommunication</td>
<td>4.3</td>
<td>2.1</td>
<td>4.5</td>
<td>-0.6</td>
<td>5.3</td>
<td>6.6</td>
<td>4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance and business activities</td>
<td>3.2</td>
<td>1.7</td>
<td>1.1</td>
<td>3.9</td>
<td>3.3</td>
<td>3.8</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public and personal services</td>
<td>0.6</td>
<td>1.6</td>
<td>1.1</td>
<td>0.6</td>
<td>1.2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private consumption expenditure</td>
<td>0.1</td>
<td>1.6</td>
<td>1.0</td>
<td>5.0</td>
<td>5.2</td>
<td>4.1</td>
<td>2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experts of goods and services</td>
<td>3.1</td>
<td>4.6</td>
<td>-1.2</td>
<td>3.2</td>
<td>8.4</td>
<td>8.9</td>
<td>3.8</td>
<td>3.3</td>
<td>3.2</td>
</tr>
</tbody>
</table>

* Eurostat forecast

Source: Statistics Denmark, Eurostat

Following increased economic growth in 2004-2007, labour market indicators also improved. Both the employment rate and the employment growth increased, and the rate of unemployment decreased to 3.8 per cent in 2007 (Table 2). Danish labour market indicators are among the best in the EU: the unemployment rate is the lowest (2.5-3.8 percentage points lower than the EU-15) and the employment rate is the highest (10-13 percentage points higher than the EU-15 average) in the EU. The employment indicators for the young and senior individuals, as well as those with less than upper secondary education are also well above the EU-15 average (Table 3). The strong performance of the Danish labour market is usually attributed to the “flexicurity” model, the two cornerstones of which are the flexibility for employers to hire and fire workers and security for employees in the form of generous unemployment benefits.

Foreigners’ performance on the Danish labour market is below that of Danish nationals. In 2007, immigrants had a higher rate of unemployment (9.6 per cent vs. 3.5 per cent) as well as a lower economic activity and employment rates (see Table 4). The unemployment rates of immigrants, however, vary depending on the countries of origin (see Figure 2). Immigrants from non-Western countries are more likely to be unemployed. The unemployment rate of the Polish and Romanian nationals (down to 9 per cent in 2005) is 3-4 percentage points above that of Danish and other Western countries’ nationals, but significantly smaller than the unemployment rates of migrants from non-Western countries. In addition, since the 2004 enlargement the unemployment rates of Polish and Romanian have been on the downward trend: the absolute number of the Polish (Romanian) unemployed decreased monotonically from 791 (146) in the third quarter of 2004 to 479 (81) in the fourth quarter of 2007 (Source: Statistics Denmark)

1 Western countries here are most European countries, USA, Canada, Australia, New Zealand and Japan.
2 The unemployment rates by country of origin are available only till 2005.
### Table 2: Labour market indicators in Denmark, 2000-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Total employment, thousands</th>
<th>Employment growth, in %</th>
<th>Employment rate, in %</th>
<th>Unemployment rate, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2760.0</td>
<td>0.5</td>
<td>76.3</td>
<td>4.3</td>
</tr>
<tr>
<td>2001</td>
<td>2785.3</td>
<td>0.9</td>
<td>76.2</td>
<td>4.5</td>
</tr>
<tr>
<td>2002</td>
<td>2786.5</td>
<td>0.0</td>
<td>75.9</td>
<td>4.6</td>
</tr>
<tr>
<td>2003</td>
<td>2755.8</td>
<td>-1.1</td>
<td>75.1</td>
<td>5.4</td>
</tr>
<tr>
<td>2004</td>
<td>2738.8</td>
<td>-0.6</td>
<td>75.7</td>
<td>5.5</td>
</tr>
<tr>
<td>2005</td>
<td>2762.5</td>
<td>1.6</td>
<td>75.9</td>
<td>4.8</td>
</tr>
<tr>
<td>2006</td>
<td>2807.5</td>
<td>1.8</td>
<td>77.4</td>
<td>3.9</td>
</tr>
<tr>
<td>2007</td>
<td>2857.8</td>
<td>1.8</td>
<td>77.1</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: Eurostat

### Table 3: Labour market indicators by age group and education, 2007

<table>
<thead>
<tr>
<th>Age group</th>
<th>Employment rate, in %</th>
<th>Economic activity rate, in %</th>
<th>Less than upper secondary education</th>
<th>Upper secondary education</th>
<th>Tertiary education</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurostat.

### Table 4: Labour market indicators of foreigners and nationals in Denmark, 2007

<table>
<thead>
<tr>
<th></th>
<th>Economic activity rate, in %</th>
<th>Employment rate, in %</th>
<th>Unemployment rate, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationals</td>
<td>66.1</td>
<td>63.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Total foreigners</td>
<td>59.5</td>
<td>53.8</td>
<td>9.6</td>
</tr>
<tr>
<td>Citizens of countries outside the EU-27</td>
<td>56.3</td>
<td>49.7</td>
<td>11.6</td>
</tr>
</tbody>
</table>

Source: Eurostat
2. Institutional setting for labour migration from the NMS

With the EU enlargement from 1 May 2004, Denmark eased access to its labour market for citizens and companies from the East European EU Member States. With the so-called East Agreement (concluded by a majority of the Danish political parties) a transitional scheme was introduced. The scheme ensured that workers from the East European EU Member States could take a job in Denmark if they had a work permit. The objective of the transitional scheme was to ensure workers from the East European EU Member States the same salary and employment terms as their Danish colleagues in similar jobs.

The Danish transitional scheme was adjusted on 5 April 2006\(^3\). Among other things, companies covered by collective agreements were given the opportunity to obtain pre-approval (advance approval) to employ workers from the East European EU Member States, so that the workers could commence work immediately and not pending case processing by the Danish Immigration Service. The parties to the East Agreement also decided that the transitional scheme should apply to workers from Bulgaria and Romania.

\(^3\) The revised versions of the East Agreement are available at http://www.bm.dk/sw7008.asp
The parties to the East Agreement agreed on 29 June 2007 that the requirements for workers from the NMS who wish to come to Denmark and work, would be softened again. In particular, all workers from the NMS which are covered by a collective agreement will be exempted from the requirement for a work permit. At the same time, the Agreement enhances supervision and monitoring to ensure that they are offered decent terms when working in Denmark.

According to the latest version (29 June 2007) of the East Agreement (available on the website of the Ministry of Employment of Denmark, http://www.bm.dk/sw7008.asp), the Danish government committed itself to apply the Community rule on free movement of workers from the NMS from 1 May 2009 (“the possibility for transitional rules ceases as of 1 May 2009”).

3. Migration trends since 2003

3.1 Relevant data sources

The major source of data on work permits and employment patterns of the NMS-8 and NMS-2 migrants is the Danish Immigration Service (http://www.nyidanmark.dk/en-us/statistics/statistics.htm ). A complementary source of data on migrants’ stocks, flows, demographic and regional characteristics is Statistics Denmark (http://www.statbank.dk/statbank5a/default.asp?w=1024).

3.2 The extent of migration

Tables 5.1 and 5.2 report the stocks of the foreign citizens and the foreign-born in Denmark in 2001-2008. Overall, the number of foreign citizens rose by 27,279 between 2004 and 2008, increasing the share of the foreign nationals in the Danish population from 5.1 per cent to 5.8 per cent. At the same time, the number of the foreign-born increased by 40,863, raising the share of the foreign-born from 6.1 per cent in 2001 to 7.3 per cent in 2008\textsuperscript{4}. At the beginning of 2008, the most important (in absolute terms) migrant groups (both by country of citizenship and birth) were from Turkey, former Yugoslavia, Iraq, the UK, Germany, Norway and Poland.

\textsuperscript{4} Both naturalizations and deaths of migrants affect the evolution of stocks by country of citizenship and country of birth. The number of naturalizations in 2004-2007 was 36,782 (Source: Statistics Sweden). The statistics on the number of deaths of the foreign-born and foreign citizens are not available.
Over 2004-2008, the stock of the NMS nationals almost doubled (from 11,785 to 25,011), but remained relatively small compared to the total population of Denmark (0.5 per cent of the total population in the beginning of 2008). In absolute terms, between 2004 and 2008, the stock of the NMS nationals increased by 13,231, and the stock of the NMS-born increased by 11,360.

The cumulative net immigration of the NMS nationals in 2004-2007 was 15,262 (Table 6). This is slightly higher that the increase in the stock of the NMS nationals and the NMS-born (Tables 5.1 and 5.2) because the former does not take into account naturalised citizens, and the latter accounts for the natural decrease (deaths) of previous migrant cohorts. Poland accounted for 58 per cent of total net inflows from the NMS-10 in 2004-2007, followed by Lithuania (13 per cent) and Romania (8 per cent).

Table 6 shows that immigration from practically all of the NMS, and especially Poland, kept increasing through the period 2004-2007. Particularly high inflows were observed in 2006 and 2007, which to a certain extent can be explained by the simplification of the NMS nationals’ hiring procedure in May 2006 (introduction of advance approvals).

Over the period 2004-2007, the share of the NMS nationals in the total net inflows of foreign citizens constituted 26 per cent. As for other countries, the net inflows were the highest from Germany (11 per cent of total net migrant inflows), Ukraine (6 per cent) and China (5 per cent).

In 2004-2007, the proportion of net over total immigration inflows from the NMS was 62 per cent (Table 6), being considerably higher than the same indicator for the total foreign national population (43 per cent). The proportion of “stayers” was highest for Polish and Romanian migrants (73 per cent), while slightly less than a half of the migrants from the Baltic States (43-50 per cent) stayed in Denmark.
Table 5.1: Population by citizenship and year: stocks (on January 1)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>458</td>
<td>541</td>
<td>539</td>
<td>611</td>
<td>682</td>
<td>807</td>
<td>+ 266</td>
</tr>
<tr>
<td>Latvia</td>
<td>742</td>
<td>905</td>
<td>942</td>
<td>1085</td>
<td>1261</td>
<td>1531</td>
<td>+ 626</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1221</td>
<td>1681</td>
<td>1946</td>
<td>2372</td>
<td>2945</td>
<td>3489</td>
<td>+ 1808</td>
</tr>
<tr>
<td>Poland</td>
<td>5548</td>
<td>5854</td>
<td>6199</td>
<td>7353</td>
<td>9701</td>
<td>13753</td>
<td>+ 7899</td>
</tr>
<tr>
<td>Slovakia</td>
<td>127</td>
<td>164</td>
<td>184</td>
<td>242</td>
<td>301</td>
<td>507</td>
<td>+ 343</td>
</tr>
<tr>
<td>Slovenia</td>
<td>51</td>
<td>57</td>
<td>57</td>
<td>78</td>
<td>102</td>
<td>135</td>
<td>+ 78</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>225</td>
<td>298</td>
<td>368</td>
<td>405</td>
<td>487</td>
<td>566</td>
<td>+ 268</td>
</tr>
<tr>
<td>Hungary</td>
<td>391</td>
<td>463</td>
<td>527</td>
<td>624</td>
<td>724</td>
<td>1019</td>
<td>+ 556</td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>408</td>
<td>493</td>
<td>536</td>
<td>572</td>
<td>583</td>
<td>823</td>
<td>+ 330</td>
</tr>
<tr>
<td>Romania</td>
<td>1106</td>
<td>1329</td>
<td>1405</td>
<td>1563</td>
<td>1672</td>
<td>2386</td>
<td>+ 1057</td>
</tr>
<tr>
<td>Other countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>35232</td>
<td>30273</td>
<td>29956</td>
<td>29491</td>
<td>28752</td>
<td>28843</td>
<td>- 1430</td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>34903</td>
<td>32643</td>
<td>28924</td>
<td>27627</td>
<td>26842</td>
<td>26876</td>
<td>- 5767</td>
</tr>
<tr>
<td>UK</td>
<td>12630</td>
<td>12830</td>
<td>12827</td>
<td>12894</td>
<td>13183</td>
<td>13657</td>
<td>+ 827</td>
</tr>
<tr>
<td>Norway</td>
<td>12966</td>
<td>13770</td>
<td>13926</td>
<td>13928</td>
<td>14170</td>
<td>14426</td>
<td>+ 656</td>
</tr>
<tr>
<td>Germany</td>
<td>12701</td>
<td>13285</td>
<td>13552</td>
<td>14182</td>
<td>15435</td>
<td>18001</td>
<td>+ 4716</td>
</tr>
<tr>
<td>Iraq</td>
<td>13821</td>
<td>19423</td>
<td>19175</td>
<td>18721</td>
<td>18133</td>
<td>18314</td>
<td>- 1109</td>
</tr>
<tr>
<td>Total Denmark</td>
<td>5090583</td>
<td>5126429</td>
<td>5143801</td>
<td>5157408</td>
<td>5168988</td>
<td>5177301</td>
<td></td>
</tr>
<tr>
<td>Total foreign citizens</td>
<td>258629</td>
<td>271211</td>
<td>267604</td>
<td>270051</td>
<td>278096</td>
<td>298490</td>
<td>+ 27279</td>
</tr>
<tr>
<td>Foreign citizens as % of total population</td>
<td>5.08%</td>
<td>5.29%</td>
<td>5.20%</td>
<td>5.24%</td>
<td>5.38%</td>
<td>5.77%</td>
<td></td>
</tr>
<tr>
<td>Total NMS-10 cit.</td>
<td>10277</td>
<td>11785</td>
<td>12703</td>
<td>14905</td>
<td>18458</td>
<td>25016</td>
<td>+ 13231</td>
</tr>
<tr>
<td>NMS-10 citizens as % of total population</td>
<td>0.20%</td>
<td>0.23%</td>
<td>0.25%</td>
<td>0.29%</td>
<td>0.36%</td>
<td>0.48%</td>
<td></td>
</tr>
<tr>
<td>NMS-10 citizens as % of foreign citizens</td>
<td>3.97%</td>
<td>4.35%</td>
<td>4.75%</td>
<td>5.52%</td>
<td>6.64%</td>
<td>8.38%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Statistics Denmark
Table 5.2: Population by country of birth and year: stocks (on January 1)

<table>
<thead>
<tr>
<th>Country</th>
<th>Absolute change 2004 - 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>472</td>
</tr>
<tr>
<td>Latvia</td>
<td>789</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1237</td>
</tr>
<tr>
<td>Poland</td>
<td>10391</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>232</td>
</tr>
<tr>
<td>Slovakia</td>
<td>132</td>
</tr>
<tr>
<td>Slovenia</td>
<td>73</td>
</tr>
<tr>
<td>Hungary</td>
<td>1352</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>570</td>
</tr>
<tr>
<td>Romania</td>
<td>1842</td>
</tr>
<tr>
<td><strong>Other countries</strong></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>29680</td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>33506</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10536</td>
</tr>
<tr>
<td>Germany</td>
<td>22716</td>
</tr>
<tr>
<td>Norway</td>
<td>13360</td>
</tr>
<tr>
<td>Iraq</td>
<td>15099</td>
</tr>
<tr>
<td><strong>Total Denmark</strong></td>
<td>5090583</td>
</tr>
<tr>
<td><strong>Total foreign-born</strong></td>
<td>308674</td>
</tr>
<tr>
<td>Foreign-born as % of total population</td>
<td>6.06%</td>
</tr>
<tr>
<td><strong>Total NMS-10 born</strong></td>
<td></td>
</tr>
<tr>
<td>NMS-10 born as % of total population</td>
<td>0.29%</td>
</tr>
<tr>
<td>NMS-10 born as % of foreign born</td>
<td>4.76%</td>
</tr>
</tbody>
</table>

Source: Statistics Denmark
Table 6: Immigration and emigration of foreign citizens, by country of origin and destination

<table>
<thead>
<tr>
<th>Country</th>
<th>Immigration</th>
<th>Emigration</th>
<th>Net immigration</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>152 168 185 208</td>
<td>713</td>
<td>357</td>
</tr>
<tr>
<td>Latvia</td>
<td>352 415 485 513</td>
<td>1765</td>
<td>1013</td>
</tr>
<tr>
<td>Lithuania</td>
<td>899 1088 1364 1200</td>
<td>4551</td>
<td>2515</td>
</tr>
<tr>
<td>Poland</td>
<td>1157 1984 3627 5484</td>
<td>12252</td>
<td>3360</td>
</tr>
<tr>
<td>Slovakia</td>
<td>70 119 137 294</td>
<td>620</td>
<td>242</td>
</tr>
<tr>
<td>Slovenia</td>
<td>29 45 50 61</td>
<td>185</td>
<td>102</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>214 227 235 265</td>
<td>941</td>
<td>523</td>
</tr>
<tr>
<td>Hungary</td>
<td>185 254 285 460</td>
<td>1184</td>
<td>514</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>129 100 89 297</td>
<td>615</td>
<td>207</td>
</tr>
<tr>
<td>Romania</td>
<td>249 326 317 861</td>
<td>1753</td>
<td>484</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>488 426 470 643</td>
<td>2027</td>
<td>828</td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>587 424 457 553</td>
<td>2021</td>
<td>573</td>
</tr>
<tr>
<td>Germany</td>
<td>1781 2187 2807 4128</td>
<td>10903</td>
<td>4759</td>
</tr>
<tr>
<td>Ukraine</td>
<td>775 1206 1644 2169</td>
<td>5794</td>
<td>2396</td>
</tr>
<tr>
<td>Philippines</td>
<td>434 507 775 1311</td>
<td>3027</td>
<td>394</td>
</tr>
<tr>
<td>China</td>
<td>1662 1553 1158 1320</td>
<td>5693</td>
<td>2617</td>
</tr>
<tr>
<td>India</td>
<td>571 678 753 1411</td>
<td>3413</td>
<td>1220</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total migration of</td>
<td>27870 29989 34281 42623</td>
<td>134763</td>
<td>76943</td>
</tr>
<tr>
<td>foreign citizens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migration of citizens</td>
<td>3436 4726 6774 9643</td>
<td>24579</td>
<td>9317</td>
</tr>
<tr>
<td>from the NMS-10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10 migrants as %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of total migrants</td>
<td>12.30% 15.80% 19.80% 22.60% 18.20%</td>
<td>10.40% 10.80% 13.00% 14.40% 12.10%</td>
<td>16.50% 25.20% 29.80% 28.50% 26.40%</td>
</tr>
</tbody>
</table>

*NetIm/Mig – the ratio of net immigration over total immigration

Source: Statistics Denmark
3.3. Labour migration and demographic characteristics of migrants

Table 7 reports the number of work permits issued by the Danish Immigration Service to NMS nationals in 2004-2008. According to the transitional rules, workers from the NMS must obtain a new permit each time they change employment. From the statistics provided by the Danish Immigration Service it is, however, impossible to separate initial applications from the new permits of the same migrants, which makes the total number of work permits granted in 2004-2007 higher than the sum of migrant inflows over this period (31,146 versus 24,579\(^5\)). 63 per cent of all work permits were received by the citizens of Poland.

Table 7: Number of work permits granted to persons from the new EU member States in accordance with the transitional rules by year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>48</td>
<td>69</td>
<td>93</td>
<td>87</td>
<td>297</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>49</td>
<td>135</td>
<td>110</td>
<td>155</td>
<td>449</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>68</td>
<td>146</td>
<td>153</td>
<td>407</td>
<td>774</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>242</td>
<td>514</td>
<td>662</td>
<td>621</td>
<td>2039</td>
<td>133</td>
</tr>
<tr>
<td>Lithuania</td>
<td>833</td>
<td>1536</td>
<td>2005</td>
<td>1795</td>
<td>6169</td>
<td>296</td>
</tr>
<tr>
<td>Poland</td>
<td>806</td>
<td>2421</td>
<td>7072</td>
<td>9394</td>
<td>19693</td>
<td>2216</td>
</tr>
<tr>
<td>Slovakia</td>
<td>48</td>
<td>88</td>
<td>244</td>
<td>428</td>
<td>808</td>
<td>85</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>632</td>
<td>632</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>239</td>
<td>239</td>
</tr>
<tr>
<td>Total</td>
<td>2097</td>
<td>4923</td>
<td>10353</td>
<td>13773</td>
<td>31146</td>
<td>3374</td>
</tr>
</tbody>
</table>

Source: Danish Immigration Service

Figure 3 shows that most of the migrants from the NMS are employed in the construction, agricultural activities and business services. The number of NMS migrants employed in the construction and business services (which besides accounting, book-keeping, legal activities, advertising etc. also include building-cleaning activities) sectors grew particularly strongly in 2006 and 2007, while employment in agriculture, relatively more important at the initial stage of the transition period, changed very little in 2005-2007.

\(^5\) Table 6. Note also that the immigration flows in Table 6 also include e.g. children of migrants to whom work permits statistics are not applicable.
Comparing employment by sector of the migrants from different NMS, Poles and Estonians are more likely than others to be employed in the construction sector (25 per cent of the Poles were employed there), and Latvians and Lithuanians are overrepresented in agriculture (Figure 4). Most of the NMS migrants who came to Denmark in 2004-2007 were relatively young (see Figure 5): 56 per cent were 20-29 years old and 19 per cent were 30-39 years old. Only 12 per cent of all migrants were 40 or older.

Figure 3: Valid permits at the end of the years 2005 - 2007 – by the most important sectors

Source: Danish Immigration Service
The expansion of the construction sector (Table 2) and its increasing importance in the employment of the NMS migrants (Figure 3) was associated with a sharp decrease in the proportion of females in the total NMS migration flows (see Table 8). The share of females from Poland, the major migrant sending NMS, fell from 61 per cent in 2000-2003 to 33 per cent in 2004-2007.

Finally, Figure 6 shows that the majority of migrants from the NMS are concentrated in Copenhagen (50 per cent) and Copenhagen suburban areas (8 per cent). Jutland, the major agricultural region of Denmark, accounted for 26 per cent of the total net NMS inflows in 2006-2007.
Figure 5: Age distribution of the NMS-10 migrants (net migrant inflows in 2004-2007)

![Age distribution chart]

Source: Statistics Denmark

Table 8: The proportion of females in net immigrant flows, 2000-2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>64%</td>
<td>75%</td>
<td>67%</td>
<td>52%</td>
<td>45%</td>
<td>54%</td>
</tr>
<tr>
<td>Estonia</td>
<td>91%</td>
<td>43%</td>
<td>73%</td>
<td>69%</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td>Latvia</td>
<td>71%</td>
<td>72%</td>
<td>64%</td>
<td>46%</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>62%</td>
<td>45%</td>
<td>45%</td>
<td>38%</td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td>Poland</td>
<td>61%</td>
<td>46%</td>
<td>38%</td>
<td>30%</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>Romania</td>
<td>61%</td>
<td>63%</td>
<td>60%</td>
<td>51%</td>
<td>41%</td>
<td>48%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>45%</td>
<td>64%</td>
<td>54%</td>
<td>38%</td>
<td>28%</td>
<td>36%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>44%</td>
<td>83%</td>
<td>84%</td>
<td>65%</td>
<td>41%</td>
<td>63%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>48%</td>
<td>49%</td>
<td>60%</td>
<td>52%</td>
<td>57%</td>
<td>55%</td>
</tr>
<tr>
<td>Hungary</td>
<td>58%</td>
<td>45%</td>
<td>52%</td>
<td>53%</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: Statistics Denmark
Figure 6: Regional (NUTS-3) distribution of immigrants from NMS-10, net inflows of 2006-2007

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copenhagen city</td>
<td>50%</td>
</tr>
<tr>
<td>Copenhagen suburban</td>
<td>8%</td>
</tr>
<tr>
<td>North Zealand</td>
<td>4%</td>
</tr>
<tr>
<td>Bornholm</td>
<td>2%</td>
</tr>
<tr>
<td>Fyn</td>
<td>3%</td>
</tr>
<tr>
<td>South Jutland</td>
<td>6%</td>
</tr>
<tr>
<td>West Jutland</td>
<td>9%</td>
</tr>
<tr>
<td>North Jutland</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: Statistics Denmark

4. The effects of migration from the NMS

There is very little empirical evidence on the economic and social effects of the migration from the NMS in Denmark. However, various reports by independent consultancies, ministries and social partners, on which the government’s decision to soften the requirements for labour market access for the NMS nationals were based, recognised a positive contribution of labour inflows from the NMS for the Danish economy.

The Rambøll’s report, published in November 2005, concluded that “the EU enlargement and the subsequent inflow of East European workers have not generally had any serious effect on the Danish labour market”.

At the conference on EU labour mobility in May 2006\(^6\), the Danish Minister for Employment pointed to “a big need for extra hands in the building sector, in agriculture and in the health sector. Failure to find these extra hands will impede growth and prosperity. The enlargement of the European Union has spared us from many worries in this connection. Citizens from the new EU Member States who are working in Denmark have contributed to alleviating our bottleneck problems; the shortage of labour has diminished”. Similar views were expressed by the Confederation of Danish Employers, adding that “the problem of Danish employers is

\(^6\) The conference materials are available at the website of the Ministry of Employment of Denmark http://www.bm.dk/sw11109.asp
that there are too few workers from the new Eastern European member states who find their way to the Danish labour market”.

Dølvik and Eldring (2008) summarise the development of labour mobility from the new EU member states to the Nordic countries (Sweden, Denmark, Finland, Norway and Iceland) since the enlargement of the EU in 2004, and conclude that “the increasing labour mobility from Poland and the Baltic states has contributed to higher economic growth and slower increases in prices, costs and interest rates than what otherwise would have been possible in a period of sustained economic boom and increasing scarcity of labour in the Nordic countries. Labour migration has contributed to removing bottlenecks, and no significant imbalances in the Nordic labour markets have been registered”.

5. Summary

Compared to the initial levels, immigration from the NMS increased substantially in 2006 and 2007. The stock of migrants from the NMS, however, remains relatively low with respect to the total population of Denmark. The majority of immigrants are relatively young individuals from Poland and the Baltic States, employed primarily in the construction, business services and agricultural sectors. As the construction sector expanded, the share of males in migrant inflows went up substantially in 2006 and 2007. There is no evidence that immigration from the NMS has led to imbalances on the Danish labour market. According to the revised (29 June 2007) agreement of the transitional scheme, Denmark will apply the full Community rule on free movement in 1 May 2009.
6. References


Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements

VC/2007/0293

Deliverable 8
Fondazione Rodolfo Debenedetti (fRDB)

Country Study: Spain
Mattia Makovec

Abstract
Foreign immigration largely contributed to Spain’s impressive employment growth over the last decade and above all during the last five years. Interestingly, according to the existing empirical evidence, this phenomenon did not determine a reduction in the employment opportunities for the natives and did not exert downward pressures on their wages. This study analyses the implications of the recent huge increase in immigration flows from the New Member States and the Candidate Countries for the Spanish labour market. We first present the main trends in immigrants’ inflows to Spain, together with their demographic characteristics and geographic concentration, within the current institutional framework regulating immigrants’ residence. By using a recent survey representative of the immigrant population in working age, we discuss then the skill profile of nationals from NMS-10 and NMS-2 and we compare their labour market performance and occupational status in Spain and in their country of origin. We show that nationals from both NMS-10 and NMS-2 improve their labour market situation in Spain as compared to the one in their sending countries, in terms of higher employment rates. NMS-2 nationals, though, experience greater downward occupational mobility than NMS-10, given their lower skill levels. Men from NMS-2 in particular, are largely reallocated to the construction sector; women are almost entirely reallocated to the services sector but they experience relatively larger downward occupational mobility since their concentration in elementary occupations is higher.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
Contents

1 Overview on the current economic situation in Spain and the importance of immigration for the Spanish economy............................................................. 1
   1.1 The Spanish economy and the labour market: recent developments .......... 1
   1.2 The importance of immigration for the Spanish economy.......................... 2
2 Institutions regulating immigrants presence and immigration policy............... 4
3 Data and recent trends....................................................................................... 6
   3.1 Data availability and limitations ................................................................ 6
   3.2 Immigration trends before and after the EU enlargement and main demographic characteristics of immigrants from New Member States and Candidate Countries ........................................................................ 7
4 The skill profile of immigrants from NMS-10 and NMS-2................................. 9
5 The labour market situation of immigrants from NMS-10 and NMS-2 and its implications for the national labour market. ......................................................... 10
   5.1 The economic activity of immigrants from NMS-10 and NMS-2................ 11
   5.2 Incidence by economic sector, occupation, and type of job ...................... 14
6 Conclusions..................................................................................................... 22
7 References...................................................................................................... 33
1 Overview on the current economic situation in Spain and the importance of immigration for the Spanish economy

1.1 The Spanish economy and the labour market: recent developments

Spain experienced a period of continuous and sustained growth over the last fourteen years, and in 2006, its per capita income in purchasing power parity converged to the European average. The expansion of the Spanish economy can be largely attributed to the steady growth of the labour factor, which according to estimates of the Spanish government (Oficina Economica del Presidente, 2008) contributed to 75% of the total growth over the period. Three main facts can help explaining such a phenomenon. First, the active population increased impressively since the end of the 1990s largely because of the increase of foreign immigration. Second, the labour force grew pushed by the dramatic increase in the immigrants’ and female labour market participation. Third, the unemployment rate declined thanks to the successful employment performance of immigrants and women. Table 1 reports a summary of the main macroeconomic indicators for the Spanish economy for the period 1998-2007.

Table 1. Main indicators of the Spanish economy (1998-2007)

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>4.5</td>
<td>4.7</td>
<td>5.0</td>
<td>3.6</td>
<td>2.7</td>
<td>3.1</td>
<td>3.3</td>
<td>3.6</td>
<td>3.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>1.8</td>
<td>2.2</td>
<td>3.5</td>
<td>2.8</td>
<td>3.6</td>
<td>3.1</td>
<td>3.1</td>
<td>3.4</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Employment growth</td>
<td>4.5</td>
<td>4.6</td>
<td>5.1</td>
<td>3.2</td>
<td>2.4</td>
<td>3.1</td>
<td>3.5</td>
<td>3.8</td>
<td>3.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Employment rate (15-64)</td>
<td>51.3</td>
<td>53.8</td>
<td>56.3</td>
<td>57.8</td>
<td>58.5</td>
<td>59.8</td>
<td>61.1</td>
<td>63.3</td>
<td>64.8</td>
<td>65.6</td>
</tr>
<tr>
<td>Unemployment rate (15-74)</td>
<td>15.0</td>
<td>12.5</td>
<td>11.1</td>
<td>10.3</td>
<td>11.1</td>
<td>11.1</td>
<td>10.6</td>
<td>9.2</td>
<td>8.5</td>
<td>8.3</td>
</tr>
<tr>
<td>Participation rate (15-64)</td>
<td>63.0</td>
<td>63.9</td>
<td>65.4</td>
<td>64.7</td>
<td>66.2</td>
<td>67.6</td>
<td>68.7</td>
<td>69.7</td>
<td>70.8</td>
<td>-</td>
</tr>
<tr>
<td>Employment (1000s)</td>
<td>14932</td>
<td>15617</td>
<td>16412</td>
<td>16931</td>
<td>17338</td>
<td>17878</td>
<td>18503</td>
<td>19212</td>
<td>19848</td>
<td>20356</td>
</tr>
<tr>
<td>Unemployment (1000s)</td>
<td>2545</td>
<td>2159</td>
<td>1980</td>
<td>1877</td>
<td>2095</td>
<td>2174</td>
<td>2144</td>
<td>1913</td>
<td>1849</td>
<td>1834</td>
</tr>
<tr>
<td>Total population (1000s)</td>
<td>39352</td>
<td>39555</td>
<td>39927</td>
<td>40427</td>
<td>41063</td>
<td>41753</td>
<td>42440</td>
<td>43141</td>
<td>43835</td>
<td>44475</td>
</tr>
<tr>
<td>Imports (% of GDP)</td>
<td>26.9</td>
<td>28.5</td>
<td>32.2</td>
<td>31.0</td>
<td>29.5</td>
<td>28.7</td>
<td>29.9</td>
<td>31.0</td>
<td>32.8</td>
<td>33.3</td>
</tr>
<tr>
<td>Exports (% of GDP)</td>
<td>26.7</td>
<td>26.7</td>
<td>29.0</td>
<td>28.5</td>
<td>28.5</td>
<td>27.3</td>
<td>26.3</td>
<td>25.9</td>
<td>25.7</td>
<td>26.4</td>
</tr>
<tr>
<td>Trade Balance (% of GDP)</td>
<td>-0.2</td>
<td>-1.9</td>
<td>-3.1</td>
<td>-2.5</td>
<td>-2.1</td>
<td>-2.4</td>
<td>-4.0</td>
<td>-5.3</td>
<td>-6.4</td>
<td>-6.8</td>
</tr>
</tbody>
</table>

Note: GDP growth is computed based on previous year’s prices.


The sustained growth of the labour factor, though, has not been accompanied by an equivalent increase in labour productivity, implying that the employment creation process has been mainly driven by the labour market assimilation of low-productive workers in low-productive sectors. This aspect is reflected as well in the lack of convergence of gross earnings with respect to the EU-15 average (Table 2) despite the convergence occurred in per capita income. The ratio of average nominal earnings in Spain to the EU-15 average has remained roughly constant over time (around 57%), signalling that employment growth occurred largely through to the inflows of workers with wages below the national average.
Indeed, one of the key sectors for the expansion of the Spanish economy over the last decade has been the construction sector: between 1998 and 2007, the stock of houses grew by 5.7 millions of units, corresponding to a 30% increase with respect to the 1998 stock (Banco de España, 2008).

Table 2. Average gross yearly earnings in Spain and EU-15 (thousands of euro/ecu)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>16043</td>
<td>16192</td>
<td>16528</td>
<td>17038</td>
<td>17432</td>
<td>17768</td>
<td>18462</td>
<td>19220</td>
<td>19828</td>
<td>20439</td>
<td>21150</td>
</tr>
<tr>
<td>EU 15</td>
<td>-</td>
<td>-</td>
<td>28609</td>
<td>29802</td>
<td>30889</td>
<td>31769</td>
<td>32689</td>
<td>32930</td>
<td>34533</td>
<td>35417</td>
<td>-</td>
</tr>
</tbody>
</table>

Nominal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>17688</td>
<td>18633</td>
<td>19331</td>
<td>19812</td>
<td>20508</td>
<td>20806</td>
<td>21823</td>
<td>21767</td>
<td>21789</td>
<td>22216</td>
<td>22669</td>
<td>-</td>
</tr>
<tr>
<td>EU 15</td>
<td>-</td>
<td>-</td>
<td>27169</td>
<td>28248</td>
<td>29446</td>
<td>30342</td>
<td>31162</td>
<td>31302</td>
<td>32763</td>
<td>33795</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

PPPs-adjusted (PPPs EU 27=100)

Source: EUROSTAT and own elaborations based on EUROSTAT.

The factors driving the expansion of the housing market have been mainly the rapid demographic boom due to the increase in the immigrants population, the growing incidence of population subgroups with high propensity to invest in housing (e.g. those aged between 46 and 65), the low level of interest rates and the high foreign demand (Banco de España, 2008). The growth of the housing market therefore has been such that the number of employed in the construction sector grew from 1.2 million to nearly 2.7 million between 1996 and 2007, corresponding to an increase in the construction share in total employment from 9.6% to 13.5%. Over the same period, the employed in the services sector grew from 7.9 to 13.4 millions, corresponding to 62% and 66% of total employment respectively (INE, 2008a).

Figures 1 and 2 offer a more detailed picture of the Spanish buoyant labour market performance and of the catch-up with the EU trends plotting employment and unemployment rates by gender for the last decade. The employment rate for the total active population (aged 15-64) grew by more than 17% between 1996 and 2007 reaching the current EU average, while female and male employment rates grew by 20% and by 13% respectively. The aggregate unemployment fell to 8.3%, the lowest level observed since the end of 1970s; male unemployment rate in particular fell below the EU average, while female unemployment rate still remains double-digit but more than halved compared to the mid of the 1990s.

1.2 The importance of immigration for the Spanish economy

One of the main driving forces contributing to the successful performance of the Spanish labour market has been foreign immigration. According to administrative data based on the number of visa released to foreign residents, and elaborated by the Ministry of Labour
and Social Affairs, the stock of immigrants regularly resident in Spain in 2007 amounted to nearly 4 millions. This figure corresponds nearly to the 9% of the total population and represents a 5.5-time increase with respect to the levels registered in 1998 (around 700,000 units).

**Figure 1: Employment rate 15-64: Spain vs. EU (1996-2007)**

![Graph showing employment rate comparison between Spain and EU from 1996 to 2007.]

Source: EUROSTAT

**Figure 2: Unemployment rate 15-74: Spain vs. EU (1996-2007)**

![Graph showing unemployment rate comparison between Spain and EU from 1996 to 2007.]

Source: EUROSTAT

Figures from the National Statistical Institute based on the Spanish labour force survey “Encuesta sobre la población activa” (involving around 60,000 households on a quarterly basis) report that the total number of foreign born residents (including both Spanish and
non Spanish nationals) currently exceeds 5.2 millions, corresponding to more than 11% of the population.

Estimates by the Government (Oficina Economica del Presidente, 2006) show that half of the Spanish GDP growth between 2001 and 2005, and one third between 1996 and 2005, could be imputed directly to immigration through its impact on the total population, employment and per capita income. In particular, immigrants represented half of the new 2.6 million employed registered between 2001 and 2005, 30% of the female labour force participation increase between 1996 and 2006, and contributed to one-fourth of the per capita income growth between 2001 and 2005. Immigrants positive net impact on public finances has been estimated around 0.5% of GDP (mainly through social security contributions) corresponding to half of the 2005 budget surplus, while their contribution to the current account deficit (through the effect of remittances and imports) has been estimated to around 30%, corresponding to 2.1% of GDP (OECD, 2007).

After the 2004 EU enlargement, and in particular after the 2007 enlargement to Bulgaria and Romania, the incidence of immigrants from the current New Member States on the total immigrant population has grown dramatically. In 2007, immigrants from NMS-8 and NMS-2 with regular visa amounted to more than 840.000 corresponding to 21% of the total number of regular visa holders (15% of which from Romania). The next section discusses the main features of the institutions currently regulating immigrants’ presence in Spain. Section 3 will present an overview of the trends of the immigrant population from NMS-10, NMS-2 and CAND-6, while sections 4 and 5 will analyze extensively the labour market participation of immigrants from the current New Member States and its implications for the national labour market.

2 Institutions regulating immigrants presence and immigration policy

In 2005 the Spanish government undertook a number of reforms to facilitate the recruitment of foreign workers and to stimulate inflows of legal migrants; before 2005, most of immigration into Spain was irregular (OECD, 2008a). Currently, employers can recruit foreign workers by advertising positions on regional “shortage lists” updated on a quarterly basis. The Spanish Ministry of Labour in collaboration with the foreign counterparts organise also an international recruitment based on quota by regions and sectors (temporary workers though are not subject to quotas). Workers recruited through this channel are bound to work in the established region and sector for a year, and, after five years, they become entitled to apply for permanent residence.

Immigrants in Spain are currently subject to two main regimes of residence regulation according to their nationality. Immigrants from non-EU countries are subject to the “Regimen General de Extranjeria”, regulated by the “Ley Organica” 4/2000 (11th of January). EU nationals, on the contrary, together with citizens from countries members of the Agreement on the European Economic Area (Iceland, Norway and Liechtenstein) and with nationals from Switzerland, are subject to the “Regimen Comunitario”, regulated by the Royal Decree 240/2007 (16th of February), valid from April 2007.
Citizens from non-EU countries need to obtain either a temporary or a permanent visa. Temporary visas are issued to non-EU citizens who obtain an authorization of stay between nine months and five years for work purposes (both as employee and self-employed), for family reasons (e.g. joining of family members), for study or for residence. Temporary visas can be issued initially for a year ("Autorización de residencia temporal inicial"), and afterwards can be renewed twice, each time for a period of maximum two years (in the meanwhile they can be converted into permanent visas). Permanent visas allow unlimited residence in the country and guarantee equal job opportunity with respect to national workers. Foreign residents under the “Regimen General” become entitled to a permanent visa after a period of continuous and regular residence in the country of at least five years, allowing for periods of stay outside the country of maximum six months up to a maximum of one year. Showing a regular employment history in the country of origin represents an important comparative advantage to obtain a temporary visa for work purposes for first-time applicants.

Nationals from countries subject to the “Regimen Comunitario” need to be registered at the Immigration Office (“Registro Central de Extranjeros”) and to obtain a certificate of residence (“certificado de registro”) in the case their stay in the country exceeds three months. In this case, their relatives (as well as the relatives of Spanish citizens with double nationality, nationals of countries subject to the “Regimen general”) need also to apply for a specific certificate of residence. Foreign residents subject to the “Regimen Comunitario” enjoy the same rights and conditions as Spanish citizens in terms of mobility into and from the country and in terms of work and study opportunities.

Spain initially signed a multipart agreement with Romania in May 2002 in order to regulate effectively the flow of immigrants and to prevent illegal immigration (OECD, 2004). The agreement regulated the inflows of three groups of workers: non-seasonal workers, seasonal workers and a very limited number of trainees aged between 18 and 35 (50 per year). Non-seasonal workers were required to work in Spain for at least a year. Seasonal workers were allowed a maximum stay in the country of nine months per year, after which they were to return to the home country. Finally, trainees were allowed to work in Spain for 12 months with a possible extension of 6 months.

Nationals from Romania and Bulgaria who were regularly resident in Spain as of the 1st of January 2007 have been subject since the same date to the “Regimen Comunitario” without restrictions. Those who were not regularly resident on the 1st of January 2007, or those who, despite being regularly resident, were not in possess of a visa for work as employee of one year or more, have instead remained subject to the “Regimen General” for a temporary period of two years until the end of 2008 (the so-called “Moratoria”). In this latter case, the “Regimen General” applied temporarily to those wishing to work as employees but not to students or to self-employed. The moratorium probably fuelled the underground economy during the period of enforcement and contributed to the substantial increase in self-employment of Romanian and Bulgarian male workers, as will be shown in section five. The moratorium expired on the 1st of January 2009 and since then the temporary restrictions on Romanian and Bulgarian nationals have been
removed. Among the main motivations for not extending the moratorium, on the one hand the intention to discourage the growth of the underground economy probably played a role. On the other, most importantly, the ongoing Spanish economic crisis represented a loss of competitiveness with respect to the – so far – sustained growth experienced by Bulgaria and Romania, and given the importance of immigrants for the national economy, keeping the restrictions in place might have overly stimulated return migration.

Finally, the Spanish government has also recently approved a special program financing the voluntary return of immigrants to the country of origin, which applies to Bulgarian and Romanian nationals as well. The program targets immigrants at high risk of social vulnerability or social exclusion resident in Spain for at least six months, wishing to go back to their sending country. The program finances travel costs and eventual unexpected exceptional expenses occurred during the return travel. Further, it offers an amount of 50 Euros for each household member participating in the return travel, and establishes a subsidy for the re-integration of the beneficiaries in the country of origin of the amount of 400 Euros per person in the household up to a maximum of 1600 Euros per household (Ministerio de Trabajo y Inmigración, 2008a). At the time of leaving Spain, the beneficiaries of the program have to return their visa and they lose the eligibility to the benefits (e.g. health care) they were entitled to as regular residents.

3 Data and recent trends

3.1 Data availability and limitations

The main administrative data source on the presence of immigrants in Spain consists in the records of regular visas collected by the Ministry of Labour and Immigration (Ministerio de Trabajo y Inmigración). The data are accessible on the web site of the “Permanent Observatory on Migration” (Observatorio Permanente sobre la Inmigración), a governmental institution established in 2004 to collect and disseminate data and research on various aspect related to the immigration phenomenon in Spain.

The main survey-based data source is the longitudinal household survey “Encuesta sobre la población activa (EPA)” carried out by the National Statistical Institute (Instituto Nacional de Estadística, INE), which includes detailed information on demographic characteristics and economic activity of both natives and foreign-born residents.

An additional useful data source consists in the social security records of employed immigrants regularly paying social security contributions. In particular, a comparison between the data from social security records and the data on immigrants presence obtained from labour force surveys might provide an estimate of the number of immigrants working irregularly. With this respect, in fact, Pajares (2007) points out that while immigrants employed according to labour force survey data were 2.6 millions in 2006, social security registers for the same year reported the presence of 1.9 million of
workers, suggesting the presence of around 670.000 foreign immigrants employed in the shadow economy.

Finally, an extremely useful data source which will be used at length in the next sections is the recent cross-sectional survey (“Encuesta nacional de Inmigrantes”) realised in 2007 by the National Statistical Institute on a sample of around 15.000 foreigners representative of the immigrant population regularly resident in Spain (INE, 2008b). The survey includes comprehensive information on demographic characteristics, household characteristics, education, economic activity, occupational status, reasons for and timing of migration, and represents an ideal tool for studying the labour market integration of immigrants in Spain.

3.2 Immigration trends before and after the EU enlargement and main demographic characteristics of immigrants from New Member States and Candidate Countries

Spain experienced an impressive increase in immigration, in particular during the last five years, which contributed to the recent demographic expansion of the country as well as to the growth of its labour force and employment. The tables A1-A3 in the Appendix show the main trends in the foreign population resident in Spain in possess of a regular visa or authorization of stay (“certificado de registro” o “tarjeta de residencia”) between 1998 and 2007 by gender and nationality. The data on regular visas highlight that the major increase in immigrants’ presence in Spain occurred between 2001 and 2007. In 2007, following the huge regularizations of immigrants from Romania and Bulgaria, nationals from EU member states became the largest foreign community, overcoming for the first time the number of immigrants from Latin America, traditionally the leading group in the league table of foreign residents. Another massive increase in the number of foreign residents occurred in 2005 following a previous regularization, which involved around 570.000 among the 760.000 new residents registered that year.

Nationals from Romania, in particular, currently represent the largest community among the foreigners from EU countries, after their number rose of nearly 400.000 units between 2006 and 2007 only. Until end of 2007, they also represented the overall second most numerous nationality, with more than 600.000 residents, corresponding to 15.2% of the total foreign residents in Spain (following Morocco, 16%), the 37% of immigrants from European countries (against 20% the previous year), and to around 1.3% of the total Spanish population. Estimates from August 2008, report around 715.000 residents from Romania, which meanwhile have become the largest foreign community in Spain. Other relevant groups are nationals from Ecuador (10% of foreign residents), from Colombia (6.4%) and from the UK (5%). Immigrants from Bulgaria represent 7.6 % of the foreign population after an increase about 11 times between 2001 and 2007, and, according to the August 2008 estimates, they currently reached 143.000 units. The other most relevant nationalities from European countries are Poland (4.3%), and Ukraine (3.8%), while immigrants from former Yugoslavia form quite a small community in
comparison to the one present in other European destination countries (e.g. Italy, Germany or Austria).

It is worth pointing out that an important feature of the foreign presence in Spain is the relevant incidence of nationals from EU-15 countries, which has been growing particularly in the last five years. Nationals from the UK amount to around 200,000 units (a 2.7 times increase with respect to 1998, with 50,000 residents concentrated in the province of Alicante only), Italian residents to around 125,000 (a 4.7 times increase with respect to 1998), Portuguese to around 100,000, (2.4 times more than in 1998), and Germans to 90,000 (1.6 times more than in 1998). This presence reflects on the one hand increased migration from the EU “old” member states for work purposes (for instance in the sector of tourism) but most importantly an increase in immigration for residence purposes (e.g. investments in housing) in particular for individuals above working age (more than 50% of residents form the UK is aged 55 and above).

From a gender perspective, the immigration process from European countries has been quite gender-balanced, without substantial gender-specific differences across countries, as it has been observed for instance in Italy (where the huge increase in the number of foreign immigrants in recent years has been largely driven by the increase in female migrants in particular from Ukraine).

Immigrants from the New Member States and from Candidate Countries exhibit a higher concentration in the working age and in particular in prime-age groups (20-55), showing the prevalence of work-related purposes among the reasons for immigration (Table A7 in the Appendix). Immigrants from other EU member states (in particular former “old” member states) are instead concentrated as well in older age groups given the above-mentioned purposes of immigration for residence after retirement (through investment in housing). A different pattern is observable among immigrants from African and Asian countries, characterized by a higher incidence of dependent children.

As far as geographic concentration is concerned, immigrants in Spain are prevalently concentrated in the main cities (Madrid and Barcelona) and in the Eastern regions. As shown in Table A8 in the Appendix, immigrants from Romania represent the first most numerous nationality in the regions of Aragon, Asturias, Cantabria, Castilla La Mancha (where they represent the 40% of the total foreign population), Comunidad Valenciana, Madrid, País Vasco, and La Rioja. They represent the second largest nationality in Castilla-León and Extremadura, and the third largest group in Cataluña, while Bulgarians are the most relevant foreign nationality in Castilla-León. As from Table A9 in the Appendix, nationals from Romania are mostly concentrated in the regions of Madrid (23.2%), where their incidence is relatively higher than for the total immigrant population, in Andalucía (13%) and in Cataluña and the Comunidad Valenciana (12.4% and 14.4% respectively), where they are though relatively under-represented with respect to the total. Nationals from Bulgaria are instead mostly concentrated in Castilla-León (20.3%), in the Comunidad Valenciana (18.8%) and in the region of Madrid (17.5%).
4 The skill profile of immigrants from NMS-10 and NMS-2

According to OECD (2008b), in 2006, 50% of the Spanish adult population aged between 25 and 64 had obtained a lower secondary or lower education degree, 21% had achieved upper secondary education while 29% had obtained a tertiary-type of education degree. Although the OECD data are not directly comparable to the classification included in the “Encuesta nacional de Inmigrantes” which covers individuals aged 16 and above, they represent a useful reference when comparing the skill distribution of immigrants and natives.

Table A10 in the Appendix shows a detailed breakdown of the sample of the “Encuesta nacional de Inmigrantes” by nationality for immigrants from NMS-10, NMS-2 and CAND-6. Since for NMS-10 and CAND-6, only 251 and 31 observations respectively are available, we decided to carry out the analysis of the current and following section adopting a breakdown by nationality for NMS-2 only, considering NMS-10 at the aggregate level only, and leaving out CAND-6.

In general, the skill profile of immigrants from NMS-10, and especially of nationals from NMS-2, appears more skewed towards medium-low skills in comparison with the native population. The difference in the reference sample though is surely important for the result, but we probably can expect, for comparable samples, the difference in the incidence of tertiary educated to be not too different from that of natives at least for NMS-10 nationals and for Bulgarian women.

Table 3 shows that more than 20% among NMS-10 nationals possess a university degree (either first or second cycle), while nearly the 50% achieved upper secondary education and the share of those with lower secondary education or lower is around 25%. The skill distribution of nationals from NMS-2 looks even more skewed towards lower skill levels. In particular, the concentration of lower secondary or primary degrees is much higher among the NMS-2 (around 35% in both Bulgaria and Romania) than among the NMS-10, while the incidence of university educated is, overall, below 10% (nearly 14% for Bulgarian and nearly 9% for Romanian nationals). For both NMS-10 and NMS-2 nationals, women’s skill profile is more skewed towards higher skills, pushed by the larger proportion of the tertiary educated among females.
Table 3. The skill distribution of immigrants from NMS-10 and NMS-2, age group 16+.

<table>
<thead>
<tr>
<th></th>
<th>Tertiary</th>
<th>Upper Secondary</th>
<th>Lower secondary or primary</th>
<th>No education</th>
<th>No answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men and Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>22.0</td>
<td>49.3</td>
<td>23.8</td>
<td>2.5</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>9.8</td>
<td>47.8</td>
<td>36.3</td>
<td>2.2</td>
<td>3.8</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>13.6</td>
<td>43.0</td>
<td>35.0</td>
<td>3.9</td>
<td>4.5</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>8.9</td>
<td>49.0</td>
<td>36.7</td>
<td>1.8</td>
<td>3.7</td>
<td>100</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>19.4</td>
<td>49.4</td>
<td>25.4</td>
<td>4.6</td>
<td>1.2</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>7.2</td>
<td>48.5</td>
<td>38.2</td>
<td>3.1</td>
<td>3.0</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>6.7</td>
<td>45.4</td>
<td>40.8</td>
<td>5.3</td>
<td>1.9</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>7.2</td>
<td>49.3</td>
<td>37.6</td>
<td>2.6</td>
<td>3.3</td>
<td>100</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>25.2</td>
<td>49.0</td>
<td>21.9</td>
<td>1.0</td>
<td>2.9</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>12.7</td>
<td>47.1</td>
<td>34.2</td>
<td>1.2</td>
<td>4.8</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>21.2</td>
<td>40.5</td>
<td>28.6</td>
<td>2.4</td>
<td>7.3</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>10.7</td>
<td>48.6</td>
<td>35.6</td>
<td>1.0</td>
<td>4.2</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on "Encuesta nacional de inmigrantes" (INE, 2008b).

5 The labour market situation of immigrants from NMS-10 and NMS-2 and its implications for the national labour market.

The immigration phenomenon and the availability of individual microdata stimulated research on the effects of immigration on the Spanish economy and its impact on the national labour market (see Dolado and Vazquéz, 2008, for a comprehensive overview). The survey by Pajares (2007) offers an exhaustive review of many of these studies. The majority of the studies on the effects of immigration on the Spanish labour market is based on the national labour force survey “Encuesta de la Población Activa” (EPA). According to Alonso (2006), between 1995 and 2006, Spain experienced a growth of employment among the natives in the order of 4.2 million, mainly as consequence of the decrease in the number of unemployed and of the growth in female employment. During the same period, the contribution of the immigrants to employment growth has been of 2.2 million workers, adding to an overall employment increase of 6.4 millions. Employment growth among the immigrants has been particularly strong since 2000, contributing to half of the new 2.6 millions of jobs created between 2001 and 2005, as pointed out already in the first section. Fernandes and Heras (2006), show that the huge employment growth among immigrants did not imply a slowdown of employment growth for the natives. Their findings is supported by the evidence provided by Carrasco, Jimeno and Ortega (2008) who, by using individual
data on wages from the “Encuesta de Estructura Salarial” and applying the methodology introduced by Borjas (2003), show that migration had no significant impact on the wages and employment of the natives. Fernandez and Ortega (2008), analyzing the EPA data for the period 1995-2006, conclude that the Spanish labour market has been able to absorb the large immigration flows by allocating immigrants in temporary jobs for which they were overqualified. Further, immigrants played a key role in matching the national labour demand in some sectors (construction and services) where natives’ labour supply was low, contributing to the attenuation of wage pressures. Gonzalez and Ortega (2008) study the absorption of immigrants’ flows in Spanish regions using the Spanish labour force survey panel for the period 2001-2006. They find that the inflows of low-educated immigrants have been particularly high in the main immigrant-receiving regions, leading therefore to a large increase in the local unskilled employment share. The absorption of new unskilled labour though, did not occur through a change in the specialization of the destination regions, but rather through a change in the skill composition of the workforce at the industry level. In high-immigration regions in fact, the share of unskilled workers by industry grew with respect to low-immigration regions, while, interestingly, nominal wages have been growing at the same rate in both high and low immigration regions.

5.1 The economic activity of immigrants from NMS-10 and NMS-2.

The immigrant population in Spain shows in general a better labour market performance than the native population, and has been characterised by higher employment rates (Table 4) for both genders during the last five years, in particular in the case of non-EU nationals.

In order to analyse in greater depth the labour market performance of immigrants from NMS-10, NMS-2 and CAND-6, we rely on a recent survey (“Encuesta nacional de Inmigrantes”) realized in 2007 by the National Statistical Institute on a cross section of around 15.000 foreigners aged 16 and above, representative of the immigrant population regularly resident in Spain (INE, 2008b). The survey includes comprehensive information on demographic characteristics, household characteristics, education, economic activity, occupational status, reasons for and timing of migration. In particular, for selected labour market related variables, such as economic activity by occupation and sector, the information is available both for the last period of residence in the country of origin and for the current period of residence in Spain. Information on wages in the current job is also included in the survey but unfortunately, the number of missing data is considerable. A partial drawback of the sample is that, while being extremely useful for the purpose of the analysis of labour market performance and integration of immigrants as a whole, it contains only a small number of observations for the subgroups of nationalities whose incidence in the total immigrant population is lower.
Table 4. Employment rate by group of nationality and gender (age group 16+).

<table>
<thead>
<tr>
<th></th>
<th>Total Population (Spain)</th>
<th>Spanish population</th>
<th>Foreign population (EU)</th>
<th>Foreign population (non-EU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>48,1</td>
<td>_</td>
<td>63,5</td>
<td>51,6</td>
</tr>
<tr>
<td>2003</td>
<td>49,2</td>
<td>48,5</td>
<td>65,7</td>
<td>55,2</td>
</tr>
<tr>
<td>2004</td>
<td>50,2</td>
<td>49,4</td>
<td>67,2</td>
<td>57,3</td>
</tr>
<tr>
<td>2005</td>
<td>52,7</td>
<td>51,3</td>
<td>66,3</td>
<td>46,8</td>
</tr>
<tr>
<td>2006</td>
<td>53,7</td>
<td>51,9</td>
<td>68,3</td>
<td>52,5</td>
</tr>
<tr>
<td>2007</td>
<td>54,0</td>
<td>52,4</td>
<td>66,0</td>
<td>62,3</td>
</tr>
</tbody>
</table>

Men

| 2002  | 61,5                     | _                  | 75,7                    | 61,9                        |
| 2003  | 62,0                     | 61,1               | 77,8                    | 66,5                        |
| 2004  | 62,6                     | 61,6               | 78,8                    | 64,8                        |
| 2005  | 64,4                     | 63,1               | 76,5                    | 56,6                        |
| 2006  | 64,8                     | 63,1               | 78,6                    | 62,6                        |
| 2007  | 64,5                     | 63,1               | 75,3                    | 71,9                        |

Women

| 2002  | 35,5                     | _                  | 51,8                    | 41,0                        |
| 2003  | 37,1                     | 36,5               | 53,5                    | 43,3                        |
| 2004  | 38,6                     | 37,8               | 55,5                    | 49,4                        |
| 2005  | 41,5                     | 40,0               | 56,4                    | 37,8                        |
| 2006  | 43,0                     | 41,3               | 57,9                    | 41,0                        |
| 2007  | 43,9                     | 42,0               | 57,2                    | 52,6                        |

Source: Pajares (2007 and 2008), based on Spanish Labour Force Survey (EPA), data refer to the 3rd quarter of each year.

Table 5a shows that the employment performance of nationals from both the NMS-10 and NMS-2 is stronger in comparison with the total population. Nationals from Bulgaria and Romania exhibit employment rates well above the Lisbon target and high labour force participation. Nationals from NMS-10 display a slightly lower employment rate than nationals from NSM-2, but still well above the national average, while showing relatively higher inactivity rates for both men and women.

The comparison of Table 5a and 5b shows that the labour market performance of immigrants from both NMS-10 and NMS-2 improves in the destination country with respect to the country of origin, for both men and women. Nationals from Romania experience an impressive increase in the employment rate and a drastic reduction in the inactivity rate; a similar pattern, though smaller in magnitude, is observable for Bulgarian nationals who experience a larger drop in their unemployment rate, while for NMS-10 nationals, the improvement in the overall labour market situation is smoother.
Table 5a: Economic activity of immigrants from NMS-10 and NMS-2 in Spain, age group 16+.

<table>
<thead>
<tr>
<th></th>
<th>Working</th>
<th>Looking for job</th>
<th>Inactive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men and Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>67.0</td>
<td>11.9</td>
<td>21.1</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>75.0</td>
<td>14.5</td>
<td>10.5</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>74.7</td>
<td>15.4</td>
<td>9.9</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>75.3</td>
<td>14.1</td>
<td>10.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>75.4</td>
<td>6.4</td>
<td>18.2</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>82.7</td>
<td>12.7</td>
<td>4.6</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>85.4</td>
<td>10.6</td>
<td>4.1</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>82.1</td>
<td>13.1</td>
<td>4.7</td>
<td>100</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>56.8</td>
<td>18.6</td>
<td>24.7</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>66.6</td>
<td>16.3</td>
<td>17.2</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>63.1</td>
<td>20.6</td>
<td>16.3</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>67.4</td>
<td>15.3</td>
<td>17.4</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on “Encuesta nacional de inmigrantes” (INE, 2007b).

Tables 5a and 5b also show that both genders improve substantially their labour market condition in the destination country, but that at the same time a large gender gap persists among employment rates, in the same order of the employment rate gender gap existing in the total population (20%).
Table 5b: Economic activity of immigrants from NMS-10 and NMS-2 in the country of origin, age group 16+.

<table>
<thead>
<tr>
<th></th>
<th>Working</th>
<th>Looking for job</th>
<th>Inactive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men and Women</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>64.4</td>
<td>11.2</td>
<td>24.4</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>60.3</td>
<td>18.7</td>
<td>21.0</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>66.6</td>
<td>18.4</td>
<td>15.0</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>58.8</td>
<td>18.8</td>
<td>22.4</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>70.1</td>
<td>6.4</td>
<td>23.5</td>
<td>100</td>
</tr>
<tr>
<td>NMS-10</td>
<td>67.3</td>
<td>19.7</td>
<td>13.0</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>65.6</td>
<td>20.2</td>
<td>14.2</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>74.8</td>
<td>17.5</td>
<td>7.7</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>51.1</td>
<td>17.1</td>
<td>31.8</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>57.4</td>
<td>17.1</td>
<td>25.5</td>
<td>100</td>
</tr>
<tr>
<td>NMS-10</td>
<td>52.3</td>
<td>17.6</td>
<td>30.1</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>57.6</td>
<td>19.4</td>
<td>23.0</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>51.1</td>
<td>17.1</td>
<td>31.8</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: own elaborations based on “Encuesta nacional de inmigrantes” (INE, 2007b).

5.2 Incidence by economic sector, occupation, and type of job

In Spain, workers belong to different social security regimes according to the industry sector and the type of occupation. The four main regimes are the general one (“regimen general”), including most of the industry and services sectors employees; the “regimen agrario”, including workers employed in the agricultural sector, and the “regimen autonomo”, including the self-employed with the exception of domestic care workers, who belong instead to the regime “empleados de hogar”. The incidence of immigrant workers is highly concentrated in selected sectors of the economy. Pajares (2008) shows that at the beginning of 2008, for all social security regimes, the foreign employed were mostly concentrated in the construction sector (22.2% against 11.4% of the native workers), in tourism-related services (e.g. hotels, 13.3% against 5.6% of the natives) and in the sector of personal and domestic care (7.8% against 0.9% of the natives). In the same sectors, foreign workers represented 18.6%, 21.8% and 50.2% of the total pool of employed, respectively. Looking at the general social security regime only, the picture does not change substantially. In January 2008, immigrant workers under the “regimen general” were mostly concentrated in tourism-related services and in the construction sector, accounting for 25.7% and 20.5% of total foreign employment, respectively (24.4% and 19.7% in January 2007), and representing a stronger concentration with respect to January 2005 (17.3% and 11% respectively). Further, at
the beginning of 2007, 42% of foreign employed men under the “regimen general” were concentrated in the construction sector (against 21% of Spanish male workers), 15% in the remaining industry sectors (against 21% of the employed natives), 8% in the agricultural sector (against 5% of the natives) and 34% in the service sector (against 52% of the Spanish). Differences in the employment composition by sector among foreign and native women instead appear less sharp (Pajares 2007).

The survey “Encuesta nacional de inmigrantes” allows analysing in detail the composition of immigrants’ employment by sector and occupation for both NMS-10 and NMS-2 nationals. In particular, Tables 6a and 6b compare the distribution of immigrant workers across economic sectors in the country of origin and in Spain. According to the human capital transferability hypothesis, immigrants experience a decline in occupational status and a wage reduction at the arrival in the destination country since the human capital acquired in the country of origin is only partially transferable to the destination country (Chiswick, 1978, Borjas, 1994, and for an application to East-West Germany migration: Bauer and Zimmermann, 1999). As long as their permanence in the destination country increases, immigrants start investing in destination country-specific human capital and they can experience upward occupational mobility and positive wage growth. Amuedo-Dorantes and De La Rica (2008) using 2001 Census data and the 2002 “Encuesta sobre la estructura salarial” find evidence of occupational gaps for non-EU15, Latino and African immigrants compared to natives, but at the same time they show that occupational assimilation improves the longer the time of residence for all foreign groups (except for African immigrants).

The first prediction of the theory seems to find support in the data shown in Tables 6a-6b and 7a-7b. The employment composition by sector of immigrants from both NMS-2 countries, in fact, exhibits a dramatic shift from the non-construction industry sector to the construction sector, particularly for men. The non-construction industry sector in facts absorbs nearly 30% of the employed immigrants in the countries of origin against only 9% in Spain; the construction sector instead, absorbs around 30% of the employed from NMS-2, against only 16% in the countries of origin, as shown in Tables 6a and 6b. The shift observed for NMS-10 nationals is less dramatic and appears rather directed towards the non-construction industry sector and agriculture.

Looking at the breakdown of the two tables by gender, it is evident that the reallocation of workers in the destination country is occurring heavily in the construction sector for men (mostly in the case of NMS-2) and in the services sector (most probably personal and domestic care and hotel and restaurant services) for women.

In the case of immigrants from NMS-10, the reallocation towards the construction sector is smaller and compensated by a larger reallocation in the industry sector, probably given their relatively higher specialization for slightly more qualified jobs in the industry sector. In the case of nationals from Romania, their incidence in the construction sector in Spain is double (60%) if compared to the country of origin. As for women, nearly 90% for both NMS-10 and NMS-2 nationals are employed in the services sector in the destination country.
The comparison of employment composition by occupation in Spain and in the countries of origin as shown by Tables 7a and 7b confirm the existence of downward occupational mobility for immigrants for both NMS-10 and NMS-2. Nationals from NMS-2 seem to experience greater downward mobility compared to those from NMS-10, most probably since their skill profile is more skewed towards lower skills.

As far as NMS-10 nationals are concerned, the incidence of “elementary occupations” is more than double in Spain than in the countries of origin. Further, we observe a 10% increase in the share of “craft and related trades workers” in Spain, while the incidence of medium-high skilled occupations is substantially reduced, as in the case of “service and sales workers”, clerical workers, and, to a minor extent, professionals and technicians. As far as NMS-2 nationals are concerned, the concentration of workers from Bulgaria and Romania among “elementary occupations” increases dramatically in Spain, above 40%, against 16% registered in the countries of origin; besides, the share of “services and sales workers” together with that of medium-high skilled occupations (from clerks to managers) in the destination country shrinks substantially. The comparison of the distribution of employment by occupation by gender shows that women in both NMS-10 and NMS-2 experience a much stronger downward occupational mobility with respect to men, since the concentration of female workers in elementary occupations is as much as five times higher in the destination country than in the country of origin.

Finally, the analysis of immigrants’ employment by type of job reported in Tables 8a and 8b, reveals the effects of the restrictions (“Moratoria”) to the access to dependent employment for Romanian and Bulgarian nationals in place during 2007 (and 2008). Workers previously irregularly employed as employee in the underground economy, most probably converted themselves into regular self-employed, in particular men: during just one year, therefore, the share of the self-employed increased dramatically from 4.4% to over 26% of total employment among Romanian male workers and, to a smaller extent, from 5% to over 16% among Bulgarian employed men. Such increase probably reflects the incidence of some “fictitious” self-employment among Romanian and Bulgarian men, while the share of female self-employed has not changed substantially during 2007.
Table 6a: Employment composition of immigrants from NMS-10 and NMS-2 by sector in Spain, age group 16+.

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry (without construction)</th>
<th>Construction</th>
<th>Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men and women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>6.1</td>
<td>22.0</td>
<td>15.8</td>
<td>56</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>8.2</td>
<td>9.2</td>
<td>34.0</td>
<td>49</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>9.7</td>
<td>10.0</td>
<td>25.0</td>
<td>55</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>7.9</td>
<td>9.1</td>
<td>36.0</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>7.4</td>
<td>29.1</td>
<td>25.6</td>
<td>38</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>10.7</td>
<td>10.9</td>
<td>57.7</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>14.0</td>
<td>11.1</td>
<td>41.8</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>10.0</td>
<td>10.9</td>
<td>61.4</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>4.1</td>
<td>10.6</td>
<td>0.0</td>
<td>85</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td>4.7</td>
<td>6.9</td>
<td>0.4</td>
<td>88</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3.3</td>
<td>8.5</td>
<td>0.0</td>
<td>88</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>5.1</td>
<td>6.5</td>
<td>0.5</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on "Encuesta nacional de inmigrantes" (INE, 2008b).
Table 6b: Employment composition of immigrants from NMS-10 and NMS-2 by sector in the country of origin, age group 16+.

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry (without construction)</th>
<th>Construction</th>
<th>Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-10</strong></td>
<td>2.8</td>
<td>18.1</td>
<td>16.4</td>
<td>63</td>
<td>100</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>7.5</td>
<td>29.1</td>
<td>16.7</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7.0</td>
<td>28.6</td>
<td>12.0</td>
<td>52</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>7.7</td>
<td>29.2</td>
<td>17.9</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NMS-10</strong></td>
<td>2.8</td>
<td>18.2</td>
<td>28.7</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>7.2</td>
<td>27.3</td>
<td>28.4</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7.1</td>
<td>28.1</td>
<td>21.3</td>
<td>43</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>7.2</td>
<td>27.0</td>
<td>30.1</td>
<td>36</td>
<td>100</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NMS-10</strong></td>
<td>2.8</td>
<td>17.9</td>
<td>0.3</td>
<td>79</td>
<td>100</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>8.0</td>
<td>31.5</td>
<td>1.1</td>
<td>59</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>6.9</td>
<td>29.3</td>
<td>0.0</td>
<td>64</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>8.2</td>
<td>32.0</td>
<td>1.4</td>
<td>58</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on “Encuesta nacional de inmigrantes” (INE, 2008b).
Table 7a: Employment composition of immigrants from NMS-10 and NMS-2 by occupation in Spain, age group 16+.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>NMS-10</th>
<th>Bulgaria</th>
<th>Romania</th>
<th>NMS-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men and Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislators and managers</td>
<td>8.9</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Professionals</td>
<td>6.3</td>
<td>0.9</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Technicians</td>
<td>8.5</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Clerks</td>
<td>1.8</td>
<td>2.3</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Service and sales workers</td>
<td>10.1</td>
<td>10.9</td>
<td>12.9</td>
<td>12.6</td>
</tr>
<tr>
<td>Agricultural and fishery workers</td>
<td>0.4</td>
<td>3.2</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Craft and related trades workers</td>
<td>38.1</td>
<td>27.9</td>
<td>30.8</td>
<td>30.3</td>
</tr>
<tr>
<td>Plant and machine operators</td>
<td>2.0</td>
<td>10.8</td>
<td>7.2</td>
<td>7.9</td>
</tr>
<tr>
<td>Elementary Occupations</td>
<td>23.9</td>
<td>42.3</td>
<td>44.0</td>
<td>43.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislators and managers</td>
<td>11.7</td>
<td>0.4</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Professionals</td>
<td>5.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Technicians</td>
<td>8.5</td>
<td>1.2</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Clerks</td>
<td>0.6</td>
<td>0.6</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Service and sales workers</td>
<td>0.5</td>
<td>5.2</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>Agricultural and fishery workers</td>
<td>0.6</td>
<td>5.0</td>
<td>1.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Craft and related trades workers</td>
<td>57.9</td>
<td>42.1</td>
<td>50.7</td>
<td>49.1</td>
</tr>
<tr>
<td>Plant and machine operators</td>
<td>2.2</td>
<td>16.9</td>
<td>10.0</td>
<td>11.3</td>
</tr>
<tr>
<td>Elementary Occupations</td>
<td>12.4</td>
<td>27.9</td>
<td>30.3</td>
<td>29.9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislators and managers</td>
<td>4.3</td>
<td>0.8</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Professionals</td>
<td>7.3</td>
<td>1.1</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Technicians</td>
<td>8.4</td>
<td>1.0</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Clerks</td>
<td>3.8</td>
<td>4.8</td>
<td>3.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Service and sales workers</td>
<td>25.6</td>
<td>19.5</td>
<td>24.9</td>
<td>23.9</td>
</tr>
<tr>
<td>Agricultural and fishery workers</td>
<td>0.0</td>
<td>0.5</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Craft and related trades workers</td>
<td>6.1</td>
<td>6.7</td>
<td>2.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Plant and machine operators</td>
<td>1.9</td>
<td>1.7</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Elementary Occupations</td>
<td>42.6</td>
<td>63.6</td>
<td>63.2</td>
<td>63.3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on “Encuesta nacional de inmigrantes” (INE, 2008b).
Table 7b: Employment composition of immigrants from NMS-10 and NMS-2 by occupation in the country of origin, age group 16+.

<table>
<thead>
<tr>
<th></th>
<th>NMS-10</th>
<th>Bulgaria</th>
<th>Romania</th>
<th>NMS-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legislators and managers</strong></td>
<td>6.5</td>
<td>2.6</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Professionals</strong></td>
<td>10.8</td>
<td>4.5</td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Technicians</strong></td>
<td>10.4</td>
<td>3.6</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>Clerks</strong></td>
<td>5.2</td>
<td>7.8</td>
<td>5.2</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Service and sales workers</strong></td>
<td>20.2</td>
<td>20.9</td>
<td>19.3</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>Agricultural and fishery workers</strong></td>
<td>0.0</td>
<td>1.4</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Craft and related trades workers</strong></td>
<td>28.1</td>
<td>29.8</td>
<td>33.5</td>
<td>32.8</td>
</tr>
<tr>
<td><strong>Plant and machine operators</strong></td>
<td>8.9</td>
<td>12.2</td>
<td>12.8</td>
<td>12.7</td>
</tr>
<tr>
<td><strong>Elementary Occupations</strong></td>
<td>10.0</td>
<td>17.2</td>
<td>16.0</td>
<td>16.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Men**

<table>
<thead>
<tr>
<th></th>
<th>Men and Women</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legislators and managers</strong></td>
<td>10.0</td>
<td>2.9</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Professionals</strong></td>
<td>8.7</td>
<td>0.5</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Technicians</strong></td>
<td>8.9</td>
<td>4.1</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Clerks</strong></td>
<td>1.9</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Service and sales workers</strong></td>
<td>5.9</td>
<td>14.5</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Agricultural and fishery workers</strong></td>
<td>0.0</td>
<td>1.2</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Craft and related trades workers</strong></td>
<td>45.2</td>
<td>38.1</td>
<td>44.9</td>
</tr>
<tr>
<td><strong>Plant and machine operators</strong></td>
<td>8.0</td>
<td>15.5</td>
<td>16.1</td>
</tr>
<tr>
<td><strong>Elementary Occupations</strong></td>
<td>11.6</td>
<td>20.9</td>
<td>17.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Women**

<table>
<thead>
<tr>
<th></th>
<th>Men and Women</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legislators and managers</strong></td>
<td>1.9</td>
<td>2.2</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Professionals</strong></td>
<td>13.6</td>
<td>9.5</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Technicians</strong></td>
<td>12.5</td>
<td>3.0</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Clerks</strong></td>
<td>9.4</td>
<td>15.8</td>
<td>9.9</td>
</tr>
<tr>
<td><strong>Service and sales workers</strong></td>
<td>39.1</td>
<td>28.9</td>
<td>31.7</td>
</tr>
<tr>
<td><strong>Agricultural and fishery workers</strong></td>
<td>0.0</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Craft and related trades workers</strong></td>
<td>5.6</td>
<td>18.9</td>
<td>17.8</td>
</tr>
<tr>
<td><strong>Plant and machine operators</strong></td>
<td>10.1</td>
<td>7.9</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Elementary Occupations</strong></td>
<td>7.8</td>
<td>12.2</td>
<td>13.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on “Encuesta nacional de inmigrantes” (INE, 2008b).
### Table 8a: Employment composition by type of employment and gender (January 2007)

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th></th>
<th></th>
<th>Men</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
<td>Self-employed</td>
<td></td>
<td>Employees</td>
<td>Self-employed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>EU</td>
<td>113,909</td>
<td>81,5</td>
<td>25,925</td>
<td>18,5</td>
<td>179,17</td>
<td>74,9</td>
</tr>
<tr>
<td>Non-EU European countries</td>
<td>101,418</td>
<td>82,5</td>
<td>21,497</td>
<td>17,5</td>
<td>158,612</td>
<td>95,2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>15,181</td>
<td>83,4</td>
<td>3,016</td>
<td>16,6</td>
<td>27,466</td>
<td>95,0</td>
</tr>
<tr>
<td>Romania</td>
<td>58,105</td>
<td>82,3</td>
<td>12,508</td>
<td>17,7</td>
<td>100,596</td>
<td>95,6</td>
</tr>
<tr>
<td>Ukraine</td>
<td>15,47</td>
<td>80,9</td>
<td>3,661</td>
<td>19,1</td>
<td>19,79</td>
<td>96,7</td>
</tr>
<tr>
<td>Total</td>
<td>639,588</td>
<td>85,4</td>
<td>109,6</td>
<td>14,6</td>
<td>1,059,591</td>
<td>89,7</td>
</tr>
</tbody>
</table>

Source: Pajares (2007), based on social security records.

### Table 8b: Employment composition by type of employment and gender (December 2007)

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th></th>
<th></th>
<th>Men</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
<td>Self-employed</td>
<td></td>
<td>Employees</td>
<td>Self-employed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>16,109</td>
<td>84,9</td>
<td>2,860</td>
<td>15,1</td>
<td>27,236</td>
<td>83,4</td>
</tr>
<tr>
<td>Romania</td>
<td>68,977</td>
<td>84</td>
<td>13,154</td>
<td>16</td>
<td>109,209</td>
<td>73,6</td>
</tr>
<tr>
<td>Ukraine</td>
<td>15,551</td>
<td>81,3</td>
<td>3,567</td>
<td>18,7</td>
<td>18,932</td>
<td>94,9</td>
</tr>
<tr>
<td>Total</td>
<td>673,689</td>
<td>86,6</td>
<td>104,649</td>
<td>13,4</td>
<td>1,034,839</td>
<td>86</td>
</tr>
</tbody>
</table>

Source: Pajares (2008), based on social security records.
6 Conclusions

The existing recent literature on the effects of migration on the Spanish economy has shown that migration had no significant impact on the wages and employment of the natives. This study has documented specifically the growing importance for the Spanish labour market of immigration from the New Member States, in particular from Romania and Bulgaria in the years following the EU enlargement. In 2007, immigrants from NMS-8 and NMS-2 with regular visa amounted to more than 840,000 units corresponding to 21% of the total number of regular visa holders (15% of which from Romania). By using a detailed survey realised on a representative sample of the immigrant population, we have shown that in Spain, immigrants from both NMS-10 and NMS-2 substantially improve their labour market situation in comparison with the country of origin. Though, both NMS-2 and, to a minor extent, NMS-10, experience downward occupational mobility in the destination country: in the case of men, the reallocation occurs heavily towards the construction sector, in particular for Romanian nationals, while in the case of women is entirely directed towards the services sector. These findings have important implications in the context of the current national economic slowdown in particular in the construction sector, were substantial dismissals might occur affecting considerably the employment perspectives of immigrants workers.
## APPENDIX

### Table A1: Immigrants with regular visa ("tarjeta de residencia") by gender and nationality: Men and Women (1998-2007)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>755</td>
<td>856</td>
<td>1264</td>
<td>1351</td>
<td>1615</td>
<td>1800</td>
<td>2166</td>
<td>3068</td>
<td>4040</td>
<td>6212</td>
</tr>
<tr>
<td>Estonia</td>
<td>20</td>
<td>30</td>
<td>52</td>
<td>85</td>
<td>99</td>
<td>134</td>
<td>210</td>
<td>381</td>
<td>505</td>
<td>846</td>
</tr>
<tr>
<td>Hungary</td>
<td>360</td>
<td>424</td>
<td>548</td>
<td>651</td>
<td>840</td>
<td>940</td>
<td>1255</td>
<td>1934</td>
<td>2950</td>
<td>5318</td>
</tr>
<tr>
<td>Latvia</td>
<td>46</td>
<td>55</td>
<td>108</td>
<td>132</td>
<td>197</td>
<td>256</td>
<td>499</td>
<td>900</td>
<td>1276</td>
<td>1898</td>
</tr>
<tr>
<td>Lithuania</td>
<td>87</td>
<td>109</td>
<td>436</td>
<td>1813</td>
<td>1836</td>
<td>2796</td>
<td>6338</td>
<td>11296</td>
<td>13810</td>
<td>17740</td>
</tr>
<tr>
<td>Poland</td>
<td>6651</td>
<td>6517</td>
<td>8143</td>
<td>11342</td>
<td>15814</td>
<td>23617</td>
<td>34600</td>
<td>48031</td>
<td>70850</td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>258</td>
<td>361</td>
<td>549</td>
<td>873</td>
<td>1099</td>
<td>256</td>
<td>499</td>
<td>900</td>
<td>1276</td>
<td>1898</td>
</tr>
<tr>
<td>Slovenia</td>
<td>62</td>
<td>87</td>
<td>119</td>
<td>134</td>
<td>168</td>
<td>156</td>
<td>206</td>
<td>266</td>
<td>380</td>
<td>625</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2336</td>
<td>3013</td>
<td>5244</td>
<td>9953</td>
<td>15495</td>
<td>24369</td>
<td>32244</td>
<td>56329</td>
<td>60174</td>
<td>127058</td>
</tr>
<tr>
<td>Romania</td>
<td>3543</td>
<td>5082</td>
<td>10983</td>
<td>24856</td>
<td>33705</td>
<td>54688</td>
<td>83372</td>
<td>192134</td>
<td>211325</td>
<td>603889</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>111</td>
<td>204</td>
<td>240</td>
<td>267</td>
<td>341</td>
<td>433</td>
<td>545</td>
<td>739</td>
<td>939</td>
<td>1154</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>824</td>
<td>929</td>
<td>889</td>
<td>877</td>
<td>1021</td>
<td>1099</td>
<td>1419</td>
<td>1988</td>
<td>2947</td>
<td>4062</td>
</tr>
<tr>
<td>Croatia</td>
<td>392</td>
<td>448</td>
<td>595</td>
<td>599</td>
<td>747</td>
<td>801</td>
<td>879</td>
<td>976</td>
<td>1052</td>
<td>1153</td>
</tr>
<tr>
<td>Macedonia</td>
<td>36</td>
<td>58</td>
<td>93</td>
<td>117</td>
<td>151</td>
<td>181</td>
<td>246</td>
<td>281</td>
<td>343</td>
<td></td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>1480</td>
<td>2230</td>
<td>1756</td>
<td>1723</td>
<td>1855</td>
<td>2039</td>
<td>2294</td>
<td>2574</td>
<td>2666</td>
<td>2991</td>
</tr>
<tr>
<td>Turkey</td>
<td>454</td>
<td>498</td>
<td>491</td>
<td>512</td>
<td>598</td>
<td>651</td>
<td>811</td>
<td>970</td>
<td>1104</td>
<td>1377</td>
</tr>
<tr>
<td><strong>Other CEEC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bielorussia</td>
<td>83</td>
<td>173</td>
<td>254</td>
<td>425</td>
<td>629</td>
<td>837</td>
<td>1113</td>
<td>1932</td>
<td>2173</td>
<td>2611</td>
</tr>
<tr>
<td>Moldova</td>
<td>44</td>
<td>116</td>
<td>596</td>
<td>1100</td>
<td>1764</td>
<td>2915</td>
<td>4153</td>
<td>7355</td>
<td>8776</td>
<td>11551</td>
</tr>
<tr>
<td>Russia</td>
<td>3312</td>
<td>3964</td>
<td>5550</td>
<td>7543</td>
<td>9448</td>
<td>12087</td>
<td>14233</td>
<td>24497</td>
<td>29297</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>599</td>
<td>1077</td>
<td>3537</td>
<td>9104</td>
<td>14861</td>
<td>21579</td>
<td>27461</td>
<td>49812</td>
<td>52760</td>
<td>62409</td>
</tr>
<tr>
<td><strong>NMS-8</strong></td>
<td>8239</td>
<td>8439</td>
<td>11219</td>
<td>16381</td>
<td>18671</td>
<td>23315</td>
<td>36279</td>
<td>55392</td>
<td>75054</td>
<td>109681</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>5879</td>
<td>8095</td>
<td>16227</td>
<td>34809</td>
<td>49200</td>
<td>79057</td>
<td>115616</td>
<td>248463</td>
<td>271499</td>
<td>730947</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td>3297</td>
<td>4367</td>
<td>4064</td>
<td>4195</td>
<td>4713</td>
<td>5164</td>
<td>5993</td>
<td>6815</td>
<td>7510</td>
<td>8524</td>
</tr>
<tr>
<td>EU</td>
<td>322336</td>
<td>342978</td>
<td>345722</td>
<td>389879</td>
<td>438729</td>
<td>517313</td>
<td>614491</td>
<td>817747</td>
<td>932503</td>
<td>1546309</td>
</tr>
<tr>
<td>Europe-Total</td>
<td>330221</td>
<td>352974</td>
<td>360007</td>
<td>412522</td>
<td>470432</td>
<td>560200</td>
<td>667775</td>
<td>906461</td>
<td>1028678</td>
<td>1661245</td>
</tr>
<tr>
<td><strong>Africa</strong></td>
<td>179487</td>
<td>213012</td>
<td>261385</td>
<td>304149</td>
<td>366518</td>
<td>432662</td>
<td>498507</td>
<td>649251</td>
<td>709174</td>
<td>841211</td>
</tr>
<tr>
<td>North America</td>
<td>16997</td>
<td>17138</td>
<td>15020</td>
<td>15020</td>
<td>15774</td>
<td>16163</td>
<td>16964</td>
<td>17052</td>
<td>18109</td>
<td>19256</td>
</tr>
<tr>
<td>Latin America</td>
<td>130203</td>
<td>149571</td>
<td>184944</td>
<td>283778</td>
<td>364569</td>
<td>514485</td>
<td>649122</td>
<td>986178</td>
<td>1064916</td>
<td>1215351</td>
</tr>
<tr>
<td>Asia</td>
<td>61021</td>
<td>66922</td>
<td>72445</td>
<td>91552</td>
<td>104665</td>
<td>121455</td>
<td>142762</td>
<td>177423</td>
<td>197965</td>
<td>238770</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>719647</td>
<td>801329</td>
<td>695720</td>
<td>1109060</td>
<td>1324001</td>
<td>1647011</td>
<td>1977291</td>
<td>2738932</td>
<td>3021808</td>
<td>3979014</td>
</tr>
</tbody>
</table>

Source: Anuario Estadístico de Inmigración (2007), Ministerio de Trabajo y Inmigración, Observatorio Permanente de la Inmigración.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>363</td>
<td>413</td>
<td>569</td>
<td>579</td>
<td>723</td>
<td>747</td>
<td>901</td>
<td>1247</td>
<td>1690</td>
<td>2729</td>
</tr>
<tr>
<td>Estonia</td>
<td>4</td>
<td>8</td>
<td>16</td>
<td>35</td>
<td>31</td>
<td>45</td>
<td>78</td>
<td>147</td>
<td>187</td>
<td>310</td>
</tr>
<tr>
<td>Hungary</td>
<td>146</td>
<td>157</td>
<td>211</td>
<td>261</td>
<td>353</td>
<td>429</td>
<td>564</td>
<td>857</td>
<td>1376</td>
<td>2703</td>
</tr>
<tr>
<td>Latvia</td>
<td>19</td>
<td>22</td>
<td>52</td>
<td>61</td>
<td>91</td>
<td>111</td>
<td>187</td>
<td>327</td>
<td>480</td>
<td>766</td>
</tr>
<tr>
<td>Lithuania</td>
<td>36</td>
<td>44</td>
<td>254</td>
<td>1098</td>
<td>1014</td>
<td>1487</td>
<td>3189</td>
<td>5819</td>
<td>7221</td>
<td>9409</td>
</tr>
<tr>
<td>Poland</td>
<td>3482</td>
<td>3319</td>
<td>4208</td>
<td>5981</td>
<td>6882</td>
<td>8587</td>
<td>12936</td>
<td>19062</td>
<td>26727</td>
<td>39662</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>137</td>
<td>198</td>
<td>272</td>
<td>439</td>
<td>553</td>
<td>691</td>
<td>979</td>
<td>1408</td>
<td>2027</td>
<td>3107</td>
</tr>
<tr>
<td>Slovenia</td>
<td>32</td>
<td>41</td>
<td>46</td>
<td>61</td>
<td>87</td>
<td>74</td>
<td>121</td>
<td>146</td>
<td>210</td>
<td>337</td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1143</td>
<td>1558</td>
<td>3062</td>
<td>6199</td>
<td>9483</td>
<td>14574</td>
<td>18989</td>
<td>32289</td>
<td>34424</td>
<td>70531</td>
</tr>
<tr>
<td>Romania</td>
<td>1918</td>
<td>2780</td>
<td>6920</td>
<td>16081</td>
<td>21502</td>
<td>33873</td>
<td>49102</td>
<td>107685</td>
<td>118682</td>
<td>336560</td>
</tr>
<tr>
<td>CAND-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>59</td>
<td>111</td>
<td>135</td>
<td>156</td>
<td>197</td>
<td>255</td>
<td>306</td>
<td>437</td>
<td>546</td>
<td>698</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>353</td>
<td>417</td>
<td>393</td>
<td>401</td>
<td>478</td>
<td>509</td>
<td>635</td>
<td>639</td>
<td>757</td>
<td>765</td>
</tr>
<tr>
<td>Croatia</td>
<td>198</td>
<td>235</td>
<td>314</td>
<td>328</td>
<td>418</td>
<td>430</td>
<td>486</td>
<td>534</td>
<td>602</td>
<td>635</td>
</tr>
<tr>
<td>Macedonia</td>
<td>28</td>
<td>44</td>
<td>61</td>
<td>78</td>
<td>99</td>
<td>118</td>
<td>125</td>
<td>158</td>
<td>173</td>
<td>205</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>730</td>
<td>1107</td>
<td>912</td>
<td>912</td>
<td>986</td>
<td>1103</td>
<td>1257</td>
<td>1416</td>
<td>1449</td>
<td>1623</td>
</tr>
<tr>
<td>Turkey</td>
<td>311</td>
<td>340</td>
<td>328</td>
<td>437</td>
<td>407</td>
<td>433</td>
<td>526</td>
<td>663</td>
<td>770</td>
<td>955</td>
</tr>
<tr>
<td>Other CEEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bielorussia</td>
<td>19</td>
<td>52</td>
<td>68</td>
<td>153</td>
<td>240</td>
<td>295</td>
<td>378</td>
<td>700</td>
<td>775</td>
<td>942</td>
</tr>
<tr>
<td>Moldova</td>
<td>19</td>
<td>63</td>
<td>374</td>
<td>643</td>
<td>1030</td>
<td>1607</td>
<td>2213</td>
<td>4144</td>
<td>4765</td>
<td>6158</td>
</tr>
<tr>
<td>Russia</td>
<td>1261</td>
<td>1522</td>
<td>2190</td>
<td>2855</td>
<td>3665</td>
<td>4456</td>
<td>4963</td>
<td>7035</td>
<td>7693</td>
<td>9206</td>
</tr>
<tr>
<td>Ukraine</td>
<td>220</td>
<td>421</td>
<td>1750</td>
<td>4868</td>
<td>8140</td>
<td>11253</td>
<td>13710</td>
<td>24088</td>
<td>25228</td>
<td>29960</td>
</tr>
<tr>
<td>NMS-8</td>
<td>4219</td>
<td>4202</td>
<td>5628</td>
<td>8515</td>
<td>9734</td>
<td>12171</td>
<td>18955</td>
<td>29013</td>
<td>39918</td>
<td>59023</td>
</tr>
<tr>
<td>NMS-2</td>
<td>3061</td>
<td>4338</td>
<td>9982</td>
<td>22280</td>
<td>30985</td>
<td>48447</td>
<td>68091</td>
<td>139974</td>
<td>153106</td>
<td>407091</td>
</tr>
<tr>
<td>CAND-6</td>
<td>1679</td>
<td>2254</td>
<td>2143</td>
<td>2312</td>
<td>2585</td>
<td>2848</td>
<td>3335</td>
<td>3847</td>
<td>4297</td>
<td>4881</td>
</tr>
<tr>
<td>EU</td>
<td>156452</td>
<td>170389</td>
<td>175774</td>
<td>203340</td>
<td>231733</td>
<td>276495</td>
<td>329615</td>
<td>441251</td>
<td>505703</td>
<td>847746</td>
</tr>
<tr>
<td>Europe-Total</td>
<td>159915</td>
<td>174862</td>
<td>182450</td>
<td>214318</td>
<td>247546</td>
<td>297119</td>
<td>354395</td>
<td>481280</td>
<td>548710</td>
<td>899183</td>
</tr>
<tr>
<td>Africa</td>
<td>116964</td>
<td>138946</td>
<td>177209</td>
<td>206890</td>
<td>251051</td>
<td>291642</td>
<td>326268</td>
<td>438577</td>
<td>471477</td>
<td>547373</td>
</tr>
<tr>
<td>North America</td>
<td>8218</td>
<td>8415</td>
<td>7567</td>
<td>7543</td>
<td>8108</td>
<td>8328</td>
<td>8678</td>
<td>8632</td>
<td>9229</td>
<td>9802</td>
</tr>
<tr>
<td>Latin America</td>
<td>43168</td>
<td>51248</td>
<td>68735</td>
<td>119560</td>
<td>158006</td>
<td>233955</td>
<td>294797</td>
<td>450219</td>
<td>487193</td>
<td>563368</td>
</tr>
<tr>
<td>Asia</td>
<td>30731</td>
<td>34393</td>
<td>40130</td>
<td>54513</td>
<td>62193</td>
<td>72167</td>
<td>82616</td>
<td>107321</td>
<td>118377</td>
<td>146050</td>
</tr>
<tr>
<td>TOTAL</td>
<td>359899</td>
<td>408772</td>
<td>477155</td>
<td>606018</td>
<td>728019</td>
<td>904331</td>
<td>1067958</td>
<td>1487446</td>
<td>1636653</td>
<td>2162190</td>
</tr>
</tbody>
</table>

### Table A3: Immigrants with regular visa (“tarjeta de residencia”) by gender and nationality: Women (1998-2007)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>368</td>
<td>419</td>
<td>671</td>
<td>756</td>
<td>882</td>
<td>1046</td>
<td>1264</td>
<td>1820</td>
<td>2349</td>
<td>3482</td>
</tr>
<tr>
<td>Estonia</td>
<td>15</td>
<td>21</td>
<td>35</td>
<td>50</td>
<td>68</td>
<td>89</td>
<td>132</td>
<td>234</td>
<td>318</td>
<td>536</td>
</tr>
<tr>
<td>Hungary</td>
<td>204</td>
<td>263</td>
<td>333</td>
<td>387</td>
<td>485</td>
<td>509</td>
<td>690</td>
<td>1077</td>
<td>1574</td>
<td>2615</td>
</tr>
<tr>
<td>Latvia</td>
<td>26</td>
<td>33</td>
<td>56</td>
<td>71</td>
<td>106</td>
<td>145</td>
<td>312</td>
<td>573</td>
<td>796</td>
<td>1132</td>
</tr>
<tr>
<td>Lithuania</td>
<td>47</td>
<td>65</td>
<td>182</td>
<td>214</td>
<td>222</td>
<td>1309</td>
<td>3149</td>
<td>5477</td>
<td>6589</td>
<td>8331</td>
</tr>
<tr>
<td>Poland</td>
<td>2926</td>
<td>3066</td>
<td>3881</td>
<td>5270</td>
<td>5908</td>
<td>7211</td>
<td>10668</td>
<td>15536</td>
<td>21301</td>
<td>31186</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>110</td>
<td>152</td>
<td>267</td>
<td>428</td>
<td>543</td>
<td>725</td>
<td>1008</td>
<td>1539</td>
<td>2035</td>
<td>3085</td>
</tr>
<tr>
<td>Slovenia</td>
<td>29</td>
<td>45</td>
<td>70</td>
<td>71</td>
<td>79</td>
<td>80</td>
<td>84</td>
<td>120</td>
<td>170</td>
<td>288</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1108</td>
<td>1416</td>
<td>2164</td>
<td>3744</td>
<td>6005</td>
<td>9788</td>
<td>13251</td>
<td>24040</td>
<td>25750</td>
<td>56527</td>
</tr>
<tr>
<td>Romania</td>
<td>1495</td>
<td>2240</td>
<td>4012</td>
<td>8728</td>
<td>12178</td>
<td>20798</td>
<td>34260</td>
<td>84447</td>
<td>92642</td>
<td>267327</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>49</td>
<td>93</td>
<td>105</td>
<td>111</td>
<td>144</td>
<td>178</td>
<td>239</td>
<td>302</td>
<td>393</td>
<td>456</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>402</td>
<td>470</td>
<td>473</td>
<td>460</td>
<td>532</td>
<td>543</td>
<td>621</td>
<td>669</td>
<td>710</td>
<td>741</td>
</tr>
<tr>
<td>Croatia</td>
<td>178</td>
<td>205</td>
<td>278</td>
<td>269</td>
<td>326</td>
<td>369</td>
<td>391</td>
<td>441</td>
<td>450</td>
<td>518</td>
</tr>
<tr>
<td>Macedonia</td>
<td>8</td>
<td>14</td>
<td>32</td>
<td>39</td>
<td>52</td>
<td>63</td>
<td>78</td>
<td>88</td>
<td>108</td>
<td>138</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>672</td>
<td>1081</td>
<td>820</td>
<td>792</td>
<td>859</td>
<td>929</td>
<td>1033</td>
<td>1155</td>
<td>1217</td>
<td>1368</td>
</tr>
<tr>
<td>Turkey</td>
<td>124</td>
<td>142</td>
<td>152</td>
<td>169</td>
<td>187</td>
<td>215</td>
<td>283</td>
<td>306</td>
<td>334</td>
<td>422</td>
</tr>
<tr>
<td><strong>Other CEEC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bielorussia</td>
<td>58</td>
<td>118</td>
<td>183</td>
<td>272</td>
<td>389</td>
<td>542</td>
<td>735</td>
<td>1232</td>
<td>1398</td>
<td>1669</td>
</tr>
<tr>
<td>Moldova</td>
<td>23</td>
<td>51</td>
<td>220</td>
<td>456</td>
<td>734</td>
<td>1308</td>
<td>1940</td>
<td>3391</td>
<td>4011</td>
<td>5393</td>
</tr>
<tr>
<td>Russia</td>
<td>1922</td>
<td>2355</td>
<td>3321</td>
<td>4665</td>
<td>5773</td>
<td>7626</td>
<td>9266</td>
<td>15186</td>
<td>16802</td>
<td>20090</td>
</tr>
<tr>
<td>Ukraine</td>
<td>361</td>
<td>645</td>
<td>1781</td>
<td>4231</td>
<td>6717</td>
<td>10324</td>
<td>13749</td>
<td>25724</td>
<td>27532</td>
<td>32449</td>
</tr>
<tr>
<td><strong>NMS-8</strong></td>
<td>3725</td>
<td>4084</td>
<td>5495</td>
<td>7747</td>
<td>8893</td>
<td>11114</td>
<td>17307</td>
<td>26376</td>
<td>35132</td>
<td>50655</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>2603</td>
<td>3656</td>
<td>6176</td>
<td>12472</td>
<td>18183</td>
<td>30586</td>
<td>47511</td>
<td>108487</td>
<td>118392</td>
<td>323854</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td>1433</td>
<td>2005</td>
<td>1860</td>
<td>1840</td>
<td>2100</td>
<td>2297</td>
<td>2645</td>
<td>2961</td>
<td>3212</td>
<td>3643</td>
</tr>
<tr>
<td><strong>EU</strong></td>
<td>155881</td>
<td>164749</td>
<td>164479</td>
<td>182547</td>
<td>204294</td>
<td>239008</td>
<td>283660</td>
<td>375893</td>
<td>426568</td>
<td>696454</td>
</tr>
<tr>
<td>Europe-Total</td>
<td>159949</td>
<td>170055</td>
<td>171974</td>
<td>194137</td>
<td>220140</td>
<td>261242</td>
<td>312145</td>
<td>424569</td>
<td>479733</td>
<td>761952</td>
</tr>
<tr>
<td><strong>Africa</strong></td>
<td>55526</td>
<td>69535</td>
<td>81396</td>
<td>93173</td>
<td>114139</td>
<td>140120</td>
<td>171761</td>
<td>210473</td>
<td>237561</td>
<td>293709</td>
</tr>
<tr>
<td>North America</td>
<td>8191</td>
<td>8319</td>
<td>7231</td>
<td>7349</td>
<td>7599</td>
<td>7792</td>
<td>8258</td>
<td>8403</td>
<td>8674</td>
<td>9449</td>
</tr>
<tr>
<td>Latin America</td>
<td>82102</td>
<td>95175</td>
<td>114443</td>
<td>162978</td>
<td>205849</td>
<td>280163</td>
<td>354134</td>
<td>535882</td>
<td>577688</td>
<td>651955</td>
</tr>
<tr>
<td><strong>Asia</strong></td>
<td>28165</td>
<td>31319</td>
<td>31669</td>
<td>36520</td>
<td>42699</td>
<td>49109</td>
<td>60051</td>
<td>70686</td>
<td>79574</td>
<td>98107</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>334612</td>
<td>375078</td>
<td>407423</td>
<td>494843</td>
<td>590629</td>
<td>739153</td>
<td>907129</td>
<td>1250371</td>
<td>1384541</td>
<td>1816392</td>
</tr>
</tbody>
</table>

Table A4: Foreign-born population (Spanish nationals and non-Spanish nationals) by country of birth and gender: Men and Women

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1550</td>
<td>4677</td>
<td>5654</td>
<td>6916</td>
</tr>
<tr>
<td>Estonia</td>
<td>663</td>
<td>788</td>
<td>966</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>3077</td>
<td>3862</td>
<td>5061</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>1440</td>
<td>1741</td>
<td>2089</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>4230</td>
<td>12234</td>
<td>15200</td>
<td>17881</td>
</tr>
<tr>
<td>Poland</td>
<td>16236</td>
<td>35757</td>
<td>44339</td>
<td>59425</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>3511</td>
<td>4428</td>
<td>5783</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>516</td>
<td>617</td>
<td>779</td>
<td></td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>25588</td>
<td>92971</td>
<td>100763</td>
<td>120151</td>
</tr>
<tr>
<td>Romania</td>
<td>56873</td>
<td>312099</td>
<td>397270</td>
<td>510983</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>1315</td>
<td>2038</td>
<td>1995</td>
<td>1925</td>
</tr>
<tr>
<td>Croatia</td>
<td>1658</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macedonia</td>
<td>413</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>4392</td>
<td>4160</td>
<td>3826</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>2386</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other CEEC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bielorussia</td>
<td>2203</td>
<td>9094</td>
<td>11034</td>
<td>12459</td>
</tr>
<tr>
<td>Russia</td>
<td>10555</td>
<td>42585</td>
<td>47515</td>
<td>48634</td>
</tr>
<tr>
<td>Ukraine</td>
<td>21507</td>
<td>65262</td>
<td>69359</td>
<td>69376</td>
</tr>
<tr>
<td><strong>NMS-8</strong></td>
<td>22016</td>
<td>61875</td>
<td>76629</td>
<td>98700</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>82461</td>
<td>405070</td>
<td>498033</td>
<td>631134</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>357979</td>
<td>945024</td>
<td>1068600</td>
<td>1821925</td>
</tr>
<tr>
<td>Europe-Total</td>
<td>526901</td>
<td>1573782</td>
<td>1808084</td>
<td>2070803</td>
</tr>
<tr>
<td>Africa</td>
<td>329695</td>
<td>774240</td>
<td>842894</td>
<td>860213</td>
</tr>
<tr>
<td>America</td>
<td>619230</td>
<td>1832144</td>
<td>1940046</td>
<td>2066368</td>
</tr>
<tr>
<td>Asia</td>
<td>71414</td>
<td>206326</td>
<td>240368</td>
<td>246269</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1548941</td>
<td>4392484</td>
<td>4837622</td>
<td>5249993</td>
</tr>
</tbody>
</table>

Table A5: Foreign-born population (Spanish nationals and non-Spanish nationals) by country of birth and gender: Men

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>569</td>
<td>1840</td>
<td>2278</td>
<td>2943</td>
</tr>
<tr>
<td>Estonia</td>
<td>286</td>
<td>345</td>
<td>413</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1269</td>
<td>1657</td>
<td>2305</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>620</td>
<td>751</td>
<td>886</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>2185</td>
<td>6310</td>
<td>7956</td>
<td>9373</td>
</tr>
<tr>
<td>Poland</td>
<td>7931</td>
<td>18086</td>
<td>22924</td>
<td>31761</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>1605</td>
<td>2046</td>
<td>2817</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>249</td>
<td>296</td>
<td>387</td>
<td></td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>14319</td>
<td>52052</td>
<td>55394</td>
<td>65292</td>
</tr>
<tr>
<td>Romania</td>
<td>33657</td>
<td>170554</td>
<td>212534</td>
<td>269650</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>664</td>
<td>1062</td>
<td>1042</td>
<td>1032</td>
</tr>
<tr>
<td>Croatia</td>
<td>879</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macedonia</td>
<td>236</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2307</td>
<td>2201</td>
<td>1992</td>
<td>1613</td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other CEEC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belorussia</td>
<td>1196</td>
<td>5175</td>
<td>6261</td>
<td>6887</td>
</tr>
<tr>
<td>Moldova</td>
<td>3918</td>
<td>15973</td>
<td>17404</td>
<td>17560</td>
</tr>
<tr>
<td>Russia</td>
<td>11024</td>
<td>32932</td>
<td>34612</td>
<td>33946</td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NMS-8</strong></td>
<td>10685</td>
<td>30265</td>
<td>38253</td>
<td>50885</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td>47976</td>
<td>222606</td>
<td>267928</td>
<td>334942</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>180887</td>
<td>475319</td>
<td>543182</td>
<td>946924</td>
</tr>
<tr>
<td>Europe-Total</td>
<td>270616</td>
<td>806865</td>
<td>927850</td>
<td>1066303</td>
</tr>
<tr>
<td>Africa</td>
<td>214829</td>
<td>516882</td>
<td>563391</td>
<td>565974</td>
</tr>
<tr>
<td>America</td>
<td>276115</td>
<td>846758</td>
<td>892456</td>
<td>945480</td>
</tr>
<tr>
<td>Asia</td>
<td>40956</td>
<td>122450</td>
<td>145824</td>
<td>146820</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>803591</td>
<td>2296052</td>
<td>2532756</td>
<td>2727858</td>
</tr>
</tbody>
</table>

### Table A6: Foreign-born population (Spanish nationals and non-Spanish nationals) by country of birth and gender: Women

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>981</td>
<td>2837</td>
<td>3376</td>
<td>3973</td>
</tr>
<tr>
<td>Estonia</td>
<td>377</td>
<td>443</td>
<td>553</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1808</td>
<td>2205</td>
<td>2756</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>820</td>
<td>990</td>
<td>1203</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>2045</td>
<td>5924</td>
<td>7244</td>
<td>8308</td>
</tr>
<tr>
<td>Poland</td>
<td>8305</td>
<td>17671</td>
<td>21415</td>
<td>27664</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>1906</td>
<td>2382</td>
<td>2966</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>267</td>
<td>321</td>
<td>392</td>
<td></td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>11269</td>
<td>40919</td>
<td>45369</td>
<td>54859</td>
</tr>
<tr>
<td>Romania</td>
<td>23216</td>
<td>141545</td>
<td>184736</td>
<td>241333</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td></td>
<td></td>
<td></td>
<td>615</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>651</td>
<td>976</td>
<td>953</td>
<td>893</td>
</tr>
<tr>
<td>Croatia</td>
<td></td>
<td></td>
<td></td>
<td>779</td>
</tr>
<tr>
<td>Macedonia</td>
<td></td>
<td></td>
<td></td>
<td>177</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2085</td>
<td>1959</td>
<td>1834</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td>773</td>
</tr>
<tr>
<td><strong>Other CEEC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bielorussia</td>
<td></td>
<td></td>
<td></td>
<td>1926</td>
</tr>
<tr>
<td>Moldova</td>
<td>1007</td>
<td>3919</td>
<td>4773</td>
<td>5372</td>
</tr>
<tr>
<td>Russia</td>
<td>6637</td>
<td>26612</td>
<td>30111</td>
<td>31074</td>
</tr>
<tr>
<td>Ukraine</td>
<td>10483</td>
<td>32330</td>
<td>34747</td>
<td>35430</td>
</tr>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-8</td>
<td>11331</td>
<td>31610</td>
<td>38376</td>
<td>47815</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td>34485</td>
<td>182464</td>
<td>230105</td>
<td>296192</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAND-6</td>
<td></td>
<td></td>
<td></td>
<td>5071</td>
</tr>
<tr>
<td><strong>EU</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>177092</td>
<td>469705</td>
<td>525418</td>
<td>875001</td>
</tr>
<tr>
<td>Europe-Total</td>
<td>256285</td>
<td>766917</td>
<td>880234</td>
<td>1004500</td>
</tr>
<tr>
<td><strong>Africa</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>114866</td>
<td>257358</td>
<td>279503</td>
<td>294239</td>
</tr>
<tr>
<td><strong>America</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>America</td>
<td>343115</td>
<td>985386</td>
<td>1047590</td>
<td>1120888</td>
</tr>
<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>30458</td>
<td>83876</td>
<td>94544</td>
<td>99449</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>745350</td>
<td>2096432</td>
<td>2304866</td>
<td>2522135</td>
</tr>
</tbody>
</table>

Table A7: Immigrants with regular visa ("tarjeta de residencia") by age group and nationality (as 31st December 2007)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>NMS-8</th>
<th>NMS-2</th>
<th>CAND-6</th>
<th>Other CEEC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>1.6</td>
<td>2.3</td>
<td>3.0</td>
<td>1.8</td>
<td>3.3</td>
</tr>
<tr>
<td>5 - 9</td>
<td>4.6</td>
<td>2.8</td>
<td>2.3</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>10 - 14</td>
<td>6.7</td>
<td>8.8</td>
<td>3.2</td>
<td>6.7</td>
<td>8.0</td>
</tr>
<tr>
<td>15 - 19</td>
<td>9.7</td>
<td>5.8</td>
<td>5.4</td>
<td>7.1</td>
<td>8.2</td>
</tr>
<tr>
<td>20 - 29</td>
<td>13.3</td>
<td>8.8</td>
<td>4.7</td>
<td>14.8</td>
<td>15.5</td>
</tr>
<tr>
<td>25 - 34</td>
<td>15.9</td>
<td>13.7</td>
<td>9.1</td>
<td>13.7</td>
<td>13.7</td>
</tr>
<tr>
<td>35 - 39</td>
<td>20.5</td>
<td>13.7</td>
<td>14.5</td>
<td>17.3</td>
<td>17.3</td>
</tr>
<tr>
<td>40 - 44</td>
<td>12.3</td>
<td>12.1</td>
<td>11.9</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>45 - 49</td>
<td>9.5</td>
<td>15.9</td>
<td>11.8</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>50 - 54</td>
<td>8.4</td>
<td>12.1</td>
<td>8.8</td>
<td>7.9</td>
<td>7.9</td>
</tr>
<tr>
<td>55 - 59</td>
<td>2.3</td>
<td>15.3</td>
<td>11.8</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>60 - 64</td>
<td>0.8</td>
<td>20.5</td>
<td>11.8</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>65 - 69</td>
<td>0.5</td>
<td>13.7</td>
<td>11.8</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>70 - 74</td>
<td>0.0</td>
<td>15.9</td>
<td>11.8</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>75+</td>
<td>0.2</td>
<td>17.3</td>
<td>11.8</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>0.0</td>
<td>17.3</td>
<td>11.8</td>
<td>6.2</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Table A8: Regional incidence of Immigrants with regular visa ("tarjeta de residencia") by most relevant nationality
(as 31st December 2007)

<table>
<thead>
<tr>
<th>Region</th>
<th>TOTAL</th>
<th>1st most numerous nationality</th>
<th>2nd most numerous nationality</th>
<th>3rd most numerous nationality</th>
<th>4th most numerous nationality</th>
<th>5th most numerous nationality</th>
<th>Other nationalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Country %</td>
<td>Country %</td>
<td>Country %</td>
<td>Country %</td>
<td>Country %</td>
<td>%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,979,014</td>
<td>Morocco 16.3</td>
<td>Romania 15.2</td>
<td>Ecuador 9.9</td>
<td>Colombia 6.4</td>
<td>UK 5.0</td>
<td>47.2</td>
</tr>
<tr>
<td>ANDALUCÍA</td>
<td>504,122</td>
<td>Morocco 18.9</td>
<td>Romania 15.6</td>
<td>UK 12.2</td>
<td>Ecuador 5.3</td>
<td>Colombia 4.2</td>
<td>43.8</td>
</tr>
<tr>
<td>ARAGÓN</td>
<td>148,319</td>
<td>Romania 38.0</td>
<td>Morocco 10.9</td>
<td>Ecuador 8.3</td>
<td>Colombia 4.8</td>
<td>Portugal 3.7</td>
<td>34.4</td>
</tr>
<tr>
<td>ASTURIAS</td>
<td>32,394</td>
<td>Romania 13.8</td>
<td>Ecuador 13.0</td>
<td>Colombia 9.3</td>
<td>Portugal 8.3</td>
<td>Rep. Dom. 5.2</td>
<td>50.4</td>
</tr>
<tr>
<td>BALEARES</td>
<td>166,936</td>
<td>Morocco 13.9</td>
<td>Germany 10.9</td>
<td>UK 9.0</td>
<td>Ecuador 8.2</td>
<td>Italy 6.6</td>
<td>51.4</td>
</tr>
<tr>
<td>CANARIAS</td>
<td>206,364</td>
<td>Colombia 10.6</td>
<td>Germany 9.9</td>
<td>UK 9.5</td>
<td>Morocco 8.1</td>
<td>Italy 8.1</td>
<td>53.8</td>
</tr>
<tr>
<td>CANTABRIA</td>
<td>26,636</td>
<td>Romania 16.2</td>
<td>Colombia 14.8</td>
<td>Perú 8.3</td>
<td>Ecuador 7.9</td>
<td>Moldova 5.4</td>
<td>47.4</td>
</tr>
<tr>
<td>CASTILLA-Y LEÓN</td>
<td>146,400</td>
<td>Bulgaria 17.7</td>
<td>Romania 17.4</td>
<td>Morocco 12.5</td>
<td>Portugal 8.7</td>
<td>Colombia 8.3</td>
<td>35.5</td>
</tr>
<tr>
<td>CASTILLA-LA MANCHA</td>
<td>160,896</td>
<td>Morocco 40.5</td>
<td>Ecuador 8.7</td>
<td>Colombia 6.9</td>
<td>Bulgaria 3.6</td>
<td>22.9</td>
<td></td>
</tr>
<tr>
<td>CATALUÑA</td>
<td>860,575</td>
<td>Morocco 24.6</td>
<td>Ecuador 9.3</td>
<td>Romania 8.7</td>
<td>Colombia 4.8</td>
<td>China 4.5</td>
<td>48.2</td>
</tr>
<tr>
<td>COM. VALENCIANA</td>
<td>517,408</td>
<td>Romania 16.8</td>
<td>Belgium 12.4</td>
<td>Morocco 10.8</td>
<td>Ecuador 9.5</td>
<td>Colombia 7.2</td>
<td>43.3</td>
</tr>
<tr>
<td>EXTREMADURA</td>
<td>34,369</td>
<td>Morocco 32.6</td>
<td>Romania 19.6</td>
<td>Portugal 15.0</td>
<td>Colombia 4.8</td>
<td>Ecuador 2.9</td>
<td>25.1</td>
</tr>
<tr>
<td>GALICIA</td>
<td>75,346</td>
<td>Portugal 19.2</td>
<td>Colombia 11.8</td>
<td>Morocco 6.7</td>
<td>Romania 5.9</td>
<td>Argentina 5.8</td>
<td>50.5</td>
</tr>
<tr>
<td>MADRID</td>
<td>712,011</td>
<td>Romania 19.7</td>
<td>Ecuador 14.5</td>
<td>Morocco 9.8</td>
<td>Colombia 6.9</td>
<td>Perú 6.6</td>
<td>42.5</td>
</tr>
<tr>
<td>MURCIA</td>
<td>188,597</td>
<td>Morocco 33.1</td>
<td>Ecuador 26.1</td>
<td>UK 6.6</td>
<td>Romania 5.3</td>
<td>Colombia 3.4</td>
<td>25.5</td>
</tr>
<tr>
<td>NAVARRA</td>
<td>53,844</td>
<td>Ecuador 22.1</td>
<td>Morocco 12.1</td>
<td>Bulgaria 11.4</td>
<td>Romania 9.8</td>
<td>Colombia 8.3</td>
<td>36.4</td>
</tr>
<tr>
<td>PAÍS VASCO</td>
<td>83,875</td>
<td>Romania 15.2</td>
<td>Colombia 13.8</td>
<td>Morocco 10.0</td>
<td>Portugal 8.8</td>
<td>Ecuador 8.8</td>
<td>43.3</td>
</tr>
<tr>
<td>LA RIOJA</td>
<td>39,025</td>
<td>Morocco 25.8</td>
<td>Colombia 18.5</td>
<td>Colombia 8.4</td>
<td>Portugal 7.5</td>
<td>Pakistan 7.5</td>
<td>32.3</td>
</tr>
<tr>
<td>CEUTA</td>
<td>3,605</td>
<td>Morocco 82.2</td>
<td>China 2.2</td>
<td>Portugal 1.6</td>
<td>India 1.6</td>
<td>Germany 1.3</td>
<td>11.1</td>
</tr>
<tr>
<td>MELILLA</td>
<td>6,004</td>
<td>Morocco 83.6</td>
<td>Germany 2.5</td>
<td>France 2.2</td>
<td>Netherlands 2.2</td>
<td>Belgium 1.8</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Source: Anuario Estadístico de Inmigración 2007, Ministerio de Trabajo y Inmigración (2008b), Observatorio Permanente de la Inmigración
Table A9: Composition (%) of immigrants with regular visa ("tarjeta de residencia") by region and selected nationality (as 31st December 2007)

<table>
<thead>
<tr>
<th>Region</th>
<th>EU</th>
<th>NMS-2</th>
<th>Bulgaria</th>
<th>Slovak Republic</th>
<th>Hungary</th>
<th>Lithuania</th>
<th>Poland</th>
<th>Czech Republic</th>
<th>Romania</th>
<th>Africa</th>
<th>Latin America</th>
<th>North America</th>
<th>Asia</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANDALUCÍA</td>
<td>15.8</td>
<td>12.0</td>
<td>7.1</td>
<td>11.5</td>
<td>17.0</td>
<td>36.4</td>
<td>11.4</td>
<td>10.8</td>
<td>13.0</td>
<td>14.2</td>
<td>8.0</td>
<td>18.3</td>
<td>8.5</td>
<td>12.7</td>
</tr>
<tr>
<td>ARAGÓN</td>
<td>5.0</td>
<td>8.4</td>
<td>4.2</td>
<td>3.4</td>
<td>1.8</td>
<td>2.3</td>
<td>6.1</td>
<td>2.7</td>
<td>9.3</td>
<td>3.7</td>
<td>2.6</td>
<td>1.9</td>
<td>2.1</td>
<td>3.7</td>
</tr>
<tr>
<td>ASTURIAS</td>
<td>0.8</td>
<td>0.7</td>
<td>0.3</td>
<td>2.5</td>
<td>1.5</td>
<td>0.2</td>
<td>2.0</td>
<td>4.3</td>
<td>0.7</td>
<td>0.3</td>
<td>1.2</td>
<td>1.7</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>BALEARES</td>
<td>5.2</td>
<td>2.1</td>
<td>5.6</td>
<td>10.6</td>
<td>6.4</td>
<td>0.8</td>
<td>4.8</td>
<td>11.9</td>
<td>1.4</td>
<td>3.7</td>
<td>3.7</td>
<td>3.4</td>
<td>2.9</td>
<td>4.2</td>
</tr>
<tr>
<td>CANARIAS</td>
<td>6.0</td>
<td>0.8</td>
<td>1.4</td>
<td>11.9</td>
<td>10.5</td>
<td>0.9</td>
<td>2.7</td>
<td>12.1</td>
<td>0.7</td>
<td>3.2</td>
<td>5.7</td>
<td>3.4</td>
<td>6.3</td>
<td>5.2</td>
</tr>
<tr>
<td>CANTABRIA</td>
<td>0.6</td>
<td>0.7</td>
<td>0.5</td>
<td>0.3</td>
<td>0.4</td>
<td>0.2</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
<td>0.2</td>
<td>1.0</td>
<td>1.2</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>CASTILLA-LA MANCHA</td>
<td>5.1</td>
<td>9.7</td>
<td>4.6</td>
<td>1.0</td>
<td>1.1</td>
<td>1.6</td>
<td>2.3</td>
<td>1.0</td>
<td>10.8</td>
<td>3.8</td>
<td>3.4</td>
<td>1.7</td>
<td>1.8</td>
<td>4.0</td>
</tr>
<tr>
<td>CASTILLA Y LEÓN</td>
<td>4.7</td>
<td>7.0</td>
<td>20.3</td>
<td>3.3</td>
<td>7.4</td>
<td>0.9</td>
<td>4.5</td>
<td>2.6</td>
<td>4.2</td>
<td>2.7</td>
<td>3.5</td>
<td>2.6</td>
<td>2.1</td>
<td>3.7</td>
</tr>
<tr>
<td>CATALUÑA</td>
<td>13.2</td>
<td>11.5</td>
<td>7.7</td>
<td>23.3</td>
<td>14.3</td>
<td>9.8</td>
<td>14.1</td>
<td>22.1</td>
<td>12.4</td>
<td>31.7</td>
<td>21.9</td>
<td>17.8</td>
<td>38.3</td>
<td>21.6</td>
</tr>
<tr>
<td>COM. VALENCIANA</td>
<td>16.7</td>
<td>15.2</td>
<td>18.8</td>
<td>18.6</td>
<td>21.2</td>
<td>33.5</td>
<td>8.9</td>
<td>17.6</td>
<td>14.4</td>
<td>9.6</td>
<td>10.8</td>
<td>8.3</td>
<td>9.5</td>
<td>13.0</td>
</tr>
<tr>
<td>EXTREMADURA</td>
<td>0.9</td>
<td>1.0</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.4</td>
<td>0.3</td>
<td>1.1</td>
<td>1.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td>GALICIA</td>
<td>1.8</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>0.5</td>
<td>0.7</td>
<td>1.2</td>
<td>0.7</td>
<td>1.0</td>
<td>2.9</td>
<td>4.6</td>
<td>1.0</td>
<td>1.9</td>
</tr>
<tr>
<td>MADRID</td>
<td>17.2</td>
<td>22.2</td>
<td>17.5</td>
<td>5.6</td>
<td>10.2</td>
<td>2.0</td>
<td>37.3</td>
<td>7.1</td>
<td>23.2</td>
<td>10.7</td>
<td>23.5</td>
<td>29.1</td>
<td>20.0</td>
<td>17.9</td>
</tr>
<tr>
<td>MURCIA</td>
<td>2.8</td>
<td>2.2</td>
<td>4.5</td>
<td>2.6</td>
<td>3.8</td>
<td>8.0</td>
<td>2.5</td>
<td>2.9</td>
<td>1.7</td>
<td>8.3</td>
<td>5.5</td>
<td>1.0</td>
<td>1.5</td>
<td>4.7</td>
</tr>
<tr>
<td>NAVARRA</td>
<td>1.1</td>
<td>1.6</td>
<td>4.8</td>
<td>0.6</td>
<td>1.0</td>
<td>1.4</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>1.3</td>
<td>1.9</td>
<td>1.0</td>
<td>0.4</td>
<td>1.4</td>
</tr>
<tr>
<td>PAÍS VASCO</td>
<td>1.8</td>
<td>1.9</td>
<td>0.8</td>
<td>3.0</td>
<td>1.9</td>
<td>1.1</td>
<td>0.9</td>
<td>1.7</td>
<td>2.1</td>
<td>1.7</td>
<td>2.8</td>
<td>3.0</td>
<td>2.2</td>
<td>2.1</td>
</tr>
<tr>
<td>LA RIOJA</td>
<td>1.0</td>
<td>1.5</td>
<td>0.6</td>
<td>0.8</td>
<td>0.6</td>
<td>0.3</td>
<td>0.4</td>
<td>0.2</td>
<td>1.7</td>
<td>1.1</td>
<td>0.8</td>
<td>0.2</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>CEUTA</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>MELILLA</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.6</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>EU</th>
<th>NMS-2</th>
<th>Bulgaria</th>
<th>Slovak Republic</th>
<th>Hungary</th>
<th>Lithuania</th>
<th>Poland</th>
<th>Czech Republic</th>
<th>Romania</th>
<th>Africa</th>
<th>Latin America</th>
<th>North America</th>
<th>Asia</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Anuario Estadístico de Inmigración 2007, Ministerio de Trabajo y Inmigración (2008b), Observatorio Permanente de la Inmigración
Table A10: "Encuesta nacional de inmigrantes": sample composition

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample (unweighted observations)</th>
<th>Population (weighted observations)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Cyprus</td>
<td>5</td>
<td>2.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td>Malta</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Polonia</td>
<td>150</td>
<td>59.8</td>
</tr>
<tr>
<td>Lettonia</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Estonia</td>
<td>35</td>
<td>13.9</td>
</tr>
<tr>
<td>Lithuania</td>
<td>21</td>
<td>8.4</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>20</td>
<td>8.0</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>NMS-10</td>
<td>251</td>
<td>100</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>323</td>
<td>19.5</td>
</tr>
<tr>
<td>Romania</td>
<td>1334</td>
<td>80.5</td>
</tr>
<tr>
<td>NMS-2</td>
<td>1657</td>
<td>100</td>
</tr>
<tr>
<td>Albania</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td>Bosnia-Ercegovina</td>
<td>8</td>
<td>25.8</td>
</tr>
<tr>
<td>Croatia</td>
<td>5</td>
<td>16.1</td>
</tr>
<tr>
<td>Macedonia</td>
<td>1</td>
<td>3.2</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>6</td>
<td>19.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>7</td>
<td>22.6</td>
</tr>
<tr>
<td>CAND-6</td>
<td>31</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own elaborations based on "Encuesta nacional de Inmigrantes" (INE, 2008b).
7 References


OECD (2008a) International Migration Outlook.

OECD (2008b) Education at a glance.


Abstract

In this contribution, we explore labour mobility in the context of enlargement and the functioning of transitional arrangements in the case of France. For that purpose, we examine the patterns of migration from the new European Union member states to France and their economic consequences. Using national statistics, we find that the flows and stocks of migrants from Central and Eastern European countries are low in France, both before and after enlargement. We also find, reviewing the literature, that the economic effects of migration are negligible from the receiving country’s point of view. Nevertheless, the French government continued to restrict access to its labour market for migrants from Central and Eastern European countries until July 2008, and will perhaps keep restriction for migrants from Bulgaria and Romania until 2014. It appears that the issue of labour mobility for migrants from the new member states is clearly more of a politic than an economic nature, and that the fears of French public opinion about enlargement are taken into account.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
**Contents**

1 Introduction .................................................................................................................. 1

2 Patterns of NMS migration in France........................................................................ 4
   2.1 Flows of NMS migrants .................................................................................. 4
   2.2 Stocks of NMS migrants ............................................................................... 7

3 Effects of NMS migration in France ..................................................................... 11
   3.1 Effects on labour market ............................................................................. 11
   3.2 Effects of selective migration ...................................................................... 13

4 Conclusion .............................................................................................................. 15

5 References .............................................................................................................. 17
1 Introduction

France is a traditional European immigration country. After the First World War and from the 1950s to the mid-1970s, the need for migrant workers was important in the context of reconstruction, strong economic growth and labour shortages. In 1974, the French government decided to stop labour migration because of the oil shock, the recession that followed, and high unemployment. Nevertheless, immigration has increasingly been perceived as a cause of concern even though the proportion of immigrants in the population has remained relatively stable (Tavan, 2005). Immigrants living in France represented 7.4% of the total population in 1982, 7.3% in 1990, 7.4% in 1999 and 8.1% in 2004.

However, migration within France has greatly evolved over time (Boëldieu and Borrel, 2000). Four main features should be put in perspective. First, the categories of migrants have changed. Migration for family reunification has become the main reason whereas, before 1974, labour migration was predominant. In 2004, 80,856 persons admitted came for family reasons (38.5% of total migrant flows) while 21,588 persons came for reasons of work (10.3%). France ranks low among European Union (EU) countries concerning labour migration. In 2004, migrant workers represented 35% of migrant flows to the United Kingdom for instance, and 57% of those to Portugal. Second, women take a larger share than men among migrants. Concerning the migration flows to France in 2004, 49.4% were female (103,631 persons) and 50.6% were men (106,443 persons). As for the stocks of immigrants, the proportion of women has been growing according to the recent census (46% in 1982, 48% in 1990, 49.7% in 1999) and represents exactly half of the total immigrant population in 2004. Third, people emigrating to France come increasingly from distant countries. Immigration flows from the EU-15 have declined (39.8% in 1994 versus 18.9% in 2004) and those from Africa have increased (47.4% in 2004 versus 29% in 1994). Fourth, immigration has to be seen in a European context over the past decades since the French migratory strategy is in line with the Community treaties.

1 France seemed to be a special case on the European continent where emigration was the norm. According to the 1931 census, France became the world’s second most important (after the United States) immigration country as a percentage of its population, with 2.7 million immigrants per 42 million inhabitants. Polish immigrants were estimated at 500,000, ranking second behind Italian immigrants (about 800,000).

2 As explained by INSEE (2005), an important distinction needs to be drawn between immigrants and foreigners in the French statistics. The former are people born abroad but living in France. The latter are people who are not of French nationality. Thus, not all immigrants are foreigners, especially immigrants who have acquired the French nationality. Conversely, not all foreigners are immigrants, especially foreigners who were born in France. In 2004, 4,959,000 persons were considered as immigrants (2,966,000 were born abroad and 1,992,000 were French by having acquired French citizenship) and 3,501,000 as foreigners (2,966,000 were born abroad and 535,000 were born in France).

3 These calculations, however, exclude seasonal migrant workers who have an employment contract for a term not exceeding six months (except eight months for some agricultural activities). In 2004, they are estimated at 15,743 persons, more than double those recorded in 1999, and are strongly represented in the agricultural sector. Moroccan and Polish migrants represent 90% of seasonal workers because of bilateral labour agreements between France and these countries.

4 EU-15 means all European Union member states before May 1, 2004: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.
The progressive decisions on immigration across the EU have created new challenges for the French immigration policy, in particular the labour mobility at the time of Eastern enlargement. While this enlargement is seen as a historical opportunity, France and the other ‘old’ European countries have worried about the Eastern migratory potential to their labour markets. Hence, the accession treaties contain transitional arrangements for the free movement of workers from the new member states\(^5\) (NMS), comparable to those agreed at the time of the accession of Greece, Portugal or Spain. These transitional arrangements, lasting for a period of a maximum of seven years, are divided into three distinct phases and may differ from one member state to another.\(^6\) In this contribution, we examine labour mobility in the context of enlargement and the functioning of transitional arrangements in the case of France. For that purpose, we examine the patterns of NMS migration in France, both before and after enlargement, and the associated economic consequences from the receiving country’s point of view.

The position of France on the transitional rules governing the free movement of workers from the NMS has been as follows. In May 2004, the French government decided to restrict access to its labour market for two years following accession. In May 2006, the French government announced to gradually lift the restrictions. The partial opening of the French labour market concerned only sectors with labour shortages, such as construction, agriculture and hotels and catering. In December 2006, France made the decision to include workers from Bulgaria and Romania in the same scheme. Therefore, the next step should have been taken in May 2009, when the French government would again have to announce the transitional rules for the third period. However, at the end of May 2008, on the occasion of a visit to Poland, President Nicolas Sarkozy announced (i.e. one year in advance) that France would open its labour market from July 2008 to workers from the eight Central and Eastern countries that joined the EU in 2004. However, workers from Bulgaria and Romania will still remain subject to a transitional arrangement limiting their access to the French labour market.

In order to understand why France has been among the most reluctant to open its labour market\(^7\), a number of important points need to be considered. First, the situation of the French labour market is characterized by two contradictory trends. On the one hand, the unemployment is high. In 2007, the French standardized unemployment rate was estimated at 8.3\%, i.e. 1.3 points above the average of the EU-15. The youth unemployment rate is estimated at more than 20\%. Furthermore, the participation of

\(^5\) NMS means the eight Central and Eastern countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia) joined the EU on May 1, 2004, and another two countries (Bulgaria and Romania) acceded at January 1, 2007.

\(^6\) According to the ‘2+3+2 formula’, different conditions apply during each phase of the transitional arrangements. During the first phase (2004-2006), the EU-15 could apply national rules on the access to their labour markets. During the second phase (2006-2009), they may continue with their national rules or decide to apply the Community rules. During the third phase (2009-2011), they should fully apply Community rules. However, if a country experiences serious disturbances of its labour market, national rules may be prolonged. Bulgaria and Romania are also subject to this scheme. This means that all restrictions will be lifted by January 1, 2014. It should be noted that the transitional arrangements do not apply to Cyprus and Malta. Furthermore, the transitional arrangements only apply to workers and not to any other categories of EU citizens.

\(^7\) For instance, Sweden decided to open their labour markets from 2004.
specific groups is low. 38% of people over 55 are working, i.e. 15.5 points less than the OECD average. On the other hand, the National Agency for Employment has observed a lack of workers in some sectors. 400,000 job offers could not be filled. Second, immigration is a sensitive issue in French society. Support has risen in recent years for the National Front, an anti-immigrant political party. In the 2002 presidential elections, the extreme right candidate made it to the final round. Third, French people do not feel they have been well informed about Eastern enlargement and are sceptic about their associated benefits. It should also be recalled that the French have massively rejected the treaty aimed at establishing a Constitution for Europe in 2005. Fourth and from a more general point of view, the economic situation of France is difficult since the 2001 slowdown of growth. Average annual growth over the period 2001-2007 is estimated at 1.8% in France, against 2.6% in the United Kingdom for instance. In addition, the trade deficit is set to widen, and France is the EU country that has most increased its public debt as a proportion of GDP (64.5% in 2006).

In this context, it is not surprising that immigration has become a major political issue. Since 2003, the French government has become more restrictive about immigration policy and adopted a succession of new laws. The main aims of the new French immigration policy are to restrict migration for family reunification, fight illegal migration and promote labour migration, in particular the recruitment of high-skilled workers. This plan is commonly called ‘immigration choisie’ as opposed to ‘immigration subie’. As suggested by the name, it would allow France to choose migrants according to what the French economy needs. The progressive French decisions on the free movement of NMS workers over the past several years should also be interpreted in this new context of selective migration.

In the following, Section 2 presents the data for measuring international migration in France and describes the patterns of NMS migrants before and after enlargement. Section 3 discusses the effects of this migration on the receiving country. Finally, Section 4 concludes.

---

8 According to the Eurobarometer (2005), the French were among the strongest opponents of Eastern enlargement: About six out of ten surveyed were against it.

9 In 2007, there were two controversies in France: The creation of a new Ministry of Immigration and National Identity (because of the notion of ‘National Identity’), and the proposition of a law using genetic tests to verify the bloodlines of migrants who want to join family members already living in France. For a more detailed discussion, see Veyrinaud (2008).

10 In 2005, the Interior Minister Nicolas Sarkozy argued during his traditional New Year’s greetings to the media: ‘In all the world’s great democracies, immigration presents the possibility of bringing in new skills, new talents, new blood. But here at home, immigration still has a negative connotation. Why? Because it is not regulated and because it is not linked to our economic needs.’
2 Patterns of NMS migration in France

2.1 Flows of NMS migrants

For observing migrant flows, France has no population register as opposed to other European countries, but uses data from three administrative institutions (Thierry, 2008). The available information is as follows: (1) residence permits granted by the Ministry of Interior, (2) obligatory medical examinations at the National Agency for the Reception of Foreigners and Migration\textsuperscript{11} (ANAEM), (3) asylum applications received by the French Office for Protection of Refugees and Stateless Persons (OFPRA).

Given these multiple data sources, there are necessarily problems of harmonization because each administrative institution uses different compilation methods. Then, data are incomplete because they relate to migrant arrivals and ignore migrant departures. In the same way, data only provide official information and, consequently, do not capture illegal migration flows. Another important problem is that ANAEM does not record nationals of the European Economic Area\textsuperscript{12} (EEA), which is based on the same freedoms as the EU, including the free movement of persons. Finally, French statistics are based on procedures for admission (family reunification, workers, refugees, visitors, etc.) rather than on length of stay as recommended by the international organizations.

Nevertheless, data measuring migrant flows to France have improved thanks to the use of a new source which rectifies the limitations of the old system (Thierry, 2004). Since 1994, the French National Institute of Demographic Studies (INED) estimates the annual total number of migrants to France, using data from the Ministry of Interior and ANAEM. Data from INED are of better quality. On the one hand, they are more complete because they cover migrant arrivals of all nationalities. Therefore, nationals of the EU, including those of the NMS, are included. On the other hand, they are more in line with international recommendations because of a migrant definition based on length of stay. For these reasons, we use in this country case study the most complete estimate of migration flows to France, i.e. data from INED.\textsuperscript{13} The series count all migrants admitted to France over the period 1994-2005, according to their country of origin, sex, age, etc. Thus data can be used to track changes of NMS migrant flows since the beginning of the 1990s. The available information relates to the time before and after enlargement (though unfortunately only one year is covered after the accession of the Central and Eastern countries).

\textsuperscript{11} Created in 2005, ANAEM is the fusion of two institutions with a long-standing experience in issues of immigration: The International Migration Office (IOM) founded in 1945, and the Social Service Assistance for Emigrants (SSAE) founded in 1926. This fusion of institutions is in keeping with the general pattern of the government’s policy on immigration reform in France.

\textsuperscript{12} The following countries are part of the EEA: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

\textsuperscript{13} The data are available on the INED website at http://www.ined.fr/.
The total number of immigrants in France is growing between 1994 and 2004 (119,563 and 211,863 persons respectively), but falling in 2005 (207,562) (see Table 1). Immigration flows by region show the greatest increases for immigrants from Africa and Asia (174% and 123% respectively between 1994 and 2005). African immigrants represent 95,309 persons (46% of total immigrant flows) and Asian immigrants represent 29,274 persons (14%) in 2005. Concerning the European continent, the number of immigrants from the EU-15 fell by 16% between 1994 and 2005 (47,697 versus 40,000). Over the same period, immigrants from the NMS increased by 71% (3628 versus 6213). They represent 3.1% of total immigrant flows in 1994 and 2.9% in 2005. These immigrants, however, had increased in number until 2003 and decreased thereafter: Thus the number of immigrants from the NMS is estimated at 6709 in 2004 and 6213 in 2005, i.e. a 7.2% decrease over the period 2004-2005.14

Looking at the nationalities of NMS immigrants, those from Poland took the highest share in 1994, 1460 persons (see Table 2). They are followed, in descending order, by immigrants from Romania, Bulgaria, Hungary, the Czech Republic, Lithuania, Slovakia, Slovenia, Estonia and Latvia. In 2005, Romanian immigrants outnumbered Polish immigrants (2585 versus 1974). Regarding the gender breakdown, women are always more numerous, for all nationalities. In 1994, women represent more than 63% of total immigrants from the NMS (2303 women versus 1326 men); in 2005 their share is 60% (3734 women versus 2481 men). NMS immigration flows are much more feminized as compared to those from other continents. For instance, females represent 47.7% of total immigrants from Africa in 2005. Concerning the age groups of NMS immigrant flows,

14 It should be noted now that France ranks low among the EU-15 statistics. Before the Eastern enlargement, Germany and Austria received about 60% of the NMS migration. After the Eastern enlargement, these countries were replaced by the United Kingdom and Ireland in the case of migrants from the eight countries of Central and Eastern Europe that joined the EU in 2004 and by Spain and Italy in the case of migrants from Bulgaria and Romania. For more details, refer to the first part of this report (Brücker et al., 2008).

Table 1: Immigration flows by region

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Africa</td>
<td>34 748</td>
<td>29</td>
<td>46 615</td>
<td>36.6</td>
<td>64 181</td>
<td>40</td>
</tr>
<tr>
<td>Asia</td>
<td>13 123</td>
<td>11</td>
<td>14 972</td>
<td>11.8</td>
<td>21 001</td>
<td>13</td>
</tr>
<tr>
<td>America</td>
<td>9 797</td>
<td>8.2</td>
<td>10 256</td>
<td>8.1</td>
<td>12 776</td>
<td>8</td>
</tr>
<tr>
<td>EU 15</td>
<td>47 697</td>
<td>39.8</td>
<td>41 306</td>
<td>32.4</td>
<td>43 282</td>
<td>27</td>
</tr>
<tr>
<td>NMS</td>
<td>3628</td>
<td>3.1</td>
<td>3922</td>
<td>3</td>
<td>6064</td>
<td>3.8</td>
</tr>
<tr>
<td>Others</td>
<td>10 570</td>
<td>8.9</td>
<td>10 360</td>
<td>8.1</td>
<td>13 124</td>
<td>8.2</td>
</tr>
<tr>
<td>All nationalities</td>
<td>119 563</td>
<td>100</td>
<td>127 431</td>
<td>100</td>
<td>160 428</td>
<td>100</td>
</tr>
</tbody>
</table>

those aged 20-24 years took the highest share for all nationalities in 1994, excepting Romania (25-29 years old). Thus, for instance, immigrants aged between 20 and 24 years represented 31.2% of total Polish immigrants. The age group 25-29 years accounted for 31.9% of total Romanian immigrants. On the whole, in 1994 the shares of the individual age groups for NMS immigrants are as follows: 15% (0-19), 51.6% (20-29), 20.1% (30-39), 7.9% (40-49), 2.3% (50-59) and 3.1% (60 and more). In 2004 and 2005, these proportions are in the same range, thus implying that immigrants from the NMS admitted to France are predominantly of young age.

**Table 2: Immigration flows by nationality and sex**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% female</td>
<td>% female</td>
<td>% female</td>
<td>% female</td>
<td>% female</td>
<td>% female</td>
</tr>
<tr>
<td><strong>Bulgaria</strong></td>
<td>349</td>
<td>61.3</td>
<td>482</td>
<td>68</td>
<td>792</td>
<td>70</td>
</tr>
<tr>
<td><strong>Czech Republic</strong></td>
<td>261</td>
<td>62.8</td>
<td>191</td>
<td>67</td>
<td>378</td>
<td>67.4</td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
<td>278</td>
<td>63.6</td>
<td>255</td>
<td>61.9</td>
<td>528</td>
<td>57.7</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>1460</td>
<td>68.1</td>
<td>1431</td>
<td>72.9</td>
<td>1739</td>
<td>73.6</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>1049</td>
<td>58.9</td>
<td>980</td>
<td>59.5</td>
<td>1959</td>
<td>61.3</td>
</tr>
</tbody>
</table>


We also have information on the reasons for admissions (see Table 3). In 1994, 675 persons (18.6% of NMS immigrants) are admitted for family reasons and 381 persons (10.5%) for reasons of work. In 2004, the share of immigrants admitted for reasons of work is higher (1061 persons or 15.8% of NMS immigrants). After the enlargement, i.e. in 2005, 1454 persons are admitted for reasons of work (23.4% of NMS immigrants) and 1768 persons for family reasons (28.4%). The Poles are the most numerous among labour immigration (810 versus 310 Romanians), but Romanians are the most numerous among immigration for family reunification (1467 versus 923 Polish). Furthermore, the flows of NMS students increased from 1453 persons in 1994 to 2556 in 2004. They represent around 5% of all students admitted to France. Women are still a majority among the flows of NMS students. Polish students are the most numerous in 1994 while Romanians took the largest share in 2004. In fact, the recent rise in total flows of students (46% within ten years) corresponds to the government intention to promote the French educational system internationally. For that purpose, the mobility of international students is facilitated.
Unfortunately, INED statistics do not provide information on immigrant flows by level of education. However, we find information on international migration by educational level using the database of Docquier and Marfouk (2006). Data are available for the years 1990 and 2000 for each Central and Eastern country; they do not related specifically to the flows to France, but give an overview of the educational level of NMS emigrants. Three educational levels are available: (1) high for emigrants who have completed tertiary education; (2) medium for emigrants who have completed secondary education; (3) low for the remaining emigrants. Thus, the Polish rate of emigration is estimated at 4.4% in 2000 and is composed as follows: Low educational level 3.4%, medium 2.8% and high 14.1%. In Romania, the rate of emigration is estimated at 3.7% in 2000, of which low 4.6%, medium 2% and high 11.8%. Note that highly educated persons account for the largest share in the emigration rates for most NMS, except for Bulgaria (with an estimated rate of emigration of 7.6% in 2000, of which 9.1% with low, 6.3% with medium and 6.6% with high educational level).

### Table 3: NMS immigration flows by admissions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Minor</td>
<td>315</td>
<td>8.6</td>
<td>158</td>
<td>4</td>
<td>149</td>
<td>2.5</td>
</tr>
<tr>
<td>Student</td>
<td>1453</td>
<td>40</td>
<td>1553</td>
<td>39.7</td>
<td>2881</td>
<td>47.5</td>
</tr>
<tr>
<td>Worker</td>
<td>381</td>
<td>10.5</td>
<td>418</td>
<td>10.6</td>
<td>629</td>
<td>10.3</td>
</tr>
<tr>
<td>Family</td>
<td>675</td>
<td>18.7</td>
<td>775</td>
<td>19.7</td>
<td>1549</td>
<td>25.6</td>
</tr>
<tr>
<td>Visitor</td>
<td>413</td>
<td>11.4</td>
<td>437</td>
<td>11.2</td>
<td>464</td>
<td>7.6</td>
</tr>
<tr>
<td>Refugee</td>
<td>86</td>
<td>2.4</td>
<td>19</td>
<td>0.5</td>
<td>28</td>
<td>0.5</td>
</tr>
<tr>
<td>Other reasons</td>
<td>305</td>
<td>8.4</td>
<td>562</td>
<td>14.3</td>
<td>364</td>
<td>6</td>
</tr>
<tr>
<td>Total NMS</td>
<td>3628</td>
<td>100</td>
<td>3922</td>
<td>100</td>
<td>6064</td>
<td>100</td>
</tr>
</tbody>
</table>


2.2 Stocks of NMS migrants

In order to examine the stocks of NMS migrants in France, we use the census of the National Institute for Statistics and Economic Studies (INSEE), counting every member of population living in France at a particular time. All inhabitants have to fill in a census form, thus those who were born outside France are included. Data from INSEE allow to determine the characteristics of migrant stocks in terms of sex, age, occupation, etc. In addition, the French census can be varied in scope (local or national). Also, some original surveys provided by INSEE can be useful: For instance, the survey on the family history, 'Etude de l'Histoire Familiale', which was conducted during the 1999 census. 380,000 persons filled in an additional questionnaire on the subject of their family history, including questions on their children, the spoken languages in the family, etc. Finally, the employment survey 'Enquête emploi' provides data on the main labour characteristics such

---

15 The data are available on the INSEE website at http://www.insee.fr/.
as participation and unemployment rates. Note that this is the French version of the European Union Labour Force Survey, which is a large household survey providing data on labour participation and other socio-economic data in EU countries.

Although the census is the most complete source for analysing the stocks of immigrants in France, a number of statistical caveats should be borne in mind (Thierry, 2004). First, it is necessary to be attentive to the definitions used. As already explained, foreigners and immigrants are two different categories. For instance, a person who has acquired French nationality since arriving in France is still counted as an immigrant in the census. Second, the French census has the disadvantage of being conducted in quite distant intervals, while immigrant flows may evolve quickly every year. In France, the interval is generally eight or nine years (e.g. 1946, 1954, 1962, 1968, 1975, 1982, 1990). The last general population census was held in 1999 and concerned the total population at one point in time. Since 2004 the census is conducted annually, but with the difference that all the inhabitants are not counted the same year (Borrel, 2006). A new method has been introduced, surveying a proportion of the population on an annual basis over a five-year cycle. The current problem is however that INSEE does not publish the results every year. Therefore and during this transitional period, the population of the 1999 census is effective until today. Information of the new census is indeed not legally taken into account because several stages of data collection are still necessary. Despite these technical considerations, INSEE provides nevertheless some preliminary data. When information is available on NMS immigrant stocks, we use the new census, but these initial results must be taken with caution.

In 1999, 155,471 persons from the NMS lived in France (see Table 4). They represented 3.6% of total immigrants. The largest share was taken by the Poles (see Table 5). They represented 63.3% of NMS immigrants, followed by Romanians (14.9%) and Hungarians (6.3%). To understand these proportions, it is important to stress that each Central and Eastern country is associated with a specific migratory wave (INSEE, 2005). For instance, Polish immigration is old. Half of Polish immigrants living in France in 1999 had arrived before 1950. On the other hand, immigrants from of the Baltic countries, the Czech Republic, Slovakia and Slovenia represent a recent migratory wave. This immigration essentially developed from the 1990s, after the collapse of communism. Concerning the gender breakdown, women were more numerous (65%) among NMS immigrants while they represented 49.7% of total immigrants living in France in 1999. Regarding the age structure, 39% of NMS immigrants were between 20 and 59 years old in 1999, against 59% of population from the EU-25 and 68% of total immigrants (see Table 6). However, these averages conceal large disparities among the immigrants from Central and Eastern countries. Once again, the age structure reflects the various migratory waves. In 1999, more than 59% of Polish immigrants were aged 60 years and more, against 24% of total immigrants. On the other hand, 31% of immigrants from Latvia are less than 20 years old, against 8% of total immigrants (INSEE, 2005).

---

16 From the end of 2008, a final figure will be published by INSEE. The data will apply from January 1, 2009 and will replace the data from the 1999 census.

17 These calculations of the age structure in 1999 exclude the immigrants from Bulgaria and Romania.
As for labour characteristics, information is not always available by nationality, but the main facts can be summarized as follows. In 2003, immigrants showed a lower participation rate than the native population (63.3% versus 69.8%). Nevertheless, that difference is smaller in France than in other European countries (e.g. 15 percentage points in the Netherlands). Conversely, immigrants’ participation rates were superior to those of natives in Spain, Greece or Portugal. In a similar vein, the unemployment rate was higher for immigrants than for natives in France in 2003 (18.8% versus 8.5%), as was the case of all European countries except for Greece. Furthermore, the differences in participation and unemployment rates in France between immigrants and natives have always been more pronounced for women than for men. Regarding the occupations of NMS workers, they are most often employed in managerial occupations than the remaining immigrants. For instance, 45% of Czech immigrants were executives in 1999 (as compared to 19% of total immigrants). By contrast, 40% of Polish immigrants belong to the working class (against 43% of total immigrants). Finally, the average monthly wage of immigrants amounted to EUR 1300 in 2002, against EUR 1500 for natives (INSEE, 2005).

<table>
<thead>
<tr>
<th>Table 4: Immigration stocks by region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>1692 110</td>
</tr>
<tr>
<td>554 315</td>
</tr>
<tr>
<td>127 344</td>
</tr>
<tr>
<td>1 629 457</td>
</tr>
<tr>
<td>155 471</td>
</tr>
<tr>
<td>149 830</td>
</tr>
<tr>
<td>4 308 527</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Table 5: Immigration stocks by nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>6863</td>
</tr>
<tr>
<td>8507</td>
</tr>
<tr>
<td>9894</td>
</tr>
<tr>
<td>98 566</td>
</tr>
<tr>
<td>23 301</td>
</tr>
<tr>
<td>155 471</td>
</tr>
</tbody>
</table>

Let us now turn to the first results of the 2004 new census (Borrel, 2006). Immigrants from the NMS were estimated at 168,000 persons. They represented 3.3% of total immigrants and 9.4% of the EU-27. The most numerous were Polish and Romanian immigrants, 91,000 and 39,000 persons respectively. These two nationalities represented 77% of the NMS immigrants and 2.6% of total immigrants. The Poles were mostly located in Ile de France (35,000), Nord Pas de Calais (11,000) and Lorraine (6000). The Romanians were mostly present in Ile de France (18,000). It must be stressed that, while Polish migration to France has historical roots, Romanian migration has cultural roots. Romania is indeed a francophone country even if French is not an official language. French has remained the preferred language of instruction at Romanian schools. Consequently, it is estimated that more one Romanian in four understands and speaks French.

Concerning age structure, gender breakdown and participation rates, we only have information on Polish immigrants at this time of the census: 4% were less than 20 years old, 25% aged between 20 and 39, 29% between 40 and 64, and 42% were more than

---

18 On the whole, 4.9 million immigrants are living in France, representing 8.1% of the total population (see Table 4). The diversification of the geographic origins is still going on. There are more immigrants from Africa (39.3% in 1999 versus 42.6% in 2004, i.e. 2,108,000 persons) and Asia (12.9% in 1999 versus 14% in 2004, i.e. 695,000 persons). By contrast, immigrants from the EU-15 have decreased since the 1999 census. They represent 37.8% of total immigrants in 1999 and 32.7% in 2004, i.e. 1,618,000 persons.

19 Since 1993, Romania has been an official member of the International Organization of La Francophonie (IOF), which is an international organization of French-speaking countries. The condition for admission is not the degree of French usage in the member countries, but a prevalent presence of the French language and French culture.
65 years old. In comparison, the percentages for the age groups of total immigrants were as follows: 8%, 33%, 43% and 16%. The striking fact is, once again, that the Polish immigrants living in France are quite old. Furthermore, Polish immigrants were in the majority female (65%). Finally, as for the Polish participation rate (42%), women took a share of 25% and men of 17%.

Unfortunately, INSEE statistics do not report the NMS migrant stocks for 2006 and 2007. We therefore complemented the French migration statistics by data from the European Union Labour Force Survey (refer to the first part of this report for more details, i.e. Brücker et al., 2008). Note that the survey is hosted by Eurostat. This data source suggests that 83,250 foreign residents from the NMS reside in France in 2006 and 80,623 in 2007. So, the latest figure from France suggests the foreign residents from the NMS have started to decrease. It would be interesting to study the NMS patterns in the future since from July 2008, the access of NMS workers (except Bulgarian and Romanian workers) to the French labour market has been fully liberalised. Findings from other EU-15 countries show that the removals of restrictions do not generate a large increase in NMS migrants. For instance, Greece is a striking case. During the first phase of transitional arrangements (2004-2006), the access of labour market is restricted. During the second phase (2006-2009), Community rules for free movements are applied. The available data for Greece are as follows: 15,194 foreign residents from the eight countries of Central and Eastern Europe that joined the EU in 2004, 19,513 in 2005, 18,357 in 2006 and 20,257 in 2007.

To conclude this statistical overview of NMS migrants in France, the question of illegal migration is raised. It is obviously that the debate on the immigration policies of European countries has turned its attention towards illegal migrants. In France, this issue is now a key pillar of immigration policy. In 2005, the French Interior Ministry estimated that 200,000 to 400,000 persons were illegal migrants. Another figure is provided by the results of the regularization programs implemented in June 1997: Then, 80,000 persons had their situations in France regularized. However, estimating the illegal migration in France remains a delicate exercise (Garson, 2001). Illegal migrants cover migrants who enter unlawfully as well as asylum seekers who remain in France despite not having been granted refugee status. Also included in this category are seasonal migrant workers who fail to return home when their employment contracts expire. In this context, it is particularly difficult to estimate the total number of illegal migrants in France. This is particularly the case of illegal migrants from the NMS. Data are indeed scarce. Nevertheless, one population appears especially ‘visible’ in France, the Roma people. They are chiefly located in Ile de France, living in precarious conditions, and some of them are involved in illegal activities. The majority of Roma people come from Bulgaria and Romania. The French government has attempted to find a solution with the sending countries, but so far unsuccessfully. For instance, the French government has offered payments to illegal migrants who agree to return home. However, 25% of the 25,000

---

20 Measures include, for instance, specific rules to stop arranged marriages, the use of visas with biometric information, as well as an increase of expulsions. In 2007, the number of immigrants deported for not having the required documents reached about 25,000. For more details, see Veyrinoud (2008).
expulsions in 2007 were Roma people. Another important aspect of illegal migration seems important, namely its effect on the French labour market. Most illegal migrants are employed in sectors with labour shortages such as construction and agriculture. The question is how to assess the extent to which their employment affects the recruitment and wages of native workers.

3 Effects of NMS migration in France

3.1 Effects on labour market

Migration has many economic effects, both positive and negative, on the receiving country. These effects are likely to vary according to the volume of migration, the skills of migrants, the status of migrants, etc. It is therefore difficult to provide definitive answers to what are the precise effects of migration from Central and Eastern countries in the case of France. In addition, research on migration is very weak in France as compared to other traditional immigration countries such as Canada and the United States. Migration issues are rarely studied in the French literature, in particular the effects of NMS migration – which constitute a recent subject. It is striking to note the lack of empirical studies on this migrant population. By contrast, empirical studies on the labour market effects of NMS migration have been more extensive in Ireland, the United Kingdom and Germany for instance.²¹

Nevertheless, recent international studies shed some light on the debate since the results converge to assert that the effects of migration are small to negligible from the receiving country’s point of view. In particular, the consensus emerging from empirical research on the labour market effects of NMS migration in European receiving countries, both before and after enlargement, is the same. Despite these well-known results, fears of the French public opinion are important against the background of growth’s slowdown and high unemployment. Clearly, immigration constitutes a sensitive issue in France, specifically in the absence of academic studies. Many common opinions dominate indeed the French public debate about migrants from the Central and Eastern countries or elsewhere, and tend to be focused on particular aspects.²²

In the French public opinion, there is a simple relation between migration and unemployment: Any supplementary migrant workers would deteriorate the labour market and lead to higher unemployment. It is true that migrant flows increase the resident population and, consequently, the number of persons wishing to work. However, and as we have seen in the above section, the characteristics of migrant population differ in some important respects from the native population in France in terms of age, sex, skill,

²¹ For this reason, we present in this country case study some findings of the other European research given that evidence for France is very limited (refer to the second part of this report on country case studies for more details, i.e. Brücker et al., 2008).

²² For instance, the famous image of ‘Polish plumber’ during the debate on Constitution for Europe in 2005 is the incarnation of collective ideas about Central and Eastern migrant workers flooding the French labour market.
participation and unemployment rates, etc. The literature suggests that two effects are possible (Domingues Dos Santos, 2006). On the one hand, migrant workers are competing with native workers, for instance in the acceptance of lower wages. On the other hand, migrant workers represent a complementary workforce, for instance in the jobs that native workers do not want. In France, this is especially the case of some sectors with difficult working conditions and where there are labour shortages such as construction and agriculture. Certainly, this result could be more complex according to the status of migrants (legal or illegal), the skills of migrants, the sector or region considered. However, there is a consensus in the economic literature which suggests that migrant workers are usually complementary rather than substitutable to the native workers. For instance, two studies on Italy confirm that migration does not have adverse effects on employment and wages of native workers (Gavosto et al., 1999; Vellosio and Venturini, 2006). A recent study on the effects of NMS migration in the United Kingdom shows that this migration has a small negative impact on unemployment of native workers (Lemos and Portes, 2008).

In a similar vein, it is important to underline that French legislation is strict concerning the employment of migrant workers. The job situation in France can be raised as an objection, meaning that a migrant worker can be employed only if a native worker is not available for this employment. Furthermore, a statistical analysis of migrant workers over the past decades rather indicates that there is no causal relationship between migration and unemployment. During the recession of the 1970s, the migrant workforce has been over affected by the unemployment.

The effect of migration on employment can be also analysed by taking into account the demand for goods and services. Migrant flows lead indeed to a growth of total population. As migrants are also consumers in the receiving country, they have a positive effect on the market of goods and services and on the labour market by increasing the labour demand. Thus, the increase in consumption, resulting from total population growth, may promote employment in the receiving country. Note that in a study on the United Kingdom, looking at the macroeconomic effects of Central and Eastern migration after the enlargement, Riley and Weale (2006) show that this migration had a positive effect on GDP, amounting to about 0.2%.

French fears have also been voiced that migrant workers would generate negative effects on wages for native workers. There is, however, no obvious relationship between migration and wage levels. Once again, the impact of migration on wages was studied at both the theoretical and empirical levels, and the economic results show that the effects are negligible, even if they can be perceptible for some native workers or in some sectors (Jayet et al., 2001). The literature explains that the effects of migration on wages depend on the skills of migrants and on the competition which may exist among the workers for the same employment. For instance, unskilled migrant workers may be in competition with unskilled native workers, but not with highly skilled native workers. Consequently, the wage negotiations of unskilled native workers could be more delicate in sectors with large migrants. Furthermore, if the migrant workers are illegal, lower wages could again
stress the competition. However, several studies explain that this competition can be geographically diluted if the native workers emigrate to regions with better opportunities or if they are incited to improve their skills (Jayet, 1996). The skill level of workers has indeed a large positive impact on the probability of being employed in France. For instance, the unemployment rate of unskilled workers was about 17% in 2006 while the unemployment rate of skilled workers was about 4%.

Finally, part of the French public debate has centred on the impact of migration on social government budgets. There is public concern that migrant population could reduce the living standard of native population. Migration would lead to higher expenses on social welfare, education or health systems, which would not be compensated by higher tax payments. There is however no study in the literature that has found any negative effects of migration on the general government budgets in France. The current debate on regularization even shows that illegal migrant workers pay direct taxes, as does the native population, despite the lack of employment contracts and social protection. It should be noted that the issue of migrants without papers, called ‘sans papiers’, is recurrent in the French political debate. After a strike of ‘sans papiers’ working in the catering sector, the French government announces in May 2008 to regularize some illegal migrants, examining individually each cases. It is not massive regularization as in 1997, but hundreds of applications have already been filed. Moreover, findings of fiscal effects of Central and Eastern migrants in the EU-15 show, in the case of Sweden for instance, that fears of welfare tourism are groundless even so this country is allowed immediate access of migrants from the NMS to welfare benefits (Wadensjö, 2007). France, as the Swedish experience, will represent a relevant case study on the effects of NMS migration on welfare system since this is a country with relatively rich social programs. This is clearly an important area for future French research on the relationship between migrants and welfare state.

3.2 Effects of selective migration

France, just as other European countries, is facing a process of population ageing because people are living longer and birth rates have declined. However, the French situation is less severe than in other countries. In 2004, the French birth rate was the highest in Europe (1.92). In comparison, birth rates were estimated at 1.74 in the United Kingdom, 1.37 in Germany, 1.33 in Italy and 1.32 in Spain. Several studies underline the negative effects of population ageing on public finances, health care systems or pensions. Hence, the notion of replacement immigration is explicitly integrated into the debates of developed countries (e.g. United Nations, 2000). Replacement immigration is seen as a solution to resolve the economic and budgetary effects of demographic trends. Note that it seems a quite paradoxical situation given the restrictive immigration regime imposed by most of the receiving countries.

The question is, what is the exact role that immigration can play in easing the negative effects of an ageing population. In France, Jayet et al. (2001) show that replacement immigration cannot on its own resolves the problem. This solution raises indeed several
unanswered questions. First, the level of migration required to achieve population objectives is very high. It is obvious that French society is unprepared for receiving massive migrant flows. Second, the French labour market would completely change. Third, the French immigration policy would become ineffective. Nevertheless, the debate about replacement immigration has considerably modified the stakes of French immigration policy, including the notion of selective migration.

According to the French government, migration and its potential positive effects will be more beneficial if the migrant workers are highly skilled. Their contribution to the public finances would be higher than that of unskilled migrant workers. In addition, they are supposed to become more easily integrated into the labour market. These arguments have led to a new orientation of French immigration policy in favour of attracting highly skilled. For that purpose, France has amended its legislation in order to facilitate their admission. Measures include, for instance, the reduction in requirements for students to change their status if they wish to enter the labour market or the setting-up of special programs in case of labour shortages. In some sectors, particularly in the field of information and technology, it is indeed difficult for French employers to find highly skilled workers. It should be noted that traditional immigration countries such as the United States, Canada and Australia have already implemented such programs to attract highly skilled migrant workers. In Europe, Germany is the first country to have engaged, from 2000, a selection of migrant workers based on the skill level.

Some researchers have attempted to evaluate the economic effects of selective migration for France. According to Chojnicki et al. (2005), the impact for France is very weak in the long term. The study underlines that a selective migration policy may raise significant problems, both of a technical and ethical nature. For instance, the selection of highly skilled migrant workers may be in contradiction with some international agreements which guarantee the free movement of persons. At the same time, the phenomenon of ‘brain drain’, which designates the migration of highly skilled people from developing to developed countries, has to be taken into consideration. Many developing countries are in fact concerned about the emigration of highly skilled workers such as engineers and health professionals. This may have negative effects on the sending countries because the emigration of these people reduces the level of human capital, an important driver of growth. Against this background, the French government has decided to give visas to highly skilled migrants only if the sending countries have signed a co-development agreement with France or if the migrants agree to return to their country within six years. Moreover, some studies examine the phenomenon of ‘brain waste’, which designates the employment of migrants below their education levels in the receiving countries. For instance, Drinkwater et al. (2006) found, in the case of the United Kingdom, that the NMS migrants are employed in low paying jobs.

Nevertheless, a recent strand of literature suggests that, under certain conditions, the highly skilled emigration may have positive effects on the sending countries, i.e. ‘brain drain’ be turned into ‘brain gain’ (Docquier, 2007). It induces indeed positive feedback
effects for the sending countries, such as remittances. These flows are estimated to have exceeded USD 337 billion in 2007, of which developing countries received USD 251 billion (World Bank, 2008). The true size, including unrecorded flows through informal channels, is significantly larger. Freund and Spatafora (2008) suspect that informal remittances range from 50% to 250% of official remittances. They also report estimates based on household surveys from selected countries. For instance, informal remittances represent 47% of total remittances sent in Moldova and 38% in Armenia. According to our information, the National Bank of Romania estimates that around 40% of remittances are coming through informal channels (De Sousa and Duval, 2008).

According to the World Bank (2008), i.e. official data, the top remittance recipients of Central and Eastern Europe are Poland (USD 10.6 billion) and Romania (USD 8.5 billion) in 2007. In Europe, the main sources of remittances are Switzerland (USD 13.8 billion) and Germany (USD 12.3 billion) in 2007.

To conclude the discussion of effects of migration from Central and Eastern countries, a more general question should not be forgotten in the case of France, namely, the integration of migrants. This is obviously a multidimensional process. It includes economic aspects such as obtaining an employment, but this is only one aspect among others. Regional distributions of migrants, housing conditions, social mobility, etc. have also to be considered because specific difficulties are met by migrants in France. As illustrated by the 2005 riots in the Paris suburbs, France has sometimes failed in its efforts to integrate migrants and their children. Thus, one of the objectives of the new immigration policy is to promote integration into French society. For instance, migrants who wish to obtain a residency permit now have to sign a ‘Welcome and Integration’ contract that requires migrants to respect the values of France such as gender equality and secularism (‘laïcité’). The French government also requires migrants to learn French before arriving in the receiving country. Nevertheless, the integration of migrants is a complex process which constitutes an integral part of French society, and selected measures by the government cannot be the ultimate solution for the long term.

4 Conclusion

The purpose of this country case study was to gain insights into the recent trends of migration from the new EU member states to France and their related economic effects in the context of the functioning of transitional arrangements. Two conclusions can be drawn from our analysis. First, French statistics show that the flows and stocks of Central and Eastern migrants are low, both before and after enlargement. Second, research results suggest that the economic effects of migration are small to negligible from the receiving country’s point of view. Nevertheless, the French government continued to restrict access to its labour market for migrant workers from Central and Eastern Europe.

23 In the literature, other channels from the sending counties’ point of view are (1) increasing return to education (e.g. Beine et al., 2001), (2) diaspora externalities (e.g. Docquier and Lodigiani), (3) quality of governance (e.g. Mariani, 2007) and (4) return migration (e.g. Domingues Dos Santos and Postel-Vinay, 2005).
until July 2008, and will perhaps keep restriction for migrant workers from Bulgaria and Romania until 2014. These restrictive measures are justified on the ground that migrant workers may compete with native workers, resulting in higher unemployment and lower wages (as illustrated by the spectre of the ‘Polish plumber’ during the debate on Constitution for Europe in 2005). Hence, it seems that the issue of labour mobility for Central and Eastern migrants is clearly more of a politic than an economic nature, and that the fears of French public opinion about enlargement are taken into account.

Against this background, President Nicolas Sarkozy surprisingly announced at the end of May 2008, on the occasion of a visit to Poland, that France would open its labour market from July 2008 (i.e. one year in advance) to migrant workers from the eight countries of Central and Eastern Europe that joined the EU in 2004. During a session of the Polish parliament he said, ‘The time has come today for France to remove the last restrictions on the free movement of Polish workers and the other states that joined the EU in 2004’. This decision applies to migrant workers from the Czech Republic, Hungary, Estonia, Latvia, Lithuania, Slovenia, Slovakia as well as Poland, and it is based on the reality of the French labour market. Migrant workers from Central and Eastern Europe are not a threat, they do not enter the country in massive numbers, and France suffers from labour shortages. However, some observers suggest that this decision was in fact political: The French move to open its doors came on the first day of the six-month French presidency of the EU. The French government would also need support from Central and Eastern European countries during this period.

What about Bulgaria and Romania? According to the functioning of the transitional arrangements, for migrant workers from these two countries a transitional period limiting their access to the French labour market will apply until 2014. The fact that labour mobility remains limited for Bulgaria and Romania may seem contradictory, with all other new European member states benefiting from unrestricted access in the case of France – particularly since there is no evidence that Romanian and Bulgarian migrant workers have generated negative effects for the French labour market in recent years.

In any case, the French reconsidations concerning decisions about the free movement of workers, which seem sometimes paradoxical, reveal that more research is needed. Indeed, much remains to be done to understand the effects of migrant workers from the new member states of Central and Eastern Europe on the French labour market and finally the long-term implications. Unfortunately, French research on migration is scarce. There are not enough empirical studies on these crucial issues and, consequently, any clear policy recommendations to be drawn. The lack of appropriate research may be a reason why public opinion and fears about enlargement and migration are so widespread in France. Another important problem is the lack of regular collection of harmonized, reliable data on the size and composition of flows and stocks of Central and Eastern migrants. In this respect, the recent initiatives of the French government to compile data of all administrative bodies that work on international migration and the new census method by INSEE are of interest to statistics in the years to come.
5 References


Brücker H. et al. (2008), Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements, Draft final report, Nuremberg.


Eurobarometer (2005), European Union enlargement, the European constitution, economic challenges, innovative products and services, 63.4.


Lemos S., Portes J. (2008), "New labour? The impact of migration from the new member states from Central and Eastern European countries on the UK labour market", Working Paper, 08/29, University of Leicester.


Croatia has been a traditional migration country for decades. During the past several years the number of Croatian migrants in the EU-15 has been stagnant or even slightly declining. Croatia’s migration balance has been positive in the past ten years, but flows have been politically motivated to some extent, since most inflows and outflows are related to the return of persons after the war. Due to the emerging shortages in some sectors and/or skills, labour migration to Croatia has been growing in recent years. Most migrants come from the successor states of the former Yugoslavia, in particular Bosnia and Herzegovina and Macedonia, and work in the construction, shipbuilding and tourism sectors. Though calculations on the potential migration flows after a future EU accession are missing, it can be assumed that the numbers will be small, even taking into account those Croats from Bosnia and Herzegovina with a double citizenship.
1 Introduction

Croatia has a long history and tradition of migration, not only within Europe but also overseas, particularly to the United States, Australia and Canada.\footnote{Data available on Croatian immigrants from other receiving countries than EU show the following: United States 374000, Australia 51000, Switzerland and Canada about 40000 each.} Croatia is not yet a member of the European Union; it became an official EU candidate only in 2004 and started entry talks in late 2005. Only recently the EU has announced an ‘indicative timetable’ for the technical conclusions, provided Croatia meets a number of conditions. Accordingly Croatia may complete membership negotiations by the end of 2009 and is likely to join the Union in 2011. Negotiations on the free movement of workers started in June 2008.

In contrast to the new EU member states (NMS) of Central and Eastern Europe, Croatia exhibits a more diverse pattern of migration which is characterized by the return of refugees who left the country as a consequence of the war in the 1990s, retirement migration and a high but almost stagnant number of traditional labour migrants.

1.1 Main characteristics of the Croatian labour market

1.1.1 The macroeconomic background

During the first years of transition, Croatia experienced the most severe output decline among the Central and East European (CEE) countries. This was caused, among other things, by the war, the disruption of transport links and the loss of the Yugoslav market. Following the introduction of a stabilization programme in late 1993, GDP grew at impressive rates up until 1997, mainly driven by domestic demand in general and by reconstruction-related investment activities in particular. But growth lost momentum in the subsequent year due to a banking crisis and turned negative by 1999. From 2000, GDP again registered continuous and increasing growth rates (Table 1), backed by strong household consumption and investment activities. Employment losses at the outset of transition were coupled with high open unemployment, associated with early retirement, increasing numbers of disability retirements and support of war veterans.

In the period 2000-2007 GDP rose by an average 4.9% per year. In some years GDP growth was driven by productivity gains rather than by new job creation (jobless growth). According to the respective data source, employment resumed growth from 2001 (registration data) or 2003 (Labour Force Survey) onwards.

1.1.2 Main features of the labour market

One of the main characteristics of the Croatia labour market is represented by its low employment and activity rates, particularly those of women. A comparison to the new EU
member states shows that only in Bulgaria and Poland employment rates are lower than in Croatia. The low activity rate may be explained by the extensive use of early retirement schemes during the 1990s, the discouraged worker effect, an increasing number of disability retirements and, last but not least, by the traditional role of women (EIZ, 2006).

Table 1: Croatia: Selected economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, th pers., mid-year</td>
<td>4437</td>
<td>4437</td>
<td>4443</td>
<td>4442</td>
<td>4439</td>
<td>4442</td>
<td>4440</td>
<td>4440</td>
<td></td>
</tr>
<tr>
<td>Gross domestic product, HRK mn, nom.</td>
<td>152519</td>
<td>165640</td>
<td>181231</td>
<td>198422</td>
<td>214983</td>
<td>231349</td>
<td>250590</td>
<td>275078</td>
<td></td>
</tr>
<tr>
<td>annual change in % (real)</td>
<td>2.9</td>
<td>4.4</td>
<td>5.6</td>
<td>5.3</td>
<td>4.3</td>
<td>4.3</td>
<td>4.8</td>
<td>5.6</td>
<td>4.3</td>
</tr>
<tr>
<td>GDP/capita (EUR at PPP - wiiw)</td>
<td>8110</td>
<td>8630</td>
<td>9320</td>
<td>9830</td>
<td>10570</td>
<td>11200</td>
<td>12130</td>
<td>13190</td>
<td></td>
</tr>
<tr>
<td>LFS - employed persons, th, avg.</td>
<td>1553</td>
<td>1469</td>
<td>1528</td>
<td>1537</td>
<td>1563</td>
<td>1573</td>
<td>1586</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>annual change in %</td>
<td>4.1</td>
<td>-5.4</td>
<td>0.6</td>
<td>1.7</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LFS - unemployed persons, average</td>
<td>298.0</td>
<td>277.0</td>
<td>266.0</td>
<td>256.0</td>
<td>249.5</td>
<td>229.0</td>
<td>198.5</td>
<td>182.6</td>
<td></td>
</tr>
<tr>
<td>LFS - unemployment rate in %, average</td>
<td>16.1</td>
<td>15.9</td>
<td>14.8</td>
<td>14.3</td>
<td>13.8</td>
<td>12.7</td>
<td>11.1</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployed, th pers, end of period</td>
<td>378.5</td>
<td>396.1</td>
<td>366.2</td>
<td>318.7</td>
<td>317.6</td>
<td>307.9</td>
<td>293.2</td>
<td>254.5</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment rate in %, end of period</td>
<td>22.3</td>
<td>23.1</td>
<td>21.3</td>
<td>18.7</td>
<td>18.5</td>
<td>17.8</td>
<td>17.0</td>
<td>14.7</td>
<td>14.5</td>
</tr>
<tr>
<td>Average gross monthly wages, HRK</td>
<td>4869</td>
<td>5061</td>
<td>5366</td>
<td>5623</td>
<td>5985</td>
<td>6248</td>
<td>6634</td>
<td>7047</td>
<td>73048</td>
</tr>
<tr>
<td>annual change in % (real, net)</td>
<td>3.4</td>
<td>1.6</td>
<td>3.1</td>
<td>3.8</td>
<td>3.7</td>
<td>1.5</td>
<td>1.9</td>
<td>2.2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Source: wiiw Database incorporating national statistics; IMF; wiiw forecasts.

Agriculture is still an important employer, accounting for 14% of total LFS employment – a fairly high share as compared to the NMS excepting Poland, Romania and Bulgaria. New jobs have mainly been created in the services sector and, after years of steady decline, again in the manufacturing sector.

Following a peak (16%) in 2000, LFS unemployment fell continuously thereafter and reached 10% in 2007. Despite this improvement, Croatia still features the second highest unemployment rate after Slovakia if compared with the NMS. The incidence of unemployment is particularly high (though declining) for young people with a low educational level. Long-term unemployment has become another salient feature of the Croatian labour market (60% of total unemployed), those affected are running the risk of permanent exclusion and finally exiting from the labour market. The groups most affected by long-term unemployment are females, those with low educational level or uncompleted schooling.

An examination of unemployment by educational level shows a less diverging picture than in most NMS. While in the latter the least educated are over-proportionately affected by unemployment, in Croatia the group with the lowest educational level features about
the average unemployment rate, whereas persons with medium education are the only group to exhibit an above-average unemployment rate.

An analysis of unemployment by region shows significant differences in Croatia. Labour market imbalances tend to be highly persistent over time: the regions worst off in 1996 have tended to perform worse in later phases as well, the only exception being the region of Zadar. The city of Zagreb and the county of Istria – the economically most developed regions of Croatia – report the lowest unemployment levels, while in Vukovar Srijem, the least developed county, the highest level is observed.

Similar to most comparable countries, Croatia experienced a real wage decline in the early years of transition, additionally accelerated by the war and by hyperinflation up to 1993, when the real wage level was only 30% of the 1990 average. This period was characterized by an enormous gap between real wage growth and productivity growth. After launching the stabilization programme in late 1993, wage growth surged ahead of productivity growth up until 1999 (gross wages) and 2000 (net wages) respectively. In the subsequent years real wage developments were almost in line with productivity increases. Croatia has a higher wage level than any of the NMS (with the exception of Slovenia), which makes its labour relatively expensive as compared to its competitors.

1.1.3 Demographic development

The population of Croatia has declined during the period of transition, first due to outward migration caused by the war but also due to the natural increase turning negative. Data for 2004 indicate that out of the country’s 4.4 million inhabitants, the agricultural population accounted for 5.5%. The highest (and stable) share by far of both population (28%) and labour force (30%) is concentrated in the Zagreb region, whereas almost all other regions have undergone a depopulation process. Croatia, like most of the new and old EU member states, faces the problem of an ageing population. The share of the pre-productive and post-productive age groups in total population is 16% and 17% respectively: thus, in a comparison with the NMS, Croatia ranks second after Bulgaria among the most ageing societies, but compared with the EU-27 the rates are similar. As a result the Croatian social security system has come under pressure, due to the very unfavourable ratio of working to retired people. The working-age population (15-64 years of age) accounted for 67% of the total population in 2007 and was lower than in any of the NMS, but above the EU-27 average (Figure 1).
**Figure 1: Population by age groups in selected countries, 2007**

![Chart showing population by age groups in selected countries, 2007](chart)

Source: Eurostat.

**Table 2: Croatia: International migration**

<table>
<thead>
<tr>
<th>Year</th>
<th>Immigrants</th>
<th>Emigrants</th>
<th>Net Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>44596</td>
<td>10027</td>
<td>34569</td>
</tr>
<tr>
<td>1997</td>
<td>52343</td>
<td>18531</td>
<td>33812</td>
</tr>
<tr>
<td>1998</td>
<td>51784</td>
<td>7592</td>
<td>44192</td>
</tr>
<tr>
<td>1999</td>
<td>32910</td>
<td>14285</td>
<td>18625</td>
</tr>
<tr>
<td>2000</td>
<td>29385</td>
<td>5953</td>
<td>23432</td>
</tr>
<tr>
<td>2001</td>
<td>24415</td>
<td>7488</td>
<td>16927</td>
</tr>
<tr>
<td>2002</td>
<td>20365</td>
<td>11767</td>
<td>8598</td>
</tr>
<tr>
<td>2003</td>
<td>18455</td>
<td>6534</td>
<td>11921</td>
</tr>
<tr>
<td>2004</td>
<td>18383</td>
<td>6812</td>
<td>11571</td>
</tr>
<tr>
<td>2005</td>
<td>14230</td>
<td>6012</td>
<td>8218</td>
</tr>
<tr>
<td>2006</td>
<td>14978</td>
<td>7692</td>
<td>7286</td>
</tr>
<tr>
<td>2007</td>
<td>14622</td>
<td>9002</td>
<td>5620</td>
</tr>
</tbody>
</table>

Note: Data for 1996 and 1997 do not include the territory of Croatia occupied at that time.

Source: Statistical Office of Croatia

The migration balance has been positive in the past ten years, but declining recently (Table 2). Migration flows during the 1990s and also the 2000s were and still are politically motivated to some extent, since most inflows and outflows are related to the return of persons displaced by the war (JIM, 2007). Available data provided by the Statistical Office of Croatia show that the bulk of immigration came from Bosnia and

---

2 Data presented by the Statistical Office of Croatia may not fully reflect the actual size of migration, since the reporting is limited to those who reported their departure and permanently residing foreigners who reported their place of permanent residence in Croatia (Bozic, 2007).
Herzegovina, while most of the emigrants went to Serbia and Montenegro, followed by Bosnia and Herzegovina.

Demographic projections prepared by the Croatian Central Bureau of Statistics (2006) indicate that Croatia’s population may decline to about 3.7 million by 2050, even if assuming a continued positive migration balance. The working-age population (15-64 years) is projected to fall by almost 30% and its share in the total population to decline from currently 67% to 57% in 2050. At the same time the number of persons over 65 years will increase by some 20%, raising the old age dependency ratio (ratio of older persons compared to the working-age population) from 26% to 50% (JIM, 2007).

Croats in Bosnia and Herzegovina

A specificity of the region is that a large number of Croats living in Bosnia and Herzegovina have obtained Croatian citizenship, as ethnic Croats have the right to apply for a Croatian passport, implying equal rights to Croatian citizens living in Croatia (Doric, 2008) – among other things the right to vote in Croatian elections. According to data provided by the Croatian Ministry of Interior, about 336 thousand Croats have a permanent residence in Bosnia and Herzegovina, accounting for around 8% of its total population.

1.2 Institutional setting for labour migration

1.2.1 Regulations on migration

Labour immigration is based on the Law on Foreigners which came into force in January 2004. The Law envisages the establishment of a quota system of work permits. Accordingly the Croatian government – following the proposal of the Ministry of Labour, based upon the opinion of the Croatian Employment Service – determines the annual quota for work permits for foreign workers per sectors and professions each year. Work permits are issued for a limited period of time, usually corresponding to one year, and may be extended to a maximum of two years. In addition the government may set the quota for the employment of seasonal workers. The work permit is issued to a foreigner upon request of an employer.

In line with the provisions of the Law, foreigners are guaranteed the same rights as Croatian citizens regarding employment and working conditions (collective agreements and arbitration rulings).

Apart from quotas, work permits can be issued to some categories of foreign workers. These permits are granted to daily commuters from neighbouring countries (on the condition of reciprocity), EU nationals and their family members, foreigners performing indispensable tasks in companies and foreign company agencies, intra-corporate transferees, school teachers teaching in the national minorities language, etc. (IOM, 2007, p. 29).
In January 2008 a Migration Policy Strategy together with a new Asylum Act came into force. This package is to a great extent harmonized with the acquis communautaire. Migration policy is primarily focusing on immigration and is a first step towards the establishment of an immigration system.

1.2.2 Labour market institutions

In Croatia a number of ministries, agencies and institutions are dealing with the (legal) aspects of migration in general and labour migration in particular (see IOM, 2007):

- The Ministry of Interior is responsible for migration. According to the Law on Foreigners it covers all issues of entry, admission, stay, residence and employment of foreigners.

- The Aliens and Asylum Department of the Inspection and Administrative Affairs Directorate is among other things responsible for issues related to regular migration and deals with residence and employment of foreigners.

- The Croatian Emigration Department encourages Croatian emigrants to engage economically in Croatia.

- The Ministry of Economy, Labour and Entrepreneurship proposes, upon the advice of the Croatian Employment Service, the annual quota of work permits by sectors and professions.

- The Labour and Labour Market Directorate (as part of the Ministry of Economy, Labour and Entrepreneurship) carries out, among other things, administrative and other professional activities related to the legal status of Croatian citizens employed in foreign countries and their return and employment in Croatia and the legal status of foreign workers in Croatia.

- The State Inspectorate is responsible for the supervision of foreign workers.

- The Croatian Employment Service provides information on the labour market situation and the need for foreign workers to set quotas for work permits. On the basis of international agreements the CES also assists Croatian citizens who want to work abroad. So far such agreements are concluded only with Germany and Slovenia. The agreement with Germany envisages the recruitment of seasonal workers from Croatia in agriculture and catering, 500 guest workers for a duration of up to 18 months and 30 student summer jobs.

2 Patterns of labour mobility

Data sources on migration from and to Croatia are very limited. The main source is the Croatian Bureau of Statistics, providing yearly data on emigration and immigration.
However, there is no separate information about labour migration (see above). Other sources are immigration figures in receiving countries.

2.1 Emigration to Western Europe

International migration from the countries of the Western Balkans has a long tradition and has been diverse and complex. Labour emigration from Croatia started in the late 1950s (illegally) and Croatian labour migrants constituted a relative majority among the first wave of guest workers in the 1960s (Bozic, 2007). At that time, when additional labour was needed in the wake of what is generally understood as the post-war reconstruction period in Western Europe, it became very common to attract labour particularly from the former Yugoslavia and Turkey; for instance, in Austria a so-called 'guest worker' scheme was introduced, bringing workers from the region to Austria (Adam, 2005). In the former Yugoslavia, labour migration to Western Europe was seen as a way to alleviate labour market imbalances, so that a high number of expatriate networks exist.

Table 3 shows the population of Southeast European (SEE) countries residing in the EU-15. Accordingly, during the period 2000-2007 Albania reported the highest share (nearly 28%) living in the EU-15, followed by Bosnia and Herzegovina, Macedonia and Croatia. Over that period 300 thousand Croatian citizens, accounting for about 7% of the Croatian population, were living in the EU-15, most of them in Germany, Austria and Switzerland. A slight decline is reported both in absolute and relative terms from 2004 onwards.

The Croatian Employment Service (CES) acts also as a mediator in the employment of seasonal workers, medical technicians, guest workers and students participating in summer trainings in Germany as well as in the employment of seamen and on ships owned by foreign owners. However, the number of workers employed abroad through the mediation of the CES is very small, amounting to 7900 persons in 2001 (Table 4), the highest level so far. Data for the entire 2000-2007 period indicate a declining number of employed abroad in 2003 and 2004, and a slight increase thereafter to about 5 thousand persons. Employment was mainly of a seasonal character with activities concentrating primarily in agriculture (over 70% of the total), followed by hotels and restaurants, entertainment etc. (CES, 2008).

The bulk of Croatian workers in the EU concentrate on Germany and the neighbouring countries Austria, Italy and Slovenia. Croatia has also concluded special arrangements with Slovenia and Germany (Table 4).³

---

³ According to the quota agreed between Germany and Croatia, unemployed Croatian citizens have the opportunity to spend a period of time in Germany. An agreement concluded in 2003 allows 500 Croatian workers who are doing temporary work in Germany access to professional training for three years. However, only 319 persons made use of this arrangement in 2003 (Kapural, 2005), 111 in 2005 and 103 in 2006.
## Table 3: Population from Southeast European countries in the EU-15 by sending country, numbers, and per cent of home-country population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>412,915</td>
<td>434,002</td>
<td>514,291</td>
<td>581,605</td>
<td>670,751</td>
<td>717,450</td>
<td>743,485</td>
<td>805,416</td>
</tr>
<tr>
<td></td>
<td>13.5%</td>
<td>14.1%</td>
<td>16.6%</td>
<td>18.7%</td>
<td>8.2%</td>
<td>8.2%</td>
<td>8.1%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Bosnia</td>
<td>227,011</td>
<td>323,006</td>
<td>323,929</td>
<td>330,751</td>
<td>313,440</td>
<td>314,624</td>
<td>310,651</td>
<td>319,347</td>
</tr>
<tr>
<td></td>
<td>6.0%</td>
<td>8.5%</td>
<td>8.5%</td>
<td>8.6%</td>
<td>8.2%</td>
<td>8.2%</td>
<td>8.1%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Croatia</td>
<td>249,031</td>
<td>316,953</td>
<td>329,448</td>
<td>334,136</td>
<td>324,698</td>
<td>326,088</td>
<td>322,926</td>
<td>316,504</td>
</tr>
<tr>
<td></td>
<td>5.6%</td>
<td>7.1%</td>
<td>7.4%</td>
<td>7.5%</td>
<td>7.3%</td>
<td>7.3%</td>
<td>7.3%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Macedonia</td>
<td>83,848</td>
<td>103,932</td>
<td>112,922</td>
<td>137,863</td>
<td>146,209</td>
<td>153,059</td>
<td>161,556</td>
<td>171,450</td>
</tr>
<tr>
<td></td>
<td>4.1%</td>
<td>5.1%</td>
<td>5.6%</td>
<td>6.8%</td>
<td>7.2%</td>
<td>7.5%</td>
<td>7.9%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Serbia-Monte.</td>
<td>679,548</td>
<td>835,176</td>
<td>806,739</td>
<td>777,571</td>
<td>342,551</td>
<td>521,495</td>
<td>508,255</td>
<td>471,764</td>
</tr>
<tr>
<td></td>
<td>6.4%</td>
<td>7.8%</td>
<td>8.6%</td>
<td>9.6%</td>
<td>4.2%</td>
<td>6.5%</td>
<td>6.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>71,437</td>
<td>102,980</td>
<td>140,864</td>
<td>166,330</td>
<td>203,528</td>
<td>219,233</td>
<td>255,163</td>
<td>310,335</td>
</tr>
<tr>
<td></td>
<td>0.9%</td>
<td>1.3%</td>
<td>1.8%</td>
<td>2.1%</td>
<td>2.6%</td>
<td>2.8%</td>
<td>3.3%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Romania</td>
<td>217,669</td>
<td>285,075</td>
<td>389,045</td>
<td>553,508</td>
<td>724,697</td>
<td>880,738</td>
<td>1,072,307</td>
<td>1,553,276</td>
</tr>
<tr>
<td></td>
<td>1.0%</td>
<td>1.3%</td>
<td>1.8%</td>
<td>2.6%</td>
<td>3.3%</td>
<td>4.1%</td>
<td>5.0%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>23,814</td>
<td>30,697</td>
<td>31,218</td>
<td>35,672</td>
<td>32,355</td>
<td>34,698</td>
<td>34,395</td>
<td>35,848</td>
</tr>
<tr>
<td></td>
<td>1.2%</td>
<td>1.5%</td>
<td>1.6%</td>
<td>1.8%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

Sources: National population statistics, Eurostat, LFS, own calculations.
Stocks in EU-15

Following Slovenia’s accession to the EU, that country had to introduce quotas for workers from non-EU member states. As a consequence the number of Croatian workers in Slovenia was reduced compared to the pre-accession period (Kapural, 2005). Croatian workers are mostly commuters and are doing seasonal work.

The number of Croats with a regular visa in Italy increased from 16,500 in 2000 to 19,600 in 2007; the majority of them was concentrated in the Veneto and Friuli-Venezia Giulia. These regions contain Italy’s two main shipyards in the Adriatic Sea, Monfalcone and Marghera (IOM, 2005). In general considerable cross-border migration – weekly or daily commuting – of Croatian workers from Istria to Italy is observed. In the region of Trieste nursing and housemaid work is performed by about 12 thousand women from Croatia. According to some estimates, approximately 5000 to 8000 women from Croatia work illegally in Northern and Central Italy (IOM, 2005, p. 35).
Table 4: Number of Croatian workers employed abroad through the mediation of the Croatian Employment Service (CES)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Seasonal workers</th>
<th>Guest workers</th>
<th>Students</th>
<th>Medical Technicians</th>
<th>Seamen on foreign ships</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>7233</td>
<td>5954</td>
<td>-</td>
<td>-</td>
<td>147</td>
<td>1132</td>
</tr>
<tr>
<td>2001</td>
<td>7862</td>
<td>6211</td>
<td>-</td>
<td>-</td>
<td>317</td>
<td>1334</td>
</tr>
<tr>
<td>2002</td>
<td>7669</td>
<td>6035</td>
<td>57</td>
<td>37</td>
<td>390</td>
<td>1150</td>
</tr>
<tr>
<td>2003</td>
<td>6161</td>
<td>5238</td>
<td>319</td>
<td>24</td>
<td>98</td>
<td>482</td>
</tr>
<tr>
<td>2004</td>
<td>5108</td>
<td>4778</td>
<td>168</td>
<td>16</td>
<td>31</td>
<td>115</td>
</tr>
<tr>
<td>2005</td>
<td>4883</td>
<td>4615</td>
<td>111</td>
<td>32</td>
<td>11</td>
<td>114</td>
</tr>
<tr>
<td>2006</td>
<td>5273</td>
<td>5013</td>
<td>103</td>
<td>31</td>
<td>12</td>
<td>114</td>
</tr>
<tr>
<td>2007</td>
<td>5082</td>
<td>4757</td>
<td>109</td>
<td>24</td>
<td>19</td>
<td>173</td>
</tr>
</tbody>
</table>

Source: Croatian Employment Service

Table 5: Croatian citizens in selected European countries, 1996-2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>201923</td>
<td>206554</td>
<td>208909</td>
<td>213954</td>
<td>216800</td>
<td>223800</td>
<td>231000</td>
<td>236570</td>
<td>229712</td>
<td>228926</td>
<td>227510</td>
<td>225309</td>
</tr>
<tr>
<td>Austria</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>57154</td>
<td>58440</td>
<td>58520</td>
<td>58719</td>
<td>58351</td>
<td>57103</td>
<td>56695</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>15309</td>
<td>15223</td>
<td>15455</td>
<td>16508</td>
<td>16690</td>
<td>16564</td>
<td>16858</td>
<td>21052</td>
<td>19595</td>
<td>20393</td>
<td>19664</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>4266</td>
<td>5490</td>
<td>6814</td>
<td>7170</td>
<td>7520</td>
<td>6859</td>
<td>5470</td>
<td>4194</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Slovenia</td>
<td>5788</td>
<td>6017</td>
<td>5245</td>
<td>6720</td>
<td>6751</td>
<td>7221</td>
<td>7208</td>
<td>..</td>
<td>6886</td>
<td>6829</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>43615</td>
<td>43727</td>
<td>43377</td>
<td>43764</td>
<td>43876</td>
<td>44097</td>
<td>43548</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
</tbody>
</table>

Source: National statistics of the respective countries; Bozic (2007).

2.2 Migrant workers in Croatia

Along with the economic upturn the Croatian economy has been making use of foreign workers due to the emerging labour shortages in some sectors and/or skills. Table 5 shows the development of work and business permits in the period 2000-2008. The strong reduction of work permits issued between 2003 and 2004 can be attributed to the changing legislation, such as the introduction of exemptions from the requirement of work permits for 23 categories of migrants by the Foreign Workers Law approved in 2003. In addition, the new Law introduced business permits as a new category, which contributed to a decline of work permits as well (see also IOM et al., 2007). Business permits are considered as both permits to work and reside on the territory of the Republic of Croatia. From the very beginning of their introduction, the number of business permits issued exceeded that of work permits. Figures for 2005 indicate that most business permits were issued for citizens from Bosnia and Herzegovina, followed by Macedonia, China, Slovakia, Italy, Serbia, Montenegro, Germany, Slovenia and Austria (Bozic, 2007).
Table 6: Work and business permits issued to foreigners in Croatia, 2000-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Work Permits</th>
<th>Business Permits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>4695</td>
<td>-</td>
<td>4695</td>
</tr>
<tr>
<td>2001</td>
<td>5710</td>
<td>-</td>
<td>5710</td>
</tr>
<tr>
<td>2002</td>
<td>6674</td>
<td>-</td>
<td>6674</td>
</tr>
<tr>
<td>2003</td>
<td>8356</td>
<td>-</td>
<td>8356</td>
</tr>
<tr>
<td>2004</td>
<td>2979</td>
<td>3356</td>
<td>6335</td>
</tr>
<tr>
<td>2005</td>
<td>3814</td>
<td>3875</td>
<td>7689</td>
</tr>
<tr>
<td>2006</td>
<td>3950</td>
<td>5678</td>
<td>9628</td>
</tr>
<tr>
<td>2007</td>
<td>4613</td>
<td>-</td>
<td>4613</td>
</tr>
<tr>
<td>2008</td>
<td>8397</td>
<td>-</td>
<td>8397</td>
</tr>
</tbody>
</table>

Source: Ministry of Interior of the Republic of Croatia, Croatian Employment Service (CES).

Table 7: Foreign workers by sex and education (as of Dec 2006)

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>10</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Masters degree</td>
<td>12</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>University degree</td>
<td>1171</td>
<td>382</td>
<td>1553</td>
</tr>
<tr>
<td>College degree</td>
<td>150</td>
<td>67</td>
<td>217</td>
</tr>
<tr>
<td>High school degree</td>
<td>4317</td>
<td>788</td>
<td>5105</td>
</tr>
<tr>
<td>Highly skilled</td>
<td>113</td>
<td>2</td>
<td>115</td>
</tr>
<tr>
<td>Skilled</td>
<td>821</td>
<td>12</td>
<td>833</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>70</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>Low skilled</td>
<td>1419</td>
<td>99</td>
<td>1518</td>
</tr>
<tr>
<td>No education</td>
<td>41</td>
<td>6</td>
<td>47</td>
</tr>
<tr>
<td>Unknown</td>
<td>410</td>
<td>64</td>
<td>474</td>
</tr>
<tr>
<td>Total</td>
<td>8534</td>
<td>1433</td>
<td>9967</td>
</tr>
</tbody>
</table>


Detailed data on the 2007 quota indicate that out of 4613 permits, new work permits accounted for 2613. The quota for 2008 almost doubled, to 8397, of which 2500 are accounting for the prolongation of work permits from the previous year and 5897 for new employment. Altogether, the number of foreign workers is increasing, but its share in overall employment is very low. A breakdown by economic sector shows that most of the work permits were issued for construction (3630), shipbuilding (1700), hotels and restaurants (240), transport (118) and manufacturing (106). In all other sectors the employment of foreign workers is negligible.
According to IOM (2007) the educational level of migrant workers in Croatia has changed during the past decade. While at the beginning of the 1990s foreign workers were mostly skilled and low-skilled, this pattern has changed from the mid-1990s with the share of highly skilled workers steadily on the increase. As Table 6 shows, in 2005 the majority of foreign workers had high school degrees, followed by those with university degrees and finally the low-skilled workers. Most foreign workers are men (86%), only 14% are women. Persons aged between 46 and 60 years account for the highest share among migrant workers in Croatia, followed by the age group 26 to 35 years.

Information about informal work of foreigners is scarce. As of 2007 the fine for employers employing workers illegally increased significantly. The State Inspectorate can even close down a firm employing migrant workers illegally. In 2005 the State Inspectorate registered 1373 foreigners working without a work permit, in 2006 the respective number was 1284.

3 Effects of migration on the national labour market and economy

3.1 Brain drain

Brain drain is an important issue not only for Croatia, but for the entire Southeast European region. Croatia is reportedly a country with a high emigration rate among the highly educated. However, the actual magnitude is unknown, because ‘the brain drain issue has been neglected for years and is still insufficiently investigated’ (Adamovic and Menznaric, 2006). During the 1990s figures on a dramatic brain drain were in circulation, based on political motives rather than on actual well-documented figures.4

According to the Ministry of Science and Technology, 849 scientists left Croatia in the period 1990-2000.5 A breakdown of the total shows that among this group the technical sciences accounted for 249 persons, natural sciences for 244, medical sciences for 139 and other scientific areas for 217. Empirical research on the potential brain drain by Golub (2001) has shown that the bulk of scientists (85%) who left the country were below the age of 40 years, more than half were young researchers. In general, the number of young researchers willing to leave the country declined between 1990 and 2000 (Adamovic and Meznaric (2003). It was found that the current migration potential of young Croatian scientists has weakened, but also that the brain drain has not lost its significance. The share of potential migrants is still highest among the highly educated (Bozic and Buric, 2005).

4 According to some ‘political estimates’ about 140 thousand highly skilled have left the country in the past decade. According to Adamovic and Meznaric (2006) this would mean that in the past ten years Croatia has lost almost the whole contingent of graduated students. A former Minister of Science and Technology stated in 2003 the 4738 highly educated citizens emigrated during 1991-2001 and added that the actual size had reached 10 thousand (Bozic, 2007).

5 Scientists here refers to persons who were employed by Croatian research institutes or universities.
In order to motivate Croatian scientists living abroad to return, the Ministry of Science, Education and Sports has launched a Fund (Unity through Knowledge Fund), supported by the World Bank. The UFK’s mission under the slogan **Connectivity – Cooperation – Creativity** is to unite scientific and professional potential in Croatia and the diaspora in the development of a knowledge-based society.\(^6\)

### 3.2 Remittances\(^7\)

Workers’ remittances have for many years been a source of income in Croatia, but are relatively modest compared to other countries of the region, and declining. In 2006 workers’ remittances accounted for 2.5% of the GDP, representing the lowest value in the region.

Migrants’ remittances refer to income earned in the host country of migration that is sent or brought to the home country. More specifically, this term covers the following items: (1) workers’ remittances, i.e. transfers abroad by resident workers (who live in the host country for at least 12 months); (2) compensation of employees, i.e. earnings paid by host-country employers to migrants who are not residing in that country, such as seasonal workers; and (3) migrants’ transfers, namely cash and goods transferred by re-migrating individuals upon their relocation back to the home economy (IMF, 1993). Understanding remittances in a more narrow sense, only the first category corresponds to the notion of remittances as transfers of individuals residing abroad to family members in their countries of origin (Chami et al., 2008).\(^8\) Besides, according to official data, that category is the most relevant among the above items.

As compared to other countries of the region, in Croatia and Macedonia the role of remittances is much less pronounced: the two countries have received recent inflows of 2.5-5% of their GDP. Both countries have shown a tendency of increasing remittance inflows during the 2000s.

From a comparative perspective, Albania as well as Bosnia and Herzegovina are countries with particularly high inflows of remittances. Bosnia and Herzegovina has received inflows of remittances of about 16-18% of its official GDP throughout the present decade, while in Albania official inflows increased from just above 12% in 2000 to more than 20% in 2006.

Although outflows of both workers’ remittances and compensation of employees have been below 1% of the countries’ GDPs throughout the 2000s, flows amounting to around

---

\(^6\) [Http://www.ukf.hr](http://www.ukf.hr)

\(^7\) This part is based on a contribution by Anna Iara.

\(^8\) *Compensation of employees* contains salaries of employees of embassies and international institutions among others as well: such flows are less relevant in terms of their impact on the source economy. Besides, this category contains employers’ payments for social security, and part of the compensation of employees is spent in the host country, so that only a fraction ends up in the source country of migration. Migrants’ transfers are again corresponding to different situations and economic behaviour than workers’ remittances in the narrow sense, and these flows have very poor statistical coverage.
0.5% of GDP in Albania, Bosnia and Herzegovina and Croatia nevertheless show that these countries also serve as hosts of worker migration.

In the context of the importance of remittances for the source countries, inflows of remittances are often compared with FDI as an alternative source of foreign exchange and investment. In the NMS the latter exceeded the former by far. By contrast, in a number of SEE countries official remittances figures were three to five times higher than FDI inflows in some years. Keeping in mind that a large part of remittances is likely to be unrecorded, the true size of remittances probably exceeds FDI in Croatia (and Romania) as well.

Most of the remittances in Croatia have been invested (real estate and land) rather than consumed (Poprzenovic, 2007).

### 3.3 Migration potential

Bozic and Buric (2005) have estimated Croatia’s migration potential by making use of the micro analytic model for the Central and East European migration potential introduced by Fassmann and Hintermann (1997). Accordingly they estimated the migration potential of Croatia at 460 thousand persons older than 14 years or 12.5% of the country’s population in that age group. The likely migration potential is 92 thousand (2.5%) and the real migration potential 0.4% of the population above 14 years or 14,700 persons. Similar to other comparable countries, typical (potential) migrants are young, unmarried, and highly educated persons. The regions with the lowest share in GDP exhibit the highest share of potential migrants and ‘not the regions which are geographically the closest to potential immigration countries’. The main reasons for emigration are primarily of an economic nature, in particular high unemployment.

### 4 Conclusions

- The situation in Croatia is in many respects very similar to other SEE countries: Together with sizeable stocks of diaspora populations in the Western countries and ongoing emigration, Croatia is characterized by the presence of refugees, the recent phenomena of labour and retirement immigration, and a growing (but still low) inflow of labour migrants.

- The stock of Croatian labour migrants in Europe (Germany, Austria, Italy in particular) has been stagnating during the past several years and is accounting for about 7% of the country’s population.

- Over recent years the inward migration of labour has been growing in Croatia, particularly in the shipbuilding, construction and tourism sectors; its level, however, is still very low. Most of these migrant workers originate from the successor states of the former Yugoslavia, the bulk coming from Bosnia and Herzegovina.
Improving economic conditions coupled with the perspective of EU accession might lower the outward migration and attract additional labour migrants. Even if taking into account those Croats holding a double citizenship and living in Bosnia and Herzegovina, the overall size of the 'Croatian' population is relatively small, thus we expect only limited future migration flows. This assumption is also confirmed by the fact that existing quota arrangements are not fully utilized.
5 References


Adamovic, M. and Meznaric, S. (2006), Migration of Young Croatian Scientists, AEMI.

Bozic, S. (2007), Strengthening cross border cooperation in the Western Balkans regarding migration management, Croatia, in: Migration Flows in Southeast Europe, a compendium of National Perspectives, Belgrade, April.


Hovat, V. (2007), Catching up in Transition: Female Highly-Skilled Migration and Youth Drain from South East Europe to Austria in the context of EU Enlargement – National Report for Croatia.

International Organisation for Migration (IOM) and Ministry of the Interior of the Republic of Slovenia, The Republic of Croatia Migration Profile, Ljubljana, September.


Republic of Croatia (2007), Joint Memorandum on Social Inclusion (JIM) of the Zagreb, May.
Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements

VC/2007/0293

Deliverable 8
The Vienna Institute for International Economic Studies (wiiw)

Country Study: Hungary
Sándor Richter

Abstract

Hungary is a relatively ‘closed’ country, neither outward nor inward migration is really significant. Hungary is among the less important sending countries of the EU’s new member states and, as host country, attracts much less migrants in relative terms than the old EU members. Compared to the communist era the mobility in both directions is more significant, but the EU accession has not changed the characteristics of migration in either direction. Most of the immigrants arrive from neighbouring countries and they are typically ethnic Hungarians. This explains the relative importance of naturalisations appearing in highly diverging numbers of foreign born persons and foreign citizens, respectively, in Hungary. Foreign employment is highly concentrated in the Budapest agglomeration and to a smaller extent in Central Transdanubia, both regions figuring as engines of growth in Hungary. The breakdown of foreign employees by branches significantly differs from that of the total employees. Foreigners are over-represented in construction and industry while under-represented in the services sectors. This latter, however may accommodate a substantial part of illegal employment.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
Contents

1 Main characteristics of the Hungarian labour market ........................................ 1

2 Migration from and to Hungary ....................................................................... 5
   2.1 Outward migration ................................................................................ 5
   2.2 Inward migration .................................................................................. 9

3 Conclusions .................................................................................................... 17

4 References ..................................................................................................... 18
1 Main characteristics of the Hungarian labour market

The macroeconomic framework

The changeover to parliamentary democracy and a market economy fundamentally transformed the Hungarian labour market. The recession that started in 1990 had reduced the Hungarian GDP by about 20% in 1990-1993, and the number of employed decreased by one quarter. After decades of (nominal) full employment under the communist regime, open unemployment appeared; it climbed to close to 12% by 1993. After a short recovery of the economy by 1994 the mounting fiscal and current account deficits necessitated an austerity programme in 1995 which radically diminished the population’s living standard through accommodation of household consumption to the reduced economic performance of the country. The stabilization package opened the way for sustainable economic growth and falling unemployment. 1997-2001 was a period of stable growth and rapid

Table 1: Selected economic indicators, 1989-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>Employment</th>
<th>Unemployment</th>
<th>Real earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>previous year = 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>100.7</td>
<td>98.2</td>
<td>...</td>
<td>99.7</td>
</tr>
<tr>
<td>1990</td>
<td>96.5</td>
<td>97.2</td>
<td>...</td>
<td>94.3</td>
</tr>
<tr>
<td>1991</td>
<td>88.1</td>
<td>92.6</td>
<td>...</td>
<td>93</td>
</tr>
<tr>
<td>1992</td>
<td>96.9</td>
<td>90.3</td>
<td>9.8</td>
<td>98.6</td>
</tr>
<tr>
<td>1993</td>
<td>99.4</td>
<td>93.8</td>
<td>11.9</td>
<td>96.1</td>
</tr>
<tr>
<td>1994</td>
<td>102.9</td>
<td>98</td>
<td>10.7</td>
<td>107.2</td>
</tr>
<tr>
<td>1995</td>
<td>101.5</td>
<td>98.1</td>
<td>10.2</td>
<td>87.8</td>
</tr>
<tr>
<td>1996</td>
<td>101.3</td>
<td>99.1</td>
<td>9.9</td>
<td>95</td>
</tr>
<tr>
<td>1997</td>
<td>104.6</td>
<td>100.1</td>
<td>8.7</td>
<td>104.9</td>
</tr>
<tr>
<td>1998</td>
<td>104.9</td>
<td>101.4</td>
<td>7.8</td>
<td>103.6</td>
</tr>
<tr>
<td>1999</td>
<td>104.2</td>
<td>103.2</td>
<td>7</td>
<td>102.5</td>
</tr>
<tr>
<td>2000</td>
<td>105.2</td>
<td>101</td>
<td>6.4</td>
<td>101.5</td>
</tr>
<tr>
<td>2001</td>
<td>103.8</td>
<td>100.3</td>
<td>5.7</td>
<td>106.4</td>
</tr>
<tr>
<td>2002</td>
<td>103.5</td>
<td>100.1</td>
<td>5.8</td>
<td>113.6</td>
</tr>
<tr>
<td>2003</td>
<td>102.9</td>
<td>101.3</td>
<td>5.9</td>
<td>109.2</td>
</tr>
<tr>
<td>2004</td>
<td>104.6</td>
<td>99.5</td>
<td>6.1</td>
<td>98.9</td>
</tr>
<tr>
<td>2005</td>
<td>104.1</td>
<td>100</td>
<td>7.2</td>
<td>106.3</td>
</tr>
<tr>
<td>2006</td>
<td>103.9</td>
<td>100.7</td>
<td>7.5</td>
<td>103.5</td>
</tr>
<tr>
<td>2007</td>
<td>101.3</td>
<td>99.9</td>
<td>7.4</td>
<td>95.2</td>
</tr>
</tbody>
</table>


Table 2: Labour market indicators for selected EU member states and group of member states, 2000-2006

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2004</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hungary</td>
<td>EU-15</td>
<td>Czech R.</td>
</tr>
<tr>
<td>1. Total population (000)</td>
<td>9,924</td>
<td>370,902</td>
<td>10,222</td>
</tr>
<tr>
<td></td>
<td>6,764</td>
<td>248,387</td>
<td>7,116</td>
</tr>
<tr>
<td>2. Population aged 15-64</td>
<td>3,844</td>
<td>166,408</td>
<td>4,941</td>
</tr>
<tr>
<td>3. Total employment (000)</td>
<td>3,806</td>
<td>157,530</td>
<td>4,625</td>
</tr>
<tr>
<td>5. Employment rate (% population aged 15-64)</td>
<td>56.3</td>
<td>63.4</td>
<td>65.0</td>
</tr>
<tr>
<td>6. Employment rate (% population aged 15-24)</td>
<td>33.5</td>
<td>40.5</td>
<td>36.4</td>
</tr>
<tr>
<td>7. Employment rate (% population aged 25-54)</td>
<td>73.0</td>
<td>76.5</td>
<td>81.6</td>
</tr>
<tr>
<td>8. Employment rate (% population aged 55-64)</td>
<td>22.2</td>
<td>37.8</td>
<td>36.3</td>
</tr>
<tr>
<td>9. FTE employment rate (% population aged 15-64)</td>
<td>56.0</td>
<td>58.0</td>
<td>63.2</td>
</tr>
<tr>
<td>10. Self-employed (% total employment)</td>
<td>15.1</td>
<td>14.5</td>
<td>17.4</td>
</tr>
<tr>
<td>11. Part-time employment (% total employment)</td>
<td>3.5</td>
<td>17.7</td>
<td>5.3</td>
</tr>
<tr>
<td>12. Fixed term contracts (% total employment)</td>
<td>7.1</td>
<td>13.7</td>
<td>8.1</td>
</tr>
<tr>
<td>13. Employment in Services (% total employment)</td>
<td>59.8</td>
<td>70.0</td>
<td>56.0</td>
</tr>
<tr>
<td>14. Employment in Industry (% total employment)</td>
<td>33.9</td>
<td>25.8</td>
<td>39.1</td>
</tr>
<tr>
<td>15. Employment in Agriculture (% total employment)</td>
<td>6.4</td>
<td>4.2</td>
<td>4.8</td>
</tr>
<tr>
<td>16. Activity rate (% population aged 15-64)</td>
<td>60.1</td>
<td>69.2</td>
<td>71.3</td>
</tr>
<tr>
<td>17. Activity rate (% of population aged 15-24)</td>
<td>38.3</td>
<td>48.2</td>
<td>44.4</td>
</tr>
<tr>
<td>18. Activity rate (% of population aged 25-54)</td>
<td>77.3</td>
<td>82.4</td>
<td>88.4</td>
</tr>
<tr>
<td>19. Activity rate (% of population aged 55-64)</td>
<td>22.9</td>
<td>40.8</td>
<td>38.2</td>
</tr>
<tr>
<td>20. Total unemployment (000)</td>
<td>261</td>
<td>13,533</td>
<td>445</td>
</tr>
<tr>
<td>21. Unemployment rate (% labour force 15+)</td>
<td>6.4</td>
<td>7.7</td>
<td>8.7</td>
</tr>
<tr>
<td>22. Youth unemployment rate (% labour force 15-24)</td>
<td>12.4</td>
<td>14.8</td>
<td>17.8</td>
</tr>
<tr>
<td>23. Long term unemployment rate (% labour force)</td>
<td>3.1</td>
<td>3.4</td>
<td>4.2</td>
</tr>
<tr>
<td>24. Youth unemployment ratio (% population aged 15-24)</td>
<td>4.8</td>
<td>7.7</td>
<td>8.0</td>
</tr>
</tbody>
</table>

modernization and was characterized by one of the lowest unemployment rates in the region. From 2001 on, closely related to political cycles, public deficits began to grow. The irresponsible economic policy of the Orbán, Medgyessy and Gyurcsány governments from mid-2001 on culminated in a crisis by the summer of 2006, necessitating a second austerity programme. This reduced economic growth to 1.3% by 2007 and (after ten years) the unemployment rate amounted again to 8% (see Table 1).

**Low activity rate**

The main feature of the Hungarian labour market is the relatively low participation/activity rate (see Table 2). It is roughly 10 percentage points lower than the respective indicator of the old EU members. The lag behind the other new EU members in Central Europe is significant as well. The respective indicators of the Czech Republic and Slovakia are similar to those of the EU-15, and only Poland’s participation/activity rate is similarly low as Hungary’s, nevertheless only after a considerable deterioration over the last few years. In 2005 not less than 34% of the population (male 15-59, female 15-54 years) was inactive (in 1990 only 23.1%). The unique feature of the Hungarian labour market is the high share of ‘other inactive’ within the pool of the inactive population (those who are not pensioners, students or on child care leave). This segment of the population is twice as large as that of the unemployed. Information on the segment ‘other inactive’ is limited. An unknown part of these people are engaged in the unreported economy. Among the population aged 15-64, disabled persons took a share of over 5% of the respondents, dependents 2% and those out of work for other reason over 2% in 2005 (according to self-categorization, being asked about their own labour market status).\(^2\)

The lag compared to the EU-15 is not smaller concerning the Hungarian employment rate either. It has even become bigger since 2000 as the respective indicator for the EU-15 has substantially improved in this period while the Hungarian one only to a moderate extent. Compared to other Central European new EU member states, the results of the comparison are however better than in the case of the participation/activity rate. While the Czech indicator is much better than the Hungarian, Slovakia performs hardly better while Poland worse than Hungary (see Table 2).

Hungary has traditionally been a low-unemployment country among the new members, but with respect to the low activity rate and especially the high share of ‘other inactive’ in the population this indicator must be treated with caution. Nevertheless, the Hungarian unemployment rate is similar to that of the EU-15. Of the Central European new member states, the Czech Republic’s unemployment rate has been similar to the Hungarian one, while Poland and Slovakia have traditionally been economies with high unemployment. In both countries, however, the respective indicator has been improving to a considerable extent since 2000 (see Table 2).

---

\(^2\) Fazekas and Kézdi (2007), Table 3.8, p. 166.
The youth unemployment rate as a share in the labour force aged 15-24 has been similar to the respective indicator of the EU-15, but with a deteriorating tendency over the last few years. Compared to the neighbouring new members, the Hungarian record is similar to that of the Czech Republic and much better than those of Poland or Slovakia. Practically the same is true for the long-term unemployment rate (see Table 2).

**The services sector’s share is lower, that of industry is higher than in the old EU**

In the Hungarian economy the share of self-employed is very similar to the respective indicator of the EU-15, a clear indication that the transition to a market economy has been completed in this respect. An other important indicator, part-time employment, is substantially worse than in the more developed old EU members, hinting at the fact that Hungary (just as the Czech Republic and Slovakia) is far behind the highly developed economies in the utilization of this tool of flexibility (see Table 2).

Concerning the main proportions of employment by branches, the share of services has been about 10 percentage points lower in Hungary than in the EU-15; in turn, the share of industry is about 10 percentage points higher, while agriculture’s relative importance became similar by 2006. The distribution of employment by main branches is similar to that in Slovakia, while differences are considerable compared to the Czech Republic, where industry is more important than in Hungary, and Poland, where substantially more people are employed in agriculture (see Table 2).

Since 1990 fundamental changes have been taking place in the composition of employed by level of education (see Table 3). By 2005 the share of employed with 8 grades of primary school or less declined from 38% (male) and 43% (female) to 13% (male) and 15% (female) of total employed, clearly pointing to the main ‘loser’ social stratum of transition. The share of university graduates more than doubled within this period. Differences in educational level by gender are remarkable and growing. Between 1990 and 2005 the share of university graduates and secondary school graduates became substantially higher in the group of female than in that of the male employed.

**Table 3: Composition of employed by level of education, in %**

<table>
<thead>
<tr>
<th>Year</th>
<th>8 grades of primary school or less</th>
<th>Vocational school</th>
<th>Secondary school</th>
<th>College, University</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>male</td>
<td>female</td>
<td>male</td>
<td>female</td>
<td>male</td>
</tr>
<tr>
<td>1990</td>
<td>37.6</td>
<td>43.4</td>
<td>30.5</td>
<td>13.4</td>
<td>20.1</td>
</tr>
<tr>
<td>1995</td>
<td>21.3</td>
<td>26.5</td>
<td>38.5</td>
<td>20.1</td>
<td>25.5</td>
</tr>
<tr>
<td>2000</td>
<td>16.1</td>
<td>19.1</td>
<td>41.6</td>
<td>20.9</td>
<td>26.7</td>
</tr>
<tr>
<td>2005</td>
<td>13.0</td>
<td>15.4</td>
<td>40.8</td>
<td>20.2</td>
<td>27.7</td>
</tr>
</tbody>
</table>

Considerable regional differences

Finally the regional inequalities must be mentioned. Employment rates (and also unemployment rates, not shown here) differ among the seven Hungarian NUTS-2 regions (see Table 4). Central Hungary (including Budapest) had an employment rate of 63.3% in 2005, only 3 percentage points less than the EU-15 average. On the other extreme, Northern Hungary’s respective indicator was 49.5% only, i.e. less than half of the working-age population (15-64 years) had a job. The record of the Northern Great Plain was hardly better than that. Beyond the Budapest agglomeration only the Central and Western Transdanubia regions have featured relatively good (over 60%) employment rates.

Table 4: Regional inequalities in the Hungarian employment rate, 1992-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Central Hungary</th>
<th>Central Transdanubia</th>
<th>Western Transdanubia</th>
<th>Southern Transdanubia</th>
<th>Northern Hungary</th>
<th>Northern Great Plain</th>
<th>Southern Great Plain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>62.3</td>
<td>57.7</td>
<td>62.0</td>
<td>57.2</td>
<td>52.2</td>
<td>52.5</td>
<td>57.9</td>
<td>58.0</td>
</tr>
<tr>
<td>1996</td>
<td>56.8</td>
<td>52.7</td>
<td>59.3</td>
<td>50.3</td>
<td>45.7</td>
<td>45.6</td>
<td>52.8</td>
<td>52.4</td>
</tr>
<tr>
<td>2000</td>
<td>60.5</td>
<td>59.2</td>
<td>63.4</td>
<td>53.5</td>
<td>49.4</td>
<td>49.0</td>
<td>56.0</td>
<td>56.3</td>
</tr>
<tr>
<td>2005</td>
<td>63.3</td>
<td>60.2</td>
<td>62.0</td>
<td>53.4</td>
<td>49.5</td>
<td>50.2</td>
<td>53.8</td>
<td>56.9</td>
</tr>
</tbody>
</table>


2 Migration from and to Hungary

2.1 Outward migration

Historical background

Hungary has a history of mass emigration, however, this refers to the period from the 1880s until the First World War. In this period two million persons left the country, mainly for the US. After World War II, in the framework of one-sided or mutual ethnic cleansing, respectively, 200,000 ethnic Germans and over 70,000 ethnic Slovaks left Hungary. From the beginning of the communist rule emigration was prohibited. This four-decade-long period was interrupted in 1956 when, after the fall of the revolution, about 200,000 Hungarian citizens fled; this was the last major emigration wave from Hungary. \(^3\)

From the early 1960s to 1990 travel to the non-communist abroad was gradually liberalized. Each year a few thousand persons used this opportunity to leave Hungary for good, although emigration itself, as rule, was regarded illegal. With the beginning of the transition to parliamentary democracy in 1989, a law was passed that abolished all restrictions on emigration. Along with the liberalization of outward migration, the

\(^3\) Juhász (2003), pp. 1-2.
registration of the later became impossible. Data on Hungarians emigrating are only available from the mirror statistics of the receiving countries.

**Changes following the EU accession**

With the accession of Hungary to the EU, Hungarian citizens are in principle entitled to work in any other EU and EEA (European Economic Area) member state. Nevertheless, because of transitional measures the completely unrestricted 'freedom of movement' will apply for Hungarian citizens only from 2011. The initial restrictions on Hungarian (and other NMS-8) migrants have been relaxed in several steps since the accession in 2004. Currently 21 EU members and 1 EEA member apply no restrictions on migration from Hungary. The EU members France, Belgium and Denmark, and EEA member Norway have not lifted the restrictions but introduced significant alleviations. Four EU members, Austria and Germany, and the EEA members Liechtenstein and Switzerland have maintained the restrictions, but in the framework of bilateral agreements these countries (except for Liechtenstein) allow migration under specific conditions. These four countries will most probably use the opportunity to protect their labour market from migration from Hungary up to 2011.

**Hungary among the new EU members with the smallest emigration**

We have a relatively clear picture of Hungarians migrating within the EU. Table 5 displays the number of persons of working age from eight new EU member states as registered in other EU member states in the year 2006. The data clearly show that in comparison to other new EU members, the propensity of Hungarians to migrate is fairly limited. Hungary’s working-age population amounted to 13.5% of the total NMS-8 working-age population, while the share of Hungarians of working age registered in other EU countries amounted to 6.6% only of the total NMS-8 working-age population in other EU member states (see Table 5). Among the new members it was only the Czech Republic where these proportions were similar to those of Hungary, hinting at a similarly low migration propensity. The last column of Table 5 shows the share of Hungarian working-age population registered in other EU member states in relation to the whole Hungarian working-age population. This is only 1%, substantially less than in any of the other new EU members, except for the Czech Republic (1.1%). Surprisingly this share is much higher in the traditional and more recent ‘success stories’ of the region, i.e. Slovenia, Estonia and Slovakia (see Table 5).

After the 2004 enlargement, only Ireland, Sweden and the UK opened up their labour markets to the NMS migrants without any restrictions. For this reason it is especially interesting to see how migration from NMS in general and from Hungary in particular developed over the three to four years of unrestricted access in the UK labour market. Nationals of the NMS-8 who wish to undertake employment in the UK for a period of at

---

4 France will fully open up its labour market to the NMS (except for Bulgaria and Romania) as of 1 July 2008.
least a month are required to register with the Worker Registration Scheme (WRS). Self-employed are not required to register, thus they are not included in the figures. The WRS data of registered NMS-8 nationals show that in the period May 2004 to December 2007 the share of Hungarians was slowly increasing from 2.9% to 4.2% of total NMS-8 migrants. Nevertheless, the share of Hungarian nationals was much lower over the whole period than the Hungarians’ share in the working-age population of the NMS-8 combined. This amounted to 13.5% in 2006, more than three times exceeding the share of Hungarian migrants in total NMS-8 workers taking a job in the UK after the EU enlargement and the successive opening-up of the UK labour market. Among the NMS-8, only Slovenia was more strongly underrepresented on the UK labour market than Hungary.

Table 5: Working-age NMS-8 nationals in other EU countries, 2006 (thousands)

<table>
<thead>
<tr>
<th></th>
<th>total population in the home country</th>
<th>working-age population in the home country</th>
<th>distribution by NMS, in %</th>
<th>working-age population in other EU countries</th>
<th>distribution by NMS, in %</th>
<th>share of working-age population in other EU countries, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>10,251</td>
<td>7,293</td>
<td>14.2</td>
<td>80</td>
<td>7.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,345</td>
<td>917</td>
<td>1.8</td>
<td>16</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Hungary</td>
<td>10,077</td>
<td>6,932</td>
<td>13.5</td>
<td>69</td>
<td>6.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3,403</td>
<td>2,321</td>
<td>4.5</td>
<td>81</td>
<td>7.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Latvia</td>
<td>2,295</td>
<td>1,580</td>
<td>3.1</td>
<td>28</td>
<td>2.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Poland</td>
<td>38,157</td>
<td>26,892</td>
<td>52.5</td>
<td>645</td>
<td>61.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2,003</td>
<td>1,407</td>
<td>2.7</td>
<td>38</td>
<td>3.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5,389</td>
<td>3,862</td>
<td>7.5</td>
<td>85</td>
<td>8.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Total NMS-8</td>
<td>72,920</td>
<td>51,206</td>
<td>100.0</td>
<td>1,043</td>
<td>100.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>


More waiters than bus drivers?

The distribution of the migrant workers’ occupations in the UK (top 10 sectors only) by new member states shows considerable differences for Hungary compared to Poland and the group of the other six NMS (see Table 6). The significance of the most popular sector, administration and business management, is about 10 percentage points smaller than either for Polish or NMS-6 workers. In turn, the relevance of the second most popular sector, hospitality and catering, is 15 percentage points higher for Hungary than for the migrants from other new member states. Hungarian workers are clearly underrepresented compared both to Poland and the NMS-6 in agricultural activities, food processing and manufacturing, while over-represented in health and medical services and entertainment and leisure services. Further, the number of jobs in other than the top 10

---

6 UK Home Office Border and Immigration Agency (2008), for the period May 2004-December 2007, Table 3.
7 Due to Poland’s overwhelming weight it was expedient to compare Hungary separately to Poland and the rest of the NMS, the NMS 6.
sectors shows that Hungarian nationals’ occupations are less concentrated in the top 10 sectors than those of either the Polish or the NMS-6 nationals.

Table 6: NMS-8 registered workers in the UK by sector, December 2007

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Number of persons</th>
<th>Distribution in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hungary</td>
<td>Poland</td>
</tr>
<tr>
<td>Admin., business &amp; management services</td>
<td>7,015</td>
<td>202,145</td>
</tr>
<tr>
<td>Hospitality &amp; catering</td>
<td>8,410</td>
<td>92,745</td>
</tr>
<tr>
<td>Agriculture activities</td>
<td>880</td>
<td>44,770</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1,115</td>
<td>37,965</td>
</tr>
<tr>
<td>Food/fish/meat processing</td>
<td>430</td>
<td>24,480</td>
</tr>
<tr>
<td>Health &amp; medical services</td>
<td>1,700</td>
<td>22,660</td>
</tr>
<tr>
<td>Retail &amp; related services</td>
<td>1,405</td>
<td>22,855</td>
</tr>
<tr>
<td>Construction &amp; land services</td>
<td>1,000</td>
<td>21,985</td>
</tr>
<tr>
<td>Transport</td>
<td>935</td>
<td>15,860</td>
</tr>
<tr>
<td>Entertainment &amp; leisure services</td>
<td>935</td>
<td>6,780</td>
</tr>
<tr>
<td>Total in top 10 sectors</td>
<td>23,825</td>
<td>492,245</td>
</tr>
<tr>
<td>Other occupations</td>
<td>1,930</td>
<td>16,150</td>
</tr>
</tbody>
</table>

Note: * NMS-6: NMS-8 less Poland and Hungary.

Source: UK Office Border and Immigration Agency, (2008), Table 11.

Low profile in both traditional Hungarian target countries for migration

Table 7 displays the inflow of foreigners into two traditionally important target countries for NMS migrants, Austria and Germany, before and after the enlargement. These two countries have maintained the restrictions on free movement of labour. In Austria the share of NMS migrants in the total inflow ranged between 9% and 16% in 2000-2005, that of Hungary was 3.6% in 2005, lower than in 2000 or 2001. No special impact of Hungary’s EU accession can be observed. In the case of Germany, immigration from the NMS increased substantially, its share in the total nearly doubled (up to 30%). This was, however, mainly the result of the strong increase in the inflow from Poland. The share of Hungarians remained at the pre-accession level, at around 3%.

Certainly all statistical data in this field have to be taken with due caution. The participation of NMS-8 nationals, including Hungarians, in the unreported economy of the other EU member states is a fact, but its extent is unknown.
Table 7: Inflows of foreign population by nationality, distribution by selected countries, 1990-2005

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.2</td>
<td>2.0</td>
<td>1.0</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>3.8</td>
<td>4.2</td>
<td>2.4</td>
<td>2.6</td>
<td>2.8</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>5.3</td>
<td>4.7</td>
<td>2.7</td>
<td>3.0</td>
<td>6.5</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>2.9</td>
<td>3.3</td>
<td>2.4</td>
<td>2.4</td>
<td>3.2</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.8</td>
<td>0.9</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>NMS-5</td>
<td>15.0</td>
<td>15.0</td>
<td>8.9</td>
<td>9.5</td>
<td>14.3</td>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.7</td>
<td>1.6</td>
<td>1.6</td>
<td>1.4</td>
<td>1.5</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1.9</td>
<td>2.5</td>
<td>2.5</td>
<td>3.1</td>
<td>2.4</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>23.8</td>
<td>11.4</td>
<td>11.6</td>
<td>12.4</td>
<td>14.7</td>
<td>20.8</td>
<td>25.5</td>
</tr>
<tr>
<td>NMS-4</td>
<td>15.9</td>
<td>16.2</td>
<td>17.4</td>
<td>18.8</td>
<td>25.5</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: OECD (2007), http://dx.doi.org/10.1787/015140410036

2.2 Inward migration

Historical background

After the end of the Turkish occupation (late 17th century) huge depopulated areas were left behind in the central and southern regions of historical Hungary. Mass immigration of Germans, South Slavs, Romanians and other ethnic minorities, and substantial migration within the country characterized the one hundred-year-long reconstruction period. After World War I, roughly one third of the Hungarian-speaking population of the historical Hungary moved outside the newly drawn borders of the country. Ethnic Hungarians from the neighbouring countries became a major source of immigration first in 1919-1923, then after World War II, and most recently after the transition to parliamentary democracy in 1989/1990.

Immigrating ethnic Hungarians

Time series on the inflow of foreigners show that Hungary has remained a relatively unimportant target country of international migration. The annual inflow was ranging between 13 and 22 thousand persons in the period 1996-2005 (see Table 8). The three most important source countries of immigration are Romania, Ukraine and Serbia, each with substantial ethnic Hungarian population. All other source countries are of minor
significance, with migrants below one thousand in any year. It is worth mentioning that China, in some years, was the source of more than 1000 migrants.

Table 8: Hungary: inflows of foreign population by nationality, 1996-2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>4.2</td>
<td>4.0</td>
<td>5.5</td>
<td>7.8</td>
<td>8.9</td>
<td>10.6</td>
<td>10.3</td>
<td>9.6</td>
<td>12.1</td>
<td>10.3</td>
</tr>
<tr>
<td>Ukraine</td>
<td>1.4</td>
<td>1.4</td>
<td>1.8</td>
<td>2.4</td>
<td>2.4</td>
<td>2.5</td>
<td>2.1</td>
<td>2.6</td>
<td>3.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>0.9</td>
<td>0.8</td>
<td>1.5</td>
<td>2.5</td>
<td>1.8</td>
<td>1.0</td>
<td>0.4</td>
<td>0.7</td>
<td>1.6</td>
<td>1.3</td>
</tr>
<tr>
<td>China</td>
<td>1.8</td>
<td>1.7</td>
<td>1.3</td>
<td>1.2</td>
<td>1.1</td>
<td>0.4</td>
<td>0.1</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Germany</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.6</td>
<td>1.0</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>United States</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>France</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Israel</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Japan</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>0.5</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Austria</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Other countries</td>
<td>2.4</td>
<td>2.4</td>
<td>2.6</td>
<td>2.6</td>
<td>2.4</td>
<td>2.5</td>
<td>2.3</td>
<td>2.5</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>13.7</td>
<td>13.3</td>
<td>16.1</td>
<td>20.2</td>
<td>20.2</td>
<td>20.3</td>
<td>18.0</td>
<td>19.4</td>
<td>22.2</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Source: OECD (2007), http://dx.doi.org/10.1787/016366311080

The definition of migrants may be based either on place of birth (home country-born/foreign country-born) or citizenship (home country/foreign). In Hungary this distinction is indeed relevant, as ethnic Hungarian immigrants tend to initiate their naturalization. Table 9 shows the stock of foreign-born population in Hungary, which includes both naturalized immigrants and those who live in Hungary but are foreign citizens. The foreign-born population slightly increased in 1996-2005, and surpassed 330,000 by the end of the period. Even then the share of the foreign-born population remained modest, 3.3% of Hungary’s total population; this is lower than the respective indicator in the old EU member states, also somewhat lower than in the Czech Republic (4-5%) and corresponds roughly to the Slovak figure. Due to lack of data no comparison is possible with Poland.\(^8\) The last line in Table 9 displays the impact of naturalization: the share of foreign citizens in the total population is only half of the share of the foreign-born population.

The participation of migrants in the Hungarian labour market is covered by various statistics; an overview of sources and methodological problems is provided in Hárs (2008).

---

\(^8\) International Migration Outlook SOPEMI (2007) http://dx.doi.org/10.1787/015587767146
Table 9: Hungary: stock of foreign-born population by country of birth, 1996-2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>141.5</td>
<td>141.7</td>
<td>142.0</td>
<td>142.3</td>
<td>144.2</td>
<td>145.2</td>
<td>146.5</td>
<td>148.5</td>
<td>152.7</td>
<td>155.4</td>
</tr>
<tr>
<td>Former Czechoslovakia</td>
<td>41.8</td>
<td>40.3</td>
<td>38.9</td>
<td>37.5</td>
<td>36.0</td>
<td>34.6</td>
<td>33.3</td>
<td>33.4</td>
<td>31.4</td>
<td>32.6</td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>27.8</td>
<td>28.3</td>
<td>29.2</td>
<td>30.2</td>
<td>31.5</td>
<td>30.4</td>
<td>31.0</td>
<td>31.4</td>
<td>32.2</td>
<td>31.9</td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>33.6</td>
<td>33.3</td>
<td>33.5</td>
<td>34.4</td>
<td>35.1</td>
<td>33.4</td>
<td>30.3</td>
<td>30.7</td>
<td>29.9</td>
<td>29.6</td>
</tr>
<tr>
<td>Germany</td>
<td>13.4</td>
<td>13.6</td>
<td>13.8</td>
<td>14.1</td>
<td>14.4</td>
<td>15.3</td>
<td>15.9</td>
<td>16.3</td>
<td>18.8</td>
<td>21.9</td>
</tr>
<tr>
<td>Austria</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
<td>4.2</td>
<td>4.3</td>
<td>4.7</td>
<td>5.4</td>
</tr>
<tr>
<td>China</td>
<td>0.7</td>
<td>1.0</td>
<td>1.7</td>
<td>2.6</td>
<td>3.5</td>
<td>3.6</td>
<td>3.8</td>
<td>3.9</td>
<td>4.2</td>
<td>4.5</td>
</tr>
<tr>
<td>United States</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>2.3</td>
<td>2.1</td>
<td>2.4</td>
<td>2.7</td>
<td>3.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Poland</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.9</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>0.5</td>
<td>0.6</td>
<td>0.8</td>
<td>1.0</td>
<td>1.2</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Greece</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.5</td>
<td>1.4</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Other countries</td>
<td>12.2</td>
<td>12.8</td>
<td>13.7</td>
<td>14.6</td>
<td>16.1</td>
<td>16.1</td>
<td>23.0</td>
<td>26.8</td>
<td>27.8</td>
<td>32.5</td>
</tr>
<tr>
<td>Total</td>
<td>283.9</td>
<td>284.2</td>
<td>286.2</td>
<td>289.3</td>
<td>294.6</td>
<td>300.1</td>
<td>302.8</td>
<td>307.8</td>
<td>319.0</td>
<td>331.5</td>
</tr>
<tr>
<td>Total foreign-born population in % of total population</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
<td>2.9</td>
<td>2.9</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Memo: non-Hungarian citizens in % of the total population</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.5</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: OECD (2007), http://dx.doi.org/10.1787/017437517777 and http://dx.doi.org/10.1787/015587767146

Immigrants in the shadow economy

Illegal employment poses a special problem of capturing the role of migrants in the labour market. In 2005 the share of foreign-born labour force made up 1.9% of the total labour force, while this population group constituted 3.3% of the total population. In the same year foreign labour force (those with other than Hungarian citizenship) amounted to 0.8% of the total labour force, while this group’s share in total population was 1.5%. These figures hint at an overrepresentation of migrants in illegal employment. Another explanation would be the lower participation rate of migrants – but exactly the opposite is the case, at least for the foreign-born population. Hungary belongs to that minority of OECD countries where the participation rate of the foreign-born population is about 4 percentage points higher than the exceptionally low rate of local-born population. But illegal employment is even greater than that indirectly reflected in the statistical data. Foreigners arriving as tourists, undertaking occasional jobs, then leaving and returning again, are an important part of the Hungarian world of labour, especially in agriculture, construction and in home care services. No statistics or estimations are available on that segment of foreign employment.

---

9 International Migration Outlook SOPEMI (2007) http://dx.doi.org/10.1787/014342316600
Table 10

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>8,526</td>
<td>9,478</td>
<td>10,610</td>
<td>14,132</td>
<td>22,039</td>
<td>25,836</td>
<td>27,609</td>
<td></td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>2,200</td>
<td>3,119</td>
<td>2,833</td>
<td>4,028</td>
<td>6,460</td>
<td>6,258</td>
<td>7,884</td>
<td></td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>1,007</td>
<td>982</td>
<td>964</td>
<td>1,238</td>
<td>1,400</td>
<td>1,252</td>
<td>1,120</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>956</td>
<td>1,051</td>
<td>989</td>
<td>972</td>
<td>1,120</td>
<td>1,112</td>
<td>344</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>428</td>
<td>425</td>
<td>469</td>
<td>2,856</td>
<td>2,759</td>
<td>5,686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8</td>
<td>26</td>
<td>21</td>
<td>34</td>
<td>79</td>
<td>124</td>
<td>344</td>
<td></td>
</tr>
<tr>
<td>EU-15</td>
<td>n.a.</td>
<td>2,162</td>
<td>2,514</td>
<td>2,514</td>
<td>2,541</td>
<td>2,298</td>
<td>2,200</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>535</td>
<td>684</td>
<td>1,053</td>
<td>1,397</td>
<td>1,146</td>
<td>1,054</td>
<td>899</td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>132</td>
<td>224</td>
<td>311</td>
<td>435</td>
<td>441</td>
<td>322</td>
<td>246</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4,971</td>
<td>2,231</td>
<td>2,702</td>
<td>2,862</td>
<td>2,623</td>
<td>2,674</td>
<td>2,550</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18,763</td>
<td>20,382</td>
<td>22,466</td>
<td>28,469</td>
<td>35,014</td>
<td>38,623</td>
<td>42,700</td>
<td>48,651</td>
</tr>
<tr>
<td>previous year = 100</td>
<td>109%</td>
<td>110%</td>
<td>127%</td>
<td>123%</td>
<td>110%</td>
<td>111%</td>
<td>114%</td>
<td></td>
</tr>
</tbody>
</table>


Labour permit, registration, green card

The registration of foreign employees distinguishes between two basic categories: EU/EEA citizens and citizens of other countries of the world. Citizens from countries outside the EU/EEA need a labour permit. The regulations of employment of persons from EU/EEA countries were more complex but have recently been simplified significantly. From January 2008 no labour permit is needed for persons with at least secondary education or a skill arriving from any EU/EEA country. Employers are obliged to report the number of employees from EU/EEA countries even if no labour permit for them is required. That will help create an overview of foreign employment from this year on, but looking backward to the years 2004-2007 the picture is not so clear.

On the basis of reciprocity no labour permit was required for citizens of the UK, Ireland and Sweden after Hungary’s EU accession on 1 May 2004; from May 2006 the same applied for
citizens from Spain, Portugal, Greece, Finland, from November 2006 for those from Italy, from May 2007 for the Netherlands. Those citizens of the old EU countries who came from a country where a labour permit was still required for Hungarian citizens and reciprocity applied, could apply for a green card and take a job in Hungary on the condition they had already one year continuous employment in Hungary. Employees from the new member states (2004 enlargement) did not need a labour permit but they were required to register. Employment of citizens from Bulgaria and Romania was, from January 2007 until the end of 2007, conditional on permission, except for a particular group of professions. The Public Employment Service warns that a substantial part of foreign employment does not appear in the statistical data.

Table 10 displays foreign employment in Hungary by sending countries in the pre-accession period (1996-2003). The number of work permits continuously increased in this period and more than doubled within seven years. About half of the work permits were issued for Romanian citizens, 11-17% for migrants from successor states of the former Soviet Union. From 2000 on the share of Slovaks increased and surpassed 11% in 2003. Migration from the old EU was still significant in 1997 and 1998 (11% of the total work permits).

**EU accession had no impact on immigration**

On the last day before Hungary’s accession to the EU, the number of valid work permits was 55,710 (see Table 11). The combined number of different kind of permits allowing foreigners to be employed in Hungary increased by 15% by the end of the first year in the EU, that was exactly the same as the average growth rate of labour permits issued in 1996-2003. It is remarkable that in 2005 and 2006 this number practically stagnated, i.e. EU accession apparently slowed down inward migration. Distribution of migrants by sending countries has changed. While Romanian citizens further on constitute about half of the migrants, Slovak citizens’ share jumped to one quarter by 2006 and that of migrants from Ukraine rose to around 12-14%. Based on 2007 data of the four various sorts of new work permits the inward migration might have further slowed down last year.  

**The case of liberalizing immigration from Bulgaria and Romania**

Although Hungary called for an immediate opening of the EU-15 labour markets before its accession in 2004, only a few years later it made a U-turn in this respect and became the only new member which did not intend to liberalize migration from Bulgaria and Romania upon their accession to the EU in 2007. The argument was that Hungary had accepted that most of the old members had restricted inward migration from the new members in 2004. Caution is justified with regard to the labour market situation and the unemployment rate. Bulgaria and Romania have a greater migration potential than any

---

10 France will be treated alike as of 1 July 2008.
11 Public Employment Service (2008)
of the new members that joined in 2004.\textsuperscript{12} This is all the more peculiar as representative bodies of employers and employees argued for an immediate and complete liberalization and saw no reason for caution.\textsuperscript{13} All in all, Hungary partially opened its labour market for migrants from Bulgaria and Romania, initially in 219, then by Summer 2008 in 247 professions. 2007 data on migration show that the skill structure of the migrants from Romania did not improve with the partial opening: the high share of unskilled migrants remained unchanged and the labour shortages in certain professions were not eased by new arrivals from Romania.\textsuperscript{14} Finally, probably as a consequence of a re-thinking of risks related to lifting barriers to migration from Romania and Bulgaria, Hungary joined the other new members abolishing remaining restriction on migration from these two countries as of January 1, 2009.

**Uneven geographical distribution of migrants**

Distribution of migrants by geographical regions is highly uneven. In 2007 nearly two thirds of the foreign workers were employed in Budapest and its agglomeration (Central-Hungary), close to 20% in the dynamically developing region Central Transdanubia. The other five regions are underrepresented in foreign employment.\textsuperscript{15} For comparison: Central Hungary delivers 46, Central Transdanubia 10% of Hungary’s GDP.\textsuperscript{16} In terms of economically active population 32% of the total falls on Central Hungary and 12% on Central Transdanubia.\textsuperscript{17}

\textsuperscript{12} Interview with a responsible official of the Ministry of Labour, Online medium Index, 06.09.2006 as cited by Hárs (2008).

\textsuperscript{13} Hárs and Neumann (2007).

\textsuperscript{14} Hárs (2008).

\textsuperscript{15} Op. cit.


\textsuperscript{17} Central Statistical Office (2005) p. 45, own calculations.
Table 11: Stock of labour permits, registrations and green cards for foreign citizens in 2004-2006

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permit</td>
<td>Registration</td>
<td>Green card</td>
<td>Total</td>
</tr>
<tr>
<td>EU-15</td>
<td>2,244</td>
<td>1,739</td>
<td>-</td>
<td>284</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>7,495</td>
<td>1,758</td>
<td>10,699</td>
<td>-</td>
</tr>
<tr>
<td>Other European of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>42,740</td>
<td>45,854</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Serbia Mont.</td>
<td>1,134</td>
<td>1,082</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ukraine</td>
<td>3,213</td>
<td>3,528</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Non-European of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>791</td>
<td>894</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unidentifiable</td>
<td>225</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>55,710</td>
<td>55,136</td>
<td>10,711</td>
<td>285</td>
</tr>
</tbody>
</table>

Industry and construction absorb most of the foreign labour

In an overview of foreign employment by economic branches, including 95% of foreign workers in 2005, we can see that the breakdown of foreign workers by branches differs substantially from that of the total employment in Hungary and there are diverging patterns by individual source countries as well (see Table 12). Foreigners are remarkably over-represented in construction and to some extent in industry while their share in services other than trade is only a quarter of that of the Hungarian average. Country specific features reveal that migrants from Slovakia work predominantly in industry, those from Ukraine in construction, while those coming from Romania in construction, industry and trade. Nearly all Chinese are engaged in (retail) trade.

Table 12: Foreign labour by branches, 2005 (distribution in %)

<table>
<thead>
<tr>
<th>Branch</th>
<th>Romania</th>
<th>Slovakia</th>
<th>Ukraine</th>
<th>former Yug.</th>
<th>China</th>
<th>Foreign (5)</th>
<th>Total Hungary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>11</td>
<td>0</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Industry</td>
<td>20</td>
<td>58</td>
<td>14</td>
<td>32</td>
<td>7</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Construction</td>
<td>35</td>
<td>3</td>
<td>55</td>
<td>14</td>
<td>0</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>Trade</td>
<td>17</td>
<td>2</td>
<td>10</td>
<td>15</td>
<td>83</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Other service</td>
<td>6</td>
<td>26</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td>Public administration</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>14</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Number of persons

33,875 15,116 8,258 1,543 1,216 60,008 3,901,500


Remittances of foreign employees to their home countries and Hungarian workers from abroad are registered by the National Bank of Hungary, nevertheless only for those with less than one year employment (see Table 3). That means that remittances of migrants proper (with longer than one year stay) are not included and the values registered are accordingly small. As most of the migrants in Hungary arrive from neighbouring countries and travel time back to original location of living is respectively short allowing frequent visits, a considerable part of transfers may take place in cash.

Concerning brain drain there are no statistical data available. Anecdotal evidence points at relevant emigration of Hungarian physicians to old EU members, which reflects the very low salaries of this professional group. Labour shortage reported in the press in professions requiring specific skills coupled with insufficiencies and rigidities of vocational training in Hungary predict an increasing inflow of migrants possessing of these skills.
Table 13: Compensation of employees (less than one year employment), according to balance of payments statistics 1995-2006, in million EUR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>109</td>
<td>125</td>
<td>172</td>
<td>172</td>
<td>171</td>
<td>238</td>
<td>270</td>
<td>247</td>
<td>219</td>
<td>213</td>
<td>211</td>
<td>252</td>
</tr>
<tr>
<td>Debit</td>
<td>97</td>
<td>63</td>
<td>65</td>
<td>53</td>
<td>76</td>
<td>75</td>
<td>94</td>
<td>96</td>
<td>80</td>
<td>87</td>
<td>110</td>
<td>135</td>
</tr>
<tr>
<td>Net</td>
<td>12</td>
<td>61</td>
<td>107</td>
<td>119</td>
<td>96</td>
<td>163</td>
<td>177</td>
<td>151</td>
<td>139</td>
<td>126</td>
<td>102</td>
<td>117</td>
</tr>
</tbody>
</table>


3 Conclusions

The available figures on migration from and to Hungary clearly show that Hungary is a relatively 'closed' country: neither outward nor inward migration is really significant. Hungary is among the less important sending countries of the EU's new member states and, as a host country, attracts much fewer migrants in relative terms than the old EU members.

Compared to the communist era the mobility in both directions is more significant, but EU accession has not changed the characteristics of migration in either direction.

Most of the immigrants arrive from neighbouring countries and they are typically ethnic Hungarians. This explains the relative importance of naturalizations, shown in the highly diverging numbers of foreign-born persons and foreign citizens, respectively, in Hungary.

Foreign employment is strongly concentrated in the Budapest agglomeration and to a smaller extent in Central Transdanubia, both regions figuring as engines of growth in Hungary. The breakdown of foreign employees by branches significantly differs from that of total employees. Foreigners are over-represented in construction and industry while under-represented in the services sectors. The latter, however may accommodate a substantial part of illegal employment.
4 References


Foglalkoztatási Hivatal (2006), A magyarországi munkaerőpiac 2006., Országos Foglalkoztatási Közalapítvány, Budapest


Iara, Anna (2008), Labour migrating from east to west in the enlarged EU in: Havlík, Peter and Holzner, Mario et al. Weathering the Global Storm, yet Rising Costs and Labour Shortages may Dampen Domestic Growth wiwi Current Analyses and Forecasts No. 1. February, Vienna.


Maier, Christoph (2007), ‘Geographic mobility within the EU’, presentation at the ECAS seminar ‘Seeing the wood for the trees after the year of Workers’ Mobility – Recommendations on workers’ mobility, March 16, Brussels.


wiwi Database
Abstract

Ireland, along with the UK and Sweden, announced an immediate opening of its borders to nationals of the NMS that became part of the EU in May 2004. In the last decade the proportion of foreign born residents in Ireland has doubled to 15%. Many of these migrants come from the new member states. They tend to be relatively young and relatively well educated. However, at present they tend to work in low skilled employment in hotels, restaurants and manufacturing. The benefits that accrue to the Irish economy and the immigrants themselves should increase as they become more fully integrated and moved up the skill ladder.
1 The Institutional Setting

1.1 The institutional arrangements for recent migration

Ireland, along with the UK and Sweden, announced an immediate opening of its borders to nationals of the 8 Eastern European countries, plus Malta and Cyprus, that became part of the EU in May 2004 (Employment Permits Bill, April 2003). This change applied to both new immigrants and to those that had already been working in Ireland before enlargement, and so was, in addition, effectively an amnesty for those previously working illegally.

Unlike the UK, the Irish government does not require accession state nationals to acquire special registration certificates after taking up employment. The primary means of monitoring the numbers of migrants is via the number of social security (PPS) numbers issued. In common with UK policy, the Irish government did introduce transitional arrangements with respect to the receipt of welfare benefits. The Habitual Residence Condition required that foreign nationals live in the Common Travel Area\(^1\) for two years before being entitled to social assistance or child benefit.

With the accession of Bulgaria and Romania, given the previous large influx of migrants from the 10 new member states, Ireland introduced a seven-year transition period during which nationals from these countries would have to apply for work permits like non-EEA (European Economic area) nationals. It was however agreed that they be given preference over third country nationals in this regard.

1.2 Other aspects of the Irish labour market

The Irish labour market is relatively unregulated and flexible compared to many other European economies. The benefit replacement ratio has been falling since the early 1980s (Nickell, Nunziata and Ochel, 2005) and is now comparatively low by international standards. Ireland has also substantially tightened the administration of benefits in recent years. Trade unions represent just over 40% of the workforce, with pay agreements being highly co-ordinated. It remains an attractive destination for foreign direct investment, especially in high value added sectors.

1.3 The Irish Economy: macroeconomic performance

The mid-1990s saw a sharp upturn in the fortunes of the Irish Economy. Real growth rates of more than 8% of GDP were more than double that of any other OECD country (Figure 1). This generated a sharp increase in the workforce with total employment

\(^1\) Ireland, the UK, Channel Islands and Isle of Man.
growing by 25% between 1993 and 1998. Over the same period, the unemployment rate fell from 15.4% to 7.7%.

Figure 1: Real GDP growth (%): 1975-2008

Source: OECD

The performance of the Irish Economy, the “Celtic tiger”, has continued to be strong and sustained over the past decade, with growth rates exceeding 5% of GDP. This success is reflected in its strong labour market performance, with unemployment rates continuing to fall and remaining low by international standards since accession at between 4 and 5% (Figure 2). Demand for overseas labour was strong before accession: Doyle et al. (2006) report that in the year before accession over 45,000 work permits were issued in Ireland.

The dramatic recent downturn in the world economy is however evident in the GDP growth figures for 2008, with GDP falling by 2.3 per cent.
The rapid growth in the Irish Economy has been facilitated by rapidly rising labour market participation over this period (Figure 3), which in part reflects the high participation of immigrant workers. Female participation, despite rising substantially in recent years, remains relatively low.
2 Relevant data sources and limitations

2.1 Censuses

The primary sources of information on migrant stocks are the censuses that were conducted in 1991, 1996, 2002 and 2006. They contain detailed information on birthplace and nationality, employment status, and sector of work.

2.2 Quarterly National Household Survey (formerly Labour Force Survey)

More detailed socio-demographic information is available from the Quarterly National Household Survey (QNHS). This is a large-scale, nationwide survey of households in Ireland. It is designed to produce quarterly labour force estimates that include the official measure of employment and unemployment (ILO basis). The survey began in September 1997, replacing the annual April Labour Force Survey (LFS). Approximately 39,000 households are interviewed each quarter.

The nationality codings in the QNHS are however limited. Prior to 2005 it records: Irish, UK, Rest of EU, Other, American. From 2005 it records:

- Irish
- UK
- EU-15 (excluding Ireland and UK)
- New Member States
• Other
• American.

2.3 Personal Public Service Numbers (PPSN)

PPSN numbers are derived from the Central Records System of the Department of Social and Family Affairs and the P35 files (employer end-of-year returns) of the Revenue Commissioners. Variables include: the date the PPSN was assigned, the nationality at that time, age and sex. They are useful for tracking gross inflows of migrants.

2.4 Work Permits

In general, a non-EEA national requires an employment permit to take up employment in Ireland and data on permits is collected by the Department of Enterprise, Trade and Employment. Although this does not apply to workers from the 10 accession countries, permits are required for workers from Romania and Bulgaria.

3 Patterns of labour mobility to Ireland

3.1 Historic patterns of migration

Ireland has a long history as a country of net emigration. Between 1861 and 1961 net emigration consistently exceeded the natural rate of increase of the Irish population. As a consequence, the population shrank from 4.4 million to 2.8 million over this period. Apart from a short period in the 1970s, this pattern continued until the mid 1990s, when Ireland became the last EU member state to become a country of net immigration. This was largely due to the increase in immigration, especially from the mid 1990s onwards, as overseas workers were drawn to a booming economy with a rapidly increasing demand for labour (Figure 4).
Some of this increase in immigration was as a result of Irish return migrants, whose numbers increased steadily until 2002, though as a proportion of immigrants their importance diminished over this period. Non-EU15 immigrants have seen the largest increase in proportionate terms.

The impact of this influx on the ethnic composition of the population has been dramatic. In 1991 only 6% of the population was foreign born, whereas by 2002 this had risen to more than 10%. Over this period the share of non-EU15 residents rose from 1 to 3%. By 2007 about 15% of people living in Ireland were born outside the country, 10% of whom were foreign nationals.

### 3.2 Stocks and flows of NMS migrants

Table 1 gives details of population migration into and out of Ireland from 2000 to 2008. Owing to data limitations, migration flows from the 10 Accession States are unavailable prior to 2005, and available only on a grouped basis subsequently. The dramatic influx of migrants from the new EU member states from 2004 can be seen. This has declined in the last year as the economic situation has deteriorated, but return migration to these countries remains relatively small.
Table 1: Estimated Population Migration (Thousand) by Migration Flow, Country

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net migration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>13.6</td>
<td>12.8</td>
<td>11.7</td>
<td>7.2</td>
<td>7.5</td>
<td>7.7</td>
<td>8.9</td>
<td>3.3</td>
<td>7.1</td>
</tr>
<tr>
<td>European Union 15 excl. UK and Ireland</td>
<td>6.2</td>
<td>4.7</td>
<td>6.5</td>
<td>5.3</td>
<td>10.2</td>
<td>6.2</td>
<td>7.8</td>
<td>10.9</td>
<td>2.9</td>
</tr>
<tr>
<td>United States of America</td>
<td>1.5</td>
<td>3.3</td>
<td>1.8</td>
<td>2.5</td>
<td>1.4</td>
<td>1.5</td>
<td>0.7</td>
<td>1.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>4.5</td>
<td>12.0</td>
<td>21.4</td>
<td>15.8</td>
<td>12.8</td>
<td>6.7</td>
<td>7.5</td>
<td>6.7</td>
<td>2.6</td>
</tr>
<tr>
<td>NMS 10</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>32.9</td>
<td>47.0</td>
<td>45.1</td>
<td>24.1</td>
</tr>
</tbody>
</table>

|                  |       |       |       |       |       |       |       |       |       |
| **Outward migration** |     |       |       |       |       |       |       |       |       |
| United Kingdom   | 7.2   | 7.8   | 7.4   | 8.6   | 7.1   | 7.9   | 8.8   | 10.1  | 7.0   |
| European Union 15 excl. UK and Ireland | 5.5   | 5.6   | 4.8   | 6.5   | 5     | 4.9   | 5.7   | 3.2   | 7.4   |
| United States of America | 4    | 3.4   | 4.8   | 2.8   | 3.9   | 3.3   | 3.3   | 2.9   | 2.2   |
| Rest of the World | 10   | 9.5   | 8.5   | 11.4  | 10.5  | 12.7  | 15.8  | 19.0  | 19.8  |
| NMS 10           | ..    | ..    | ..    | ..    | ..    | 0.8   | 2.3   | 7.0   | 9.0   |

|                  |       |       |       |       |       |       |       |       |       |
| **Inward migration** |     |       |       |       |       |       |       |       |       |
| United Kingdom   | 20.8  | 20.6  | 19.1  | 15.8  | 14.6  | 15.6  | 17.7  | 13.4  | 14.1  |
| European Union 15 excl. UK and Ireland | 11.7  | 10.3  | 11.3  | 11.8  | 15.2  | 11.1  | 13.5  | 14.1  | 10.3  |
| United States of America | 5.5  | 6.7   | 6.6   | 5.3   | 5.3   | 4.8   | 4.0   | 4.2   | 3.9   |
| Rest of the World | 14.5  | 21.5  | 29.9  | 27.2  | 23.3  | 19.4  | 23.3  | 25.7  | 22.4  |
| NMS 10           | ..    | ..    | ..    | ..    | ..    | 33.7  | 49.3  | 52.1  | 33.1  |

Source: CSO, Ireland

Table 2 illustrates the number of PPS numbers allocated by nationality between 2004 and 2008. This demonstrates the preponderance of Polish and Lithuanian amongst recent immigrants. Note that the number of PPS numbers is a measure of the gross rather than the net inflow. However, it again illustrates the rapid rise in new arrivals from the NMS-10 since 2004 and the sharp decrease of arrivals in 2008 as the economic situation deteriorated.

Table 2: Allocation of Personal Public Service (PPS) Numbers in Ireland

<table>
<thead>
<tr>
<th>Nationality</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>25,104</td>
<td>64,718</td>
<td>93,609</td>
<td>79,816</td>
<td>42,554</td>
</tr>
<tr>
<td>Lithuania</td>
<td>11,368</td>
<td>18,707</td>
<td>15,917</td>
<td>10,728</td>
<td>6,443</td>
</tr>
<tr>
<td>Latvia</td>
<td>5,733</td>
<td>9,327</td>
<td>7,866</td>
<td>4,674</td>
<td>3,727</td>
</tr>
<tr>
<td>Slovakia</td>
<td>4,554</td>
<td>9,256</td>
<td>10,497</td>
<td>8,415</td>
<td>4,994</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3,045</td>
<td>4,503</td>
<td>4,407</td>
<td>3,838</td>
<td>2,762</td>
</tr>
<tr>
<td>Hungary</td>
<td>1,746</td>
<td>2,985</td>
<td>4,234</td>
<td>5,046</td>
<td>4,562</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,630</td>
<td>2,011</td>
<td>1,286</td>
<td>648</td>
<td>572</td>
</tr>
<tr>
<td>Slovenia</td>
<td>64</td>
<td>76</td>
<td>98</td>
<td>72</td>
<td>87</td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td>14,525</td>
<td>6,762</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
<td></td>
<td>1,008</td>
<td>772</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59,249</td>
<td>112,623</td>
<td>142,366</td>
<td>128,721</td>
<td>73,235</td>
</tr>
</tbody>
</table>

Source: Department of Social and Family Affairs
According to figures collected in the census (Table 3), around 120,000 NMS-10 citizens were living in Ireland in 2006, with approximately three-quarters coming either from Poland or Lithuania.

Table 3: Usually resident persons, males and females present in the State on Census Night, by nationality and age group, 2006

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>0-14</th>
<th>15-24</th>
<th>25-44</th>
<th>45-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Irish</td>
<td>3,706,683</td>
<td>797,281</td>
<td>536,777</td>
<td>1,089,238</td>
<td>845,160</td>
<td>438,227</td>
</tr>
<tr>
<td>Non-Irish</td>
<td>419,733</td>
<td>52,500</td>
<td>75,687</td>
<td>219,281</td>
<td>57,181</td>
<td>15,084</td>
</tr>
<tr>
<td>EU25</td>
<td>275,775</td>
<td>28,695</td>
<td>51,826</td>
<td>137,788</td>
<td>44,921</td>
<td>12,545</td>
</tr>
<tr>
<td>Poland</td>
<td>63,276</td>
<td>4,790</td>
<td>17,665</td>
<td>36,464</td>
<td>4,213</td>
<td>144</td>
</tr>
<tr>
<td>Lithuania</td>
<td>24,628</td>
<td>2,778</td>
<td>6,728</td>
<td>12,987</td>
<td>2,064</td>
<td>71</td>
</tr>
<tr>
<td>Latvia</td>
<td>13,319</td>
<td>1,238</td>
<td>3,690</td>
<td>7,106</td>
<td>1,245</td>
<td>40</td>
</tr>
<tr>
<td>Slovakia</td>
<td>8,111</td>
<td>418</td>
<td>2,465</td>
<td>4,751</td>
<td>450</td>
<td>27</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>5,159</td>
<td>356</td>
<td>1,292</td>
<td>3,171</td>
<td>320</td>
<td>20</td>
</tr>
<tr>
<td>Hungary</td>
<td>3,440</td>
<td>197</td>
<td>675</td>
<td>2,330</td>
<td>216</td>
<td>22</td>
</tr>
<tr>
<td>Estonia</td>
<td>2,272</td>
<td>198</td>
<td>764</td>
<td>1,135</td>
<td>169</td>
<td>6</td>
</tr>
<tr>
<td>Slovenia</td>
<td>130</td>
<td>10</td>
<td>26</td>
<td>86</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Romania</td>
<td>7,696</td>
<td>1,024</td>
<td>1,156</td>
<td>5,068</td>
<td>424</td>
<td>24</td>
</tr>
<tr>
<td>Cyprus</td>
<td>60</td>
<td>5</td>
<td>10</td>
<td>31</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Malta</td>
<td>139</td>
<td>17</td>
<td>15</td>
<td>66</td>
<td>31</td>
<td>10</td>
</tr>
</tbody>
</table>

Total 4,172,013 860,496 618,465 1,320,551 912,301 460,200
Source: Census, CSO Ireland

Note, that migrants from the new member states are slightly younger (median age 29) than the native population (median age 33) and much more likely to be of working age.

3.3 Employment Patterns

Table 4 documents the ILO economic status of migrants and natives in autumn 2008. Migrants from the new member states have a very high participation rate (84%) both in comparison with Irish nationals (61%) and with other migrants (66%). The relatively high unemployment rate (10.1%) amongst NMS migrants is partly attributable to those looking for a job for the first time. However this rate has also doubled since autumn 2007 with the decline in the economic situation. Interestingly, in contrast to Table 1, Table 4 shows a small decline in the NMS-10 population, perhaps suggesting that some return migration has begun to occur following the decline in job prospects.
Table 4: Estimated number of persons aged 15 years and over classified by nationality and ILO Economic Status, Sept-Nov 2008 (thousands)

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Employed</th>
<th>Unemp.</th>
<th>In labour Force</th>
<th>Not econ. active</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quarter 4 2008</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish nationals</td>
<td>1,736.0</td>
<td>137.3</td>
<td>1,873.4</td>
<td>1,188.8</td>
<td>3,062.2</td>
</tr>
<tr>
<td>Non-Irish nationals</td>
<td>316.0</td>
<td>33.3</td>
<td>349.3</td>
<td>126.8</td>
<td>476.1</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>51.8</td>
<td>5.0</td>
<td>56.8</td>
<td>39.5</td>
<td>96.4</td>
</tr>
<tr>
<td>EU15 excl. Ire &amp; UK</td>
<td>33.7</td>
<td>3.5</td>
<td>37.1</td>
<td>11.7</td>
<td>48.8</td>
</tr>
<tr>
<td>Accession states (EU15 to EU27)</td>
<td>150.9</td>
<td>16.9</td>
<td>167.8</td>
<td>31.0</td>
<td>198.8</td>
</tr>
<tr>
<td>Other</td>
<td>79.6</td>
<td>7.9</td>
<td>87.5</td>
<td>44.6</td>
<td>132.1</td>
</tr>
<tr>
<td><strong>Total persons</strong></td>
<td>2,052.0</td>
<td>170.6</td>
<td>2,222.7</td>
<td>1,315.6</td>
<td>3,538.3</td>
</tr>
</tbody>
</table>

Year on year changes

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Year on year changes</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Irish nationals</td>
<td>- 68.2</td>
<td>+ 56.2</td>
<td>- 11.8</td>
<td>+ 35.0</td>
<td>+ 23.2</td>
</tr>
<tr>
<td>Non-Irish nationals</td>
<td>- 18.7</td>
<td>+ 13.3</td>
<td>- 5.4</td>
<td>+ 13.4</td>
<td>+ 8.0</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>+ 0.4</td>
<td>+ 0.9</td>
<td>+ 1.3</td>
<td>+ 3.2</td>
<td>+ 4.6</td>
</tr>
<tr>
<td>EU15 excl. Ire &amp; UK</td>
<td>- 0.8</td>
<td>+ 2.3</td>
<td>+ 1.3</td>
<td>+ 3.3</td>
<td>+ 4.6</td>
</tr>
<tr>
<td>Accession states (EU15 to EU27)</td>
<td>- 16.8</td>
<td>+ 7.5</td>
<td>- 9.3</td>
<td>+ 5.1</td>
<td>- 4.2</td>
</tr>
<tr>
<td>Other</td>
<td>- 1.4</td>
<td>+ 2.6</td>
<td>+ 1.2</td>
<td>+ 1.9</td>
<td>+ 3.0</td>
</tr>
<tr>
<td><strong>Total persons</strong></td>
<td>- 86.9</td>
<td>+ 69.6</td>
<td>- 17.2</td>
<td>+ 48.5</td>
<td>+ 31.2</td>
</tr>
</tbody>
</table>

Source: CSO, Quarterly National Household Survey

Table 5 illustrates the preponderance of migrant workers from the NMS in hotels and restaurants as well as low skill manufacturing and construction. They are also slightly more likely than Irish workers to work shifts, evenings and weekends (Barrett and Bergin, 2007).

Table 5: Sectoral Employment of NMS-10 nationals

<table>
<thead>
<tr>
<th></th>
<th>Irish Born</th>
<th>NMS-10 nationals</th>
<th>Other non-Irish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>87.1</td>
<td>4.9</td>
<td>8</td>
</tr>
<tr>
<td>Hotels, restaurants</td>
<td>68.3</td>
<td>14.3</td>
<td>17.4</td>
</tr>
<tr>
<td>Financial, business</td>
<td>83.4</td>
<td>3.2</td>
<td>13.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>84.8</td>
<td>7.6</td>
<td>7.6</td>
</tr>
<tr>
<td>Construction</td>
<td>85.9</td>
<td>8.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Wholesale, retail trade</td>
<td>87.4</td>
<td>5.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Health, social work</td>
<td>88.3</td>
<td>1.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Transport, communications</td>
<td>90.2</td>
<td>3.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Agriculture</td>
<td>93.2</td>
<td>3.8</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td>94.2</td>
<td>0.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Public administration, defence</td>
<td>97.3</td>
<td>0.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Source: Census, CSO Ireland

Immigrants from the NMS have higher educational levels than Irish nationals (OECD, 2008), though they tend to be less well qualified than previous migrants. The occupational mismatch of these workers is relatively high, however, and they tend to work in jobs for which they are overqualified. Doyle et al. (2006) note that, although it is not possible to calculate hourly earnings separately for native and NMS-10 workers, earnings growth rates did decline in most sectors after accession.
4 Effects of labour mobility on the Irish Labour Market

Academic research about the impact of migration on the Irish labour market is relatively limited.

4.1 The wage and employment effect on natives

Barrett, Bergin and Duffy (2006) simulate the impact of migration from 1993-2003 on the earnings of natives, allowing the impact to differ by skill group. In this analysis they allow for the fact that many migrants are employed in occupations below their educational level. They find that, largely due to the high share of high skilled migrants over this period, the primary impact was at the top end of the skill distribution, compressing earnings. They also suggest that since these immigrants were complements for unskilled labour, they served to increase the demand for those at the bottom end of the skill distribution.

More recent immigration to Ireland from the new member states has, as noted above, been less skilled than earlier. Analysis by the OECD (2008) gives indicative evidence that wage growth has been depressed in those sectors that have experienced the highest inflow of NMS-10 migrants. They also present evidence that, possibly as a result, this had led Irish workers to move from those sectors.

Doyle et al. (2006) note that there has been a debate in Ireland about whether foreign workers are displacing native workers and receiving pay which is less than the collectively agreed rate. While there is significant anecdotal evidence, Doyle et al. (p.69) conclude that: “The statistical data that have been used to address the displacement issue are capable of different interpretations and further research is needed…”

4.2 Macro-Economic Impacts

A number of studies have attempted to estimate the impact of immigration on GNP growth in Ireland. Barrett, Bergin and Duffy (2006) estimate that the immigrants that arrived between 1993 and 2003 increased GNP by between 3 and 3.7%, depending on assumptions regarding the impact on skilled wages. However this impact is small compared to the overall increase in the size of the economy.

In comparing the impact of recent migration across countries, Barrell, Fitzgerald and Riley (2007) also suggest beneficial impacts on Irish GDP (3.3%), though this amounts to only a 0.7% rise in GDP per capita in the long term.

4.3 Effect on Public Finances

There has been no comprehensive study of the impact of immigration on public finances in Ireland. Ireland adopted similar restrictions as the UK for the receipt of social benefits. Foreign nationals were generally required to have lived in the Common Travel Area
(Ireland, UK, Channel Islands, Isle of Man) for at least two years before being entitled to social assistance. Barrett and McCarthy (2006) find that, in 2004, immigrants are half as likely to be in receipt of welfare benefits compared to equivalent natives. Given the preponderance of working age migrants from the 10 new member states, expenditure on healthcare and education is likely to be relatively small, especially as many of the initial migrants did not bring dependant children with them.

4.4 Effects on Immigrants

Barrett and McCarthy (2007) examine the relative earnings of migrants using the EU Survey of Income and Living Conditions for 2004 and 2005. They find that, after controlling for education and labour market experience, immigrants earn 18 percent less than equivalent Irish workers. For immigrants from non-English speaking countries this rises to 31%, with the earnings disadvantage of those from the 10 New Member States being as high as 45%.

Interestingly, Barrett and McCarthy (2007) find evidence that these gaps may be partly explained by lower returns to human capital for immigrants, with the more highly educated facing the biggest wage gap. This point is examined further in Barrett, Bergin and Duffy (2006) and Barrett and Duffy (2008) who use the Quarterly National Household Survey to examine the occupational attainment of migrants. They find strong evidence that immigrants are employed at lower positions in the occupational ladder than Irish workers of similar age and education. Further, this gap is particularly pronounced for workers from the New Member States, with little evidence of assimilation over time.

5 Summary

In the last decade the proportion of foreign born residents in Ireland has doubled to 15%. Many of these migrants come from the new member states. They tend to be relatively young and relatively well educated. However, at present they tend to work in low skilled employment in hotels, restaurants, construction, and manufacturing. These sectors are likely to be particularly vulnerable to the current economic downturn, and the level of net migration is likely to fall, at least in the short run, as job opportunities dry up. However the stock of foreign born residents is likely to remain high, and the long-run benefits that accrue to the Irish economy and the immigrants themselves should increase as they become more fully integrated and moved up the skill ladder.

6 References


European Integration Consortium
IAB, CMR, fRDB, GEP, WIFO, wiiw

Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements

VC/2007/0293
Deliverable 8
Fondazione Rodolfo Debenedetti (fRDB)

Country Study: Italy
Mattia Makovec

Abstract
This study analyses the implications for the Italian labour market of the recent dramatic upsurge in immigration from the New Member States and the Candidate Countries after the 2004 and 2007 enlargement within the context of the current Italian immigration policy. The study documents the most salient features of the immigrant population before and after the enlargement with respect to demographic characteristics, skill structure, labour market participation, occupational sector, underscoring the main differences and similarities within immigrants subgroups (New Member States vs. Candidate Countries) and between native and foreigners, and discussing their overall implications for the Italian labour market. The main conclusion of the study is that immigrants from NMS-10, NMS-2, and CAND-6 represent a vital resource for the Italian labour market, having contributed substantially to national employment growth especially in the latest years. Further, immigrants from both New Member States and candidate countries appear to act as complement rather than substitutes of native labour given the high national demand for unskilled manual and non-manual workers and for personal and domestic care workers.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
1 Overview on the current Italian economic situation

Despite the substantial structural reforms undertaken in the 1990s to meet the parameters of macroeconomic stability required to join the European Monetary Union, during the last decade, the Italian economy has been characterized by very modest growth rates compared to the euro area and by a loss of international competitiveness.

The 2006 and 2007 recovery from the 2001-2005 slowdown looks now as a temporary upswing stimulated by favorable external economic conditions, which have meanwhile vanished with the onset of the ongoing economic and financial crisis. Given the current international economic outlook, the forecasts for the Italian economy in the short-run by national and international institutions have been revised towards pessimistic scenarios.

In the latest years, domestic demand has remained weak given the slow increase in households’ real disposable income (Bank of Italy, 2008). Total factor productivity growth has been considerably slow since the end of the 1990s, in particular in the services sector, as opposed to increasing trends observed in the US and in the Scandinavian countries in key sectors such retail trade and financial services (OECD, 2007a). Exports remain one of the most important factors driving growth but their share in the world trade volumes has dramatically declined, by one-third, in the decade 1995-2005 (OECD, 2007a). Exports’ positive expansion registered in 2006 and 2007 has been largely driven by sustained foreign demand (in particular by Germany, New EU Member States, China and energy-exporting countries such as Russia) and concentrated in sectors producing capital goods (mechanical machinery and equipment, electrical equipment and precision instruments, metal products and transport equipment) rather than traditional sectors (Bank of Italy, 2008).

Undoubtedly, positive signs came so far from the evolution of the labour market, though the current international economic slowdown might display its effects on national employment and unemployment soon. Between 1996 and 2006, total employment grew by more than 2 million and 600.000 units (of which more than 400.000 units between 2005 and 2006, an increase registered only between 2000 and 2001 in the last decade) leading to a 6.3% growth of the employment rate for the people in working age. At the same time, unemployment fell by more than 900.000 units, corresponding to a decline in the unemployment rate by more than 4%, leading to a historical minimum of 6.8%, a level which had not been observed in Italy since the second half of the 1970s (Table 1). There are three main explanations for such a buoyant performance. First, the constant wage moderation in place since the abolition of the national wage indexation mechanism in 1993 (scala mobile). Second, the introduction of a number of labour market reforms (the Treu reform in 1997 and the Biagi reform in 2003) which liberalised employment contracts for new labour market entrants creating new forms of part-time, temporary and fixed-term contracts with lower hiring and firing costs and social
security contributions for the employers. Third, the surge of international immigration started in the mid 1990s: in 2007, more than 65% of the new persons employed (around 230.000 units) were foreigners, and in the same year the share of foreigners in total employment rose to 6.4% from 5.9% registered in 2006 (Bank of Italy, 2008).

Table 1: Selected indicators of the Italian economy (1996-2006)

<table>
<thead>
<tr>
<th>Year</th>
<th>Real GDP growth</th>
<th>Inflation rate</th>
<th>Employment Growth</th>
<th>Employment Rate (15-64)</th>
<th>Unemployment rate</th>
<th>Participation Rate (15-64)</th>
<th>Employment (1000s)</th>
<th>Unemployment (1000s)</th>
<th>Imports (% of GDP)</th>
<th>Exports (% of GDP)</th>
<th>Trade Balance (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>0.7</td>
<td>4.0</td>
<td>0.4</td>
<td>52.1</td>
<td>11.2</td>
<td>58.8</td>
<td>20328</td>
<td>2555</td>
<td>22.1</td>
<td>26.3</td>
<td>4.2</td>
</tr>
<tr>
<td>1997</td>
<td>1.9</td>
<td>2.0</td>
<td>0.3</td>
<td>52.3</td>
<td>11.3</td>
<td>59.0</td>
<td>20384</td>
<td>2584</td>
<td>23.6</td>
<td>26.7</td>
<td>3.1</td>
</tr>
<tr>
<td>1998</td>
<td>1.4</td>
<td>1.9</td>
<td>1.0</td>
<td>52.9</td>
<td>11.3</td>
<td>59.8</td>
<td>20591</td>
<td>2634</td>
<td>25.3</td>
<td>26.7</td>
<td>1.4</td>
</tr>
<tr>
<td>1999</td>
<td>1.9</td>
<td>1.7</td>
<td>1.2</td>
<td>53.7</td>
<td>10.9</td>
<td>60.4</td>
<td>20847</td>
<td>2559</td>
<td>25.6</td>
<td>26.7</td>
<td>0.1</td>
</tr>
<tr>
<td>2000</td>
<td>3.6</td>
<td>2.5</td>
<td>2.5</td>
<td>54.8</td>
<td>10.1</td>
<td>61.0</td>
<td>21210</td>
<td>2599</td>
<td>25.6</td>
<td>27.1</td>
<td>0.9</td>
</tr>
<tr>
<td>2001</td>
<td>1.8</td>
<td>2.8</td>
<td>1.7</td>
<td>55.9</td>
<td>9.1</td>
<td>61.6</td>
<td>21604</td>
<td>2626</td>
<td>25.4</td>
<td>26.7</td>
<td>1.1</td>
</tr>
<tr>
<td>2002</td>
<td>0.3</td>
<td>2.5</td>
<td>1.4</td>
<td>56.7</td>
<td>8.6</td>
<td>62.1</td>
<td>21913</td>
<td>2664</td>
<td>25.6</td>
<td>26.7</td>
<td>0.1</td>
</tr>
<tr>
<td>2003</td>
<td>0.0</td>
<td>2.7</td>
<td>1.5</td>
<td>57.5</td>
<td>8.4</td>
<td>62.9</td>
<td>22341</td>
<td>2708</td>
<td>26.0</td>
<td>26.7</td>
<td>-0.7</td>
</tr>
<tr>
<td>2004</td>
<td>1.2</td>
<td>2.2</td>
<td>1.7</td>
<td>57.4</td>
<td>8.0</td>
<td>62.5</td>
<td>22404</td>
<td>2732</td>
<td>26.1</td>
<td>26.7</td>
<td>-0.5</td>
</tr>
<tr>
<td>2005</td>
<td>0.1</td>
<td>1.9</td>
<td>1.8</td>
<td>57.5</td>
<td>7.7</td>
<td>62.4</td>
<td>22563</td>
<td>2755</td>
<td>25.4</td>
<td>26.1</td>
<td>-0.8</td>
</tr>
<tr>
<td>2006</td>
<td>1.9</td>
<td>2.1</td>
<td>1.9</td>
<td>58.4</td>
<td>6.6</td>
<td>62.7</td>
<td>22988</td>
<td>2776</td>
<td>25.3</td>
<td>26.1</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

Notes: real GDP is calculated at 2000 prices; the unemployment rate is defined for the age group 15-74.


As it will be shown in detail in the following sections, immigrant workers currently represent a tremendous resource for the Italian economy, in particular in the Centre-North, where the highest demand for low-skilled jobs (e.g. in the sectors of construction, hotel and restaurants, services for the household) is concentrated.

Despite the positive developments outlined above, most of the structural problems affecting the Italian economy seem to persist. The decline in total factor productivity growth can be explained by a lack of capacity to innovate in key service sectors, which could offset the historical productivity slowdown in the manufacturing sector. With this respect, Italy is undergoing an opposite tendency compared to those undertaken by the most advanced industrialized economies currently experiencing productivity growth in skill-intensive sectors, which might further hamper Italy competitiveness in the future. Further, Italy still presents dramatic human capital gaps with respect to the European average: tertiary educational attainment is among the lowest in Europe, representing a barrier both to potential innovation and to international competitiveness. The human capital gap is critical also from the viewpoint of the demand, since the Italian industry specialization has traditionally privileged low-skill intensive production; further, an average small firm scale and the high share of self-employed are probably inadequate to foster R&D and innovation in high-skill intensive sectors. High pension expenditure on the one hand and high debt to GDP ratio on the other put serious constraints to reduction in the tax wedge, one of the highest in Europe and to the introduction of virtuous in-work policies. Further, Italy has been recently introducing some measures to tackle the size of the underground economy, but a lot still needs to be done to reduce substantially its incidence. A related aspect, high crime rates together with poor
infrastructures and inefficiency in public services – other than wage rigidity and strong employment protection - are critical aspects making Italy scarcely attractive to foreign investors, especially in the South, explaining why Italy ranks low in terms of capacity to attract Foreign Direct Investments (OECD, 2007a). Finally, the historical dualism between Northern and Southern regions still represent a persistent phenomenon, with strong differences in labour market performance, productivity and even in student performances as measured by recent PISA standardized test scores (OECD, 2007b).

2 Recent trends and main features of the Italian labour market

Since the mid 1990s, the aggregate performance of the Italian labour market has been constantly improving thanks to a slow but steady increase in the employment rate and a decline in the unemployment rate. The total number of employed persons in 2007 overcame 23 million while the unemployment rate decreased to a historical minimum of 6.1% (EUROSTAT data). The incidence of the long-term unemployed (persons unemployed for more than 12 months) on the total number of unemployed fell from over 65% registered in 1996 to 48.6% in 2006, a level in line with the current EU average. Since 1995, the aggregate employment rate for the population in working age (15-64) has risen from 51.8% to 58.4%: despite the improvement, such level remains below the current EU-27 average (65%) and still far from the Lisbon target of 70% which should be reached by 2010 (Figure 1).

Figure 1: Employment rate in Italy and the EU (Men and Women)

![Figure 1: Employment rate in Italy and the EU (Men and Women)](image)


A similar positive tendency has been observed over the period considered for unemployment: the unemployment rate in 2007 declined to 6.1%, a historical minimum below the EU average (Figure 2). A closer look at the data, though, shows that the traditional gender and regional disparities historically affecting the Italian
labour market still persist, and to some extent, have widened. The regional breakdown of the employment rate trend shows that Northern regions are much closer to the Lisbon target than regions in the South. In particular, in the North-East, in the North-West and in the Centre, the employment rate grew between 7% and 8% in the period considered, while in the South the increase was only of 3.7%.

**Figure 2: Unemployment rate in Italy and the EU (Men and Women)**

![Unemployment rate graph]


A further breakdown by gender, shows that both in the North and in the Centre, male employment rates currently reach nearly 80% and, during the last decade, displayed a higher increase than the one registered in the South (now at 70%, Figure 3a). Female employment rate in the South is among the lowest in Europe, largely explaining the overall weak employment performance of the region. In 2006, female employment rate in the South still corresponded to nearly half of female employment rate in the North (31.1% against 56% in 2006, Figure 3b), and to half of the male employment rate in the South (62.3%). The decline of the unemployment rate has been substantial in all regions for both men and women (Figures 4b and 4c). Male unemployment rate in Northern regions in 2006 was one of the lowest observed in Europe (below 3%), and female unemployment rate halved from 10% to 5% over the decade considered. Despite the general declining trend, in 1995 female unemployment rate in the South was 2.5 times as much as higher than in the North while in 2006 the ratio resulted higher than 3 times, signaling that for females the regional unemployment gap has widened, while for men slightly declined. Besides, in Southern regions, the within-region gender gap in unemployment rates remained substantially constant.

The first of the three main explanations of the Italian labour market performance in the last decade is the existence of a long period of wage moderation after the abolition of the national wage indexation scheme (*scala mobile*) in 1993. Table 2
reports the evolution of average real net earnings by gender, macro-regions and type of contract (full time vs. total employees), together with some distributional indicators, showing that the overall real wage growth over the decade considered for full time employees has been extremely modest (below 7%). If on the one hand women’s salaries grew twice than men’s contributing to the narrowing of the wage gender gap, on the other the regional wage gap has widened, since the profile of real wages in South remained basically flat over ten years. Qualitatively, these results do not change substantially when we consider the total pool of employees, the only difference being that total wage growth has been even more modest.

The growth of part-time employment has been one of the key features of the recent evolutions of the Italian labour market, together with the increase of the share of temporary and flexible contracts. As shown in Table 3, part-time employment accounts now for 8% of total employment, and fixed-term contracts account now for more than 10% of total employment (13% in the South against 8.5% in the Centre-North).

The third most relevant explanation of the recent Italian labour market performance is the upsurge of immigration since the mid 1990s and the contribution of foreign workers to national employment growth. Table 4 compares labour market indicators for natives and foreigners, showing that the highest concentration of foreigners regularly resident in Italy is observed in the prime age group with secondary or lower education for both men and women. Foreign men exhibit by far higher labour market participation and employment rates than natives, in particular for the youngest and oldest age groups, at all education levels. The different labour market performance of foreigners against natives in those age groups reflects most probably the substitution of natives with foreigners in low-skilled jobs and blue-collar occupations, such as workers in the manufacturing and tourist sector or manual workers in the construction and in the agriculture sector. As far as foreign women are concerned, such differences appear as large (52% against 22% for the participation rate and 50% against 21% for the employment rate) only for the oldest age group (55-64), though accounting for only 4% of the regularly resident foreign women. The reasons are most probably on the one hand the structural low Italian female labour market participation, and, on the other, the recent increase in the number of personal and domestic care workers from Central Eastern Europe, in particular from Ukraine, even in this age group. For the youngest age group (15-24), participation and employment rates are slightly higher for foreigners, while for the prime age group (25-54) Italian women outperform foreign residents, reflecting that probably the main motive of female migration remains the joining of family members rather than job search.
Table 2: Average Real Net Earnings: 1995-2006 (in 2006 euros)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Employees</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Earnings</td>
<td>Men</td>
<td>Women</td>
<td>Centre-North</td>
<td>South</td>
<td>Gini Index</td>
<td>Interdecile Ratio (^1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1320</td>
<td>1446</td>
<td>1129</td>
<td>1348</td>
<td>1252</td>
<td>0.234</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>1292</td>
<td>1401</td>
<td>1133</td>
<td>1343</td>
<td>1170</td>
<td>0.241</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>1310</td>
<td>1430</td>
<td>1134</td>
<td>1362</td>
<td>1177</td>
<td>0.240</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>1338</td>
<td>1451</td>
<td>1176</td>
<td>1387</td>
<td>1212</td>
<td>0.251</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>1364</td>
<td>1479</td>
<td>1199</td>
<td>1419</td>
<td>1214</td>
<td>0.242</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>1384</td>
<td>1507</td>
<td>1218</td>
<td>1439</td>
<td>1238</td>
<td>0.233</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Earnings refer to earnings in the main payroll employment and are deflated with the cost of living index: they are considered net of taxes and social security contributions. (1) The interdecile ratio is defined as the ratio between the top 9th and the bottom 1st decile of the earnings distribution.


Table 3: Employment composition by type of contract and macro-regions (2007)

<table>
<thead>
<tr>
<th>Type of Contract</th>
<th>Centre-North</th>
<th>South</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent</td>
<td>10971</td>
<td>3928</td>
<td>14898</td>
</tr>
<tr>
<td>Full time</td>
<td>9444</td>
<td>3535</td>
<td>12979</td>
</tr>
<tr>
<td>Part time</td>
<td>1526</td>
<td>393</td>
<td>1919</td>
</tr>
<tr>
<td>Fixed-term and temporary</td>
<td>1423</td>
<td>846</td>
<td>2269</td>
</tr>
<tr>
<td>Full time</td>
<td>1097</td>
<td>669</td>
<td>1766</td>
</tr>
<tr>
<td>Part time</td>
<td>326</td>
<td>176</td>
<td>502</td>
</tr>
<tr>
<td>Self-employed</td>
<td>4312</td>
<td>1743</td>
<td>6055</td>
</tr>
<tr>
<td>Full time</td>
<td>3767</td>
<td>1546</td>
<td>5313</td>
</tr>
<tr>
<td>Part time</td>
<td>545</td>
<td>197</td>
<td>742</td>
</tr>
<tr>
<td><strong>Total Employment</strong></td>
<td><strong>16706</strong></td>
<td><strong>6516</strong></td>
<td><strong>23222</strong></td>
</tr>
</tbody>
</table>

Source: Bank of Italy (2008), Table 9.1, based on ISTAT Labour Force Survey.
### Table 4. Employment and labour market participation by education, age, and gender: natives vs. foreigners (2007)

<table>
<thead>
<tr>
<th>AGE</th>
<th>EDUCATION</th>
<th>Population</th>
<th>Participation rate</th>
<th>Employment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Italian</td>
<td>Foreign</td>
<td>Italian</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Italian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td>Lower secondary or less</td>
<td>9</td>
<td>12.9</td>
<td>26.9</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>6.6</td>
<td>3.2</td>
<td>50.6</td>
</tr>
<tr>
<td></td>
<td>University or higher</td>
<td>0.4</td>
<td>0.1</td>
<td>26.9</td>
</tr>
<tr>
<td>25-54</td>
<td>Lower secondary or less</td>
<td>29.7</td>
<td>42.6</td>
<td>89.4</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>27.7</td>
<td>30.5</td>
<td>92.4</td>
</tr>
<tr>
<td></td>
<td>University or higher</td>
<td>8.2</td>
<td>7.5</td>
<td>92.5</td>
</tr>
<tr>
<td>55-64</td>
<td>Lower secondary or less</td>
<td>11.7</td>
<td>1.6</td>
<td>38.9</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>4.9</td>
<td>0.9</td>
<td>52.4</td>
</tr>
<tr>
<td></td>
<td>University or higher</td>
<td>1.8</td>
<td>0.7</td>
<td>75.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
<td>73.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td>Lower secondary or less</td>
<td>7.6</td>
<td>11.4</td>
<td>14.4</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>6.9</td>
<td>4.8</td>
<td>38.5</td>
</tr>
<tr>
<td></td>
<td>University or higher</td>
<td>0.7</td>
<td>0.2</td>
<td>43.9</td>
</tr>
<tr>
<td>25-54</td>
<td>Lower secondary or less</td>
<td>27.4</td>
<td>35.2</td>
<td>47.5</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>28.1</td>
<td>32.8</td>
<td>73.5</td>
</tr>
<tr>
<td></td>
<td>University or higher</td>
<td>9.8</td>
<td>11.5</td>
<td>84.7</td>
</tr>
<tr>
<td>55-64</td>
<td>Lower secondary or less</td>
<td>14.1</td>
<td>2.3</td>
<td>15.1</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>3.9</td>
<td>1.1</td>
<td>35.9</td>
</tr>
<tr>
<td></td>
<td>University or higher</td>
<td>1.4</td>
<td>0.7</td>
<td>56.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
<td>50.4</td>
</tr>
</tbody>
</table>


### 3 Institutions and immigration policy

One of the most important factors affecting the time trend of regular visas has been the immigration policy of Italian governments, which has been largely based on ex post regularizations of immigrants already living in the country established from time to time by ad-hoc laws, rather than being selective in the administration of the entry process.

The Italian immigration policy since the mid 1980s has been based on a quota system regulating the regular number of immigrants allowed in the country together with the conditions of entry and residence. The current institution regulating immigration policy in Italy is the so-called “Bossi-Fini” law (no. 189, 30th
of July 2002), which establishes annual quotas through annual decrees. The main difference with respect to previous regulations is that currently the only legal way of entering Italy for job purposes for non-EU citizens is holding a job offer beforehand. Furthermore, the employer should be able to guarantee housing to the immigrant worker and eventually funds in the case the worker might wish to go back to the country of origin. The Law also establishes a net of Immigration Offices (“Sportello Unico per l’Immigrazione”) at the province (“provincial”) level, with the task of managing the hiring process of immigrants according to the local demand and the issuing of visas for family re-union purposes. The Bossi-Fini law has reduced the duration of stay for job purposes with respect to the previous legislation (the so-called “Turco-Napolitano” law, no. 286/1998): now the visa can be renewed only for a period equal to the previous duration against the double of the previous duration permitted by the 1998 law. Further, the duration of the visa cannot exceed the duration of the job contract, or, in the case of unlimited contracts, a period of two years. The law has also reduced the time limit for applying to the renewal of the visa from 30 days from the expiration date to 60 days in the case of fixed-term contracts, and to 90 days in the case of unlimited contracts. Besides, it has shortened from one year to six months the longest period allowed to dismissed immigrant unemployed workers to find another job. The Bossi-Fini law therefore, while conceived in principle to simplify the management and the implementation of the Italian immigration policy, implies in the end harder requirements both to obtain and to renew a visa for job purposes, and imposes to the immigrant – and to the society as a whole - higher bureaucratic costs (Ministry of Internal Affairs, 2007a). In addition, the condition of holding a regular job offer before entering the country appears realistically very difficult to fulfill, unless in the case of very high-skilled migrants (a minority in the Italian case), which implies that most often, migrants from non-EU countries enter illegally and regularize their position afterwards. The quota established for non-EU workers in non-seasonal jobs corresponded to 170.000 workers in both 2006 and 2007 and to 150.000 in 2008. As it will become clearer in the following sections, though, such figures are too modest to match the national demand of non-EU workers.

Once obtained, the visa is normally renewed annually, and after 5 years of regular visa status, immigrants can apply for a permanent resident status if they can prove they are able to generate an adequate income from economic activity (law no. 40/1998). After ten years of regular residence, immigrants are entitled to apply for Italian citizenship with the possibility to transfer it to their dependent children below 18. The current legislation admits visa application for various reasons other than work (family, study, refugee status, religion etc.); in the case of application for job purposes, the application of the immigrant worker must be supported by the parallel application of the employer.

The first relevant regularization of non-EU immigrants occurred with the so-called “Martelli law” in 1990 (law no. 39/1990), which interested mostly young-aged male immigrants arriving from Northern Africa and Asia. As consequence of the
regularization, the number of foreign residents with a regular visa registered at the
beginning of the 1992 rose to 649,000. In spite of the large regularization, the 40% of
the visas issued by the Martelli law was not renewed at the expiry date (end of
1992), concerning mainly immigrants who were not regularly employed at the end
of the period.

The increase of regular visas observed in the years 1994 and 1995 can be largely
ascribed to the increased inflows of foreigners coming from former Yugoslavia
Republics as consequence of the ongoing conflicts. The impact of migration from
these countries has been slowing down in the second half of the 1990s mainly
because of return migration to the countries of origin.

A second major regularization occurred with the “Dini law” of 1995 (law no.
489/1995): the number of visas released as a consequence of the Dini Law has
been estimated in 15,000 for 1995, 221,000 for 1996 and 10,000 for 1997, to
expire mainly at the end of 1998. Differently from the previous regularization, the
majority of the visas released has been renewed at the end of the period. The
regularization interested mainly immigrants arriving from Albania who had been
entering the country irregularly increasingly since 1991.

In 1998, the larger yearly increase in the number of released visas interested
foreigners from Central Eastern European countries (+15.4%) compared to an
overall increase of 6.6%, an increase of 5.1% registered from EU countries, 1.8%
from Africa, 7.8% from Asia and 4.4% from Central and South America.

At the end of the 1990s, immigrants arriving from former Yugoslavia and other
Central Eastern European countries represented a relatively new immigrant
population. More than 60% of them in fact were resident in Italy for less than 5
years, 30% between 5 and 9 years summing to more than 90% of this subgroup
resident in the country for less than ten years (ISTAT 2000a, 200b). Italy’s most
traditional immigrant population in fact consisted of immigrants from Northern and
Western African countries, nearly 50% of whom was registered as resident in Italy
between 5 and 9 years, and around 20% between 10 and 14 years and around 23%
and 27% respectively below 5 years. Immigrants from more developed countries
(other EU countries, or North American countries) display longer spells of residence,
but they are on the other hand the smallest group in terms of incidence on the total
population.

The three last most relevant regularizations occurred with the Turco-Napolitano law
(1998), but most importantly with the Bossi-Fini law, and the law no. 195, 9th of
September 2002. The latter aimed at regularizing domestic care workers and
employees with some work experience during the three months before November
2002. The last two regularizations involved 650,000 immigrants and their effects
are reflected in the jump in the number of regular visas registered between 2003
and 2004. At the end of 2006, the Italian government, as many other Member
States’ governments, introduced restrictions to the freedom of movement citizens
from Bulgaria and Romania were supposed to benefit after the 2007 enlargement. A temporary regime was adopted for a year, according to which the freedom of movement principle was applicable only to Bulgarian and Romanian workers of particularly high skill levels, or belonging to “strategic sectors”, such as construction, metalworking, domestic and personal care, hotel-related services and the agriculture, maritime and fishing sectors. Bulgarian and Romanian workers employed in other sectors had to apply for a visa. The transitory regime was extended to 2008, and will be in place in 2009 as well.

4 Data: residents and visas

An exact account of the presence of immigrants in Italy is problematic given the non-comparability of the two main existing data source. The first one consists in the register of visas (“permesso di soggiorno”) released by the Ministry of Internal Affairs (“Ministro dell’Interno”) coming directly from Police records. The second source refers to the number of immigrants counted as regular “residents” of an Italian municipality (“comune”) at the end of the year; this number is collected by the National Statistical Institute (ISTAT) once a year through a survey covering all Italian municipalities’ register offices. The latter figure, though, does not coincide with the number of immigrants in possess of a regular visa since registration at the municipality register office, once a regular visa is obtained, is not compulsory. Moreover, there are three additional reasons for which the figures coming from the two administrative sources are not directly comparable. First, in the case immigrants possessing a regular visa decide to register towards the end of the year, the registration will not be counted immediately, but will appear in the municipality registers from the following year. Second, registered immigrants who leave the country or those whose visa has expired or has not been renewed during the year, are not immediately cancelled from the municipality registers and might appear as regular residents for another year or more. Third, while municipality registers include immigrant residents of all age groups (including dependent children), data concerning regular visa do not include dependent children below 18 years old who are not obliged to apply for a visa, since their immigrant status in the country depend on the parents’ immigrant status. To sum up, figures based on the number of regular visas at the end of the year are likely to underestimate the actual presence of immigrants in the country, while the figures coming from municipality registers might both underestimate and overestimate immigrants’ regular presence.

The data provided by the National Statistical Institute on regular residents seem more appropriate to capture the magnitude of the foreign population stably resident in the country. Data from visa registers on the one hand allow capturing year-to-year effects of regularizations implemented by the government but on the other are not very much informative on new inflows, given that regularizations normally involve immigrants already living in the country irregularly. The advantage of data from visa registers is that they include breakdowns by gender, age, years of residence in the country and reason of staying. Furthermore, they are available
without breaks for a time span ranging between the early 1990s and the most recent years (2007), while data on regular residents are only available for a shorter time span. Figure 5 compares the evolution over time of the number of immigrants from the New Member States obtained with both data sources, while a detailed data breakdown by gender and nationality is provided in the Tables A1-A6 in the Appendix. Figure 5 shows the increasing trend of the series from both data sources. The sharp increase in regular residents of the latest years measured from municipality registers data reflects on the one hand the recent regularizations, and on the other, the increase over time in the presence of dependent children. A general limitation of both type of data source is the lack of information on immigrants’ skills, education level, occupation, and profession. Such information can be partially recovered or inferred from reports produced regularly by NGO or religious organizations (the “Dossier statistico sull’immigrazione” by Caritas is one of the most important), although not based on statistically representative but rather on selected samples.

Unfortunately, the data obtained from household budget surveys based on representative sample of the population, such as the Survey on Italian Households Income and Wealth carried out by the Bank of Italy, or the EU-SILC (European Survey on Income and Living Conditions) are not very much informative. In fact, either the number of foreign residents included in their samples is too small or their classification does not allow obtaining descriptive statistics broken down by detailed nationality or country of origin.

Figure 5: Regular residents vs. visa holders (“permesso di soggiorno): Men and Women

Note: the original ISTAT reference period is the 1st of January of the year following the year indicated above; hereafter we adopt the 31st of December of the indicated year as reference period for consistency with the rest of the report.

5 General trends before and after the EU enlargement

At the beginning of the 1990s, the number of immigrants resident in Italy in possess of a regular visa was slightly above 600,000; in 2007, this figure reached nearly 2,500,000 units. Looking at the figures corresponding to the number of immigrants registered at municipality register offices (which, as pointed out above, take into account the number of dependent children and are not directly comparable), the increase is even more pronounced, as the regular residents overcame 3,400,000 units at the end of 2007, corresponding to nearly 6% of the total population.

The top panel of Table A1 shows that such growth occurred alongside major changes in the composition of the immigrants’ population in the last fifteen years. Firstly, until the early 1990s, immigrants from African countries (in particular from Northern Africa, as Morocco, Tunisia and Egypt, and from Western Africa, as Senegal), represented the most relevant group of foreign residents in Italy, and their incidence was as much as double as those of the other main subgroups (EU Member States, Central Eastern European, Asian, and American countries). Secondly, immigrants from EU member states accounted for 50% of the foreign residents coming from European countries (EU member states, Central Eastern European countries and other non-EU members). Both scenarios changed quite dramatically during the last decade.

Figure 6a: Residents and Visas by nationality (Men and Women)

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Hercegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey. Data as of 31st of December (See note Figure 5)

In the first half of 1990s, the two most relevant groups of foreign residents within the pool of immigrants coming from European countries were Albanians (around 10%) and citizens from former Yugoslavia, whose number increased as consequence of mass migration from ongoing conflicts in the Balkans and reached an incidence of 25% in 1994. In the second half of the 1990s, the incidence of Albanian immigrants remained high, rocketing to 18% in 1997; the impact of migration from former Yugoslavia instead became more attenuated because of return migration. In the same year (1997), the presence of immigrants from Romania, already representing the 5% of migrants from European countries, began to rise steeply, and Romanians became the second most important immigrant group from European countries after Albanians. It has to be kept in mind that year-to-year massive increases in the number of regular visas do not generally reflect contemporaneous new inflows but rather recently occurred mass regularization of immigrants already living in the country, as pointed out earlier.

**Figure 6b: Residents and Visas by nationality (Men)**

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Hercegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey. Data as of 31st of December (See note Figure 5)


Since the year 2000, the growth of immigrants from Romania and Ukraine has been impressive. In 2006, nationals from Romania became the second largest group of foreign residents following Albanians, but one year later, as consequence of the enlargement, they turned to first in the league table. At the end of 2007, the number of Romanian citizens regularly resident in Italy amounted to over 600.000 individuals, corresponding to around 18% of the total immigrant population in the country, 35% of the foreign population from European countries, and 67% of the foreign population from EU Member States. Albanians became the second largest foreign community counting over 400.000 individuals (11.6% of the total number of
An increase of more than 100,000 released visas registered between 2003 and 2004 made Ukrainian nationals the third leading group of migrants from European countries (10% in 2007). Another group emerged recently consists in migrants from Moldova, which in a few years became the sixth leading group (4.3%) following in the league table Serbia and Montenegro (4.7%). The presence of immigrants from the other New Member states is very limited (between 0.5% and 2% of the migrants from European countries), and has not changed substantially after the EU enlargement.

A comparison between Tables A5 and A6 in the Appendix shows that the increase in migration from Central Eastern European countries has been largely driven by female migration, with the exception of Albania and former Yugoslavia Republics. African countries have been the leading group for men migration until 2003, while female migrants from Africa kept the same growth pattern of other subgroups until nowadays. Further, the expansion of female migration from Eastern European countries has been strongly pushed by the increase of female immigrants from Ukraine. Among Ukrainian migrants regularly resident in 2007, gender differences are striking, since the women-to-men ratio reaches 4.1, against 2.4 in the case of Poland, 1.5 in the case of Bulgaria and 1.1 in the case of Romania. This ratio is higher in the former Soviet Republics (Estonia, Latvia, Lithuania and Belarus), though the incidence in these cases is much lower.

**Figure 6c: Residents and Visas by nationality (Women)**

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey. Data as of 31st of December (See note Figure 5)

Finally, Figure 7 and Table A11 in the Appendix illustrate the geographic concentration of immigrants, showing that foreigners from NMS-2 and CAND-6, which are relatively less qualified than NMS-10, are more heavily concentrated (around 60%) in Northern regions where the demand for labour is more elastic.

### 6 Demographic and labour market trends before and after EU enlargement

Tables A7 to A10 in the Appendix offer a snapshot of the changes occurred in the pool of immigrants from Eastern European Countries with respect to age composition and reason for stay by considering a ten-year time horizon. Immigrants from the New Member States are mostly concentrated in the prime-age (25-44) or working-age groups, while a higher concentration in younger age groups is observed among immigrants from former Yugoslavia or Russia. A comparison between Tables A7 and A8 shows as well the presence of cohort effects, with a shift towards higher incidence of older age groups (between 35 and 39) in 2007 with respect to 1998. Ukraine is the only country exhibiting a much higher incidence of older age groups (50-54 and 55-59) due in particular to the higher presence of women of older age.

Tables A9 and A10 compare immigrants’ reasons for stay in 1998 and 2007. Employment is general the main reason for stay, in particular employment as dependent worker. Among the New Member States, we can notice a relative increase in the importance of stay for labour market reason with respect to family reason for women, which might reflect higher integration in the Italian labour market, while the incidence of stay for family reason has remained roughly constant.

Interestingly, for immigrants coming from former Yugoslavia, stay for labour market purposes, was higher in 1997 compared to nowadays, family reasons being now the leading purpose. High incidence of entry for “study reason” reflects alternative strategies of entry in the country in the absence of the conditions for applying immediately for work permit (as in the case of Russian immigrants).
7 The skill structure of immigrants from NMS-10, NMS-2, and CAND-6

According to the National Statistical Institute (ISTAT, 2008a), in 2006, 9.6% of the total resident population in working age in Italy was formed by individuals with tertiary education, 32% with upper secondary education and 58% with lower secondary education or lower (of which 31% lower secondary and 27% primary or no education). Detailed data on immigrants’ educational attainment are unfortunately unavailable, since the most recent statistics from the National Statistical Institute on education level of foreigners are not broken down by nationality. We try to compensate for the missing information by combining Census data dating back to 2001 with the figures reported in Deliverable 2 (“Analysis of the scale, direction and structure of labour mobility”) based on the 2008 European Labour Force Surveys. Taking into account the differences in the comparability of the two data sources, by this approach, we aim at capturing the main changes in the skill structure of immigrants before and after the 2004 enlargement.

Census data show that, as of 2001, immigrants from NMS-10 and NMS-2 were in general better qualified than natives, mainly for the relatively higher educational level of foreign women (Table 6), while the skill structure of immigrants from CAND-6 was more skewed to lower skill levels, in particular in Bosnia-Herzegovina, Macedonia, Serbia and Montenegro and Turkey. Half of the immigrants from NMS-10 in 2001 had achieved upper secondary education against one fourth of the Italian population and the share of the population with tertiary education was as much as double among NMS-10 nationals in comparison with Italian natives (15% against 7%). Looking at NMS-2, the skill composition of Bulgarian immigrants in 2001 appeared very similar and even more skewed towards tertiary education compared to NMS-10, and the share of tertiary or upper secondary educated was dramatically higher among Bulgarian immigrants than among the Italian native population. The skill distribution of Romanian nationals displayed a similar incidence of upper secondary school degrees compared to NMS-10, while exhibiting a lower share of tertiary-educated. If the incidence of tertiary educated was on the hand lower among immigrants than in the population of origin (11% according to the 2001 Census), on the other, those with upper secondary education were largely over-represented among immigrants compared to nationals in the country of origin (38%).

The differences in the skill structure between the native and the NMS-10 population can be explained firstly by a composition effect. The immigrant population consists prevalently of young and prime-age individuals, whose skill distribution is bound to be very different from that of the total Italian population, in which the size of older cohorts with only basic education attainment is considerable. Secondly, Italy has been historically characterized by very low tertiary education attainment rates in comparison to the EU-15 average, and its skill composition is still heavily biased towards primary or lower education groups: this shows why, NMS-10 immigrants
display lower education levels when compared to the average of EU-15 natives, but relatively higher attainments when compared to Italian natives.

### Table 6: Educational attainment by nationality (Census 2001)

<table>
<thead>
<tr>
<th></th>
<th>Tertiary</th>
<th>Upper Secondary</th>
<th>Lower Secondary or Primary</th>
<th>No education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Italy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.4</td>
<td>25.8</td>
<td>55.8</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td><strong>NMS-10</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>14.3</td>
<td>39.2</td>
<td>38.4</td>
<td>8.0</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>15.5</td>
<td>51.7</td>
<td>29.1</td>
<td>3.8</td>
<td>100</td>
</tr>
<tr>
<td><strong>NMS-8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>13.6</td>
<td>39.3</td>
<td>38.9</td>
<td>8.2</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>15.5</td>
<td>52.0</td>
<td>28.8</td>
<td>3.8</td>
<td>100</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>12.6</td>
<td>42.3</td>
<td>36.4</td>
<td>8.6</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>14.5</td>
<td>53.6</td>
<td>27.5</td>
<td>4.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>NMS-2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bulgaria</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>15.2</td>
<td>39.5</td>
<td>37.2</td>
<td>8.0</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>23.6</td>
<td>43.3</td>
<td>27.5</td>
<td>5.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>5.9</td>
<td>51.0</td>
<td>34.9</td>
<td>8.3</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>9.1</td>
<td>52.2</td>
<td>31.4</td>
<td>7.3</td>
<td>100</td>
</tr>
<tr>
<td><strong>CAND-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>5.5</td>
<td>25.4</td>
<td>54.3</td>
<td>14.8</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>7.0</td>
<td>25.5</td>
<td>49.7</td>
<td>17.8</td>
<td>100</td>
</tr>
<tr>
<td><strong>Albania</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>5.9</td>
<td>26.6</td>
<td>54.4</td>
<td>13.1</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>7.3</td>
<td>28.1</td>
<td>49.3</td>
<td>15.2</td>
<td>100</td>
</tr>
<tr>
<td><strong>Bosnia and Herzegovina</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>5.0</td>
<td>30.6</td>
<td>47.1</td>
<td>17.3</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>6.7</td>
<td>26.6</td>
<td>45.7</td>
<td>21.0</td>
<td>100</td>
</tr>
<tr>
<td><strong>Croatia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>10.4</td>
<td>38.0</td>
<td>42.6</td>
<td>9.1</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>13.0</td>
<td>37.6</td>
<td>40.6</td>
<td>8.8</td>
<td>100</td>
</tr>
<tr>
<td><strong>Macedonia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2.2</td>
<td>15.2</td>
<td>64.7</td>
<td>18.0</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>1.8</td>
<td>10.7</td>
<td>63.3</td>
<td>24.3</td>
<td>100</td>
</tr>
<tr>
<td><strong>Serbia and Montenegro</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>4.5</td>
<td>22.7</td>
<td>52.2</td>
<td>20.6</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>5.5</td>
<td>19.0</td>
<td>49.3</td>
<td>26.1</td>
<td>100</td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>6.6</td>
<td>16.8</td>
<td>62.7</td>
<td>13.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Women</td>
<td>8.5</td>
<td>16.2</td>
<td>55.7</td>
<td>19.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: composition of the population aged 6 and above by highest educational attainment.

Source: own elaborations based on ISTAT (2006c).

The data reported in Deliverable 2 (Figure 7) show that the skill structure of immigrants from NMS-8 appeared slightly more concentrated towards medium
education levels in 2006 with respect to 2001: the share of immigrants with tertiary education amounts to around 10%, with upper secondary education to 60% and with lower secondary education, primary, or no education to 30%. This can be imputed, first, to mere differences in statistical classifications, since the 2001 Census data refer to the population aged six and above, while figures from Deliverable 2 to individuals in working age. We can speculate though, that differences in the 2006 and 2001 skill distribution result not only from differences in the data sources, but actually reflect a moderate increase in the foreign population with upper secondary education after the enlargement. In fact, even by assuming that all the cohorts which could have achieved upper secondary education in 2006 (those aged 13 to 18 in 2001, corresponding to around 3% of the population according to 2001 Census data), actually reached that education level, the resulting increase would not be enough to justify a 60% share of foreigners with upper secondary degree in the total immigrant population from NMS-8.

The picture emerging from the 2001 Census data relative to CAND-6 is quite different, since for all nationalities the largest group is represented by the population with lower secondary or primary education (ranging from 41% among Croatian nationals to nearly 60% among Turkish nationals). In addition, among immigrants from CAND-6, women do not exhibit substantially higher educational attainment compared to men, and for some nationalities, the incidence of the population subgroup without any education is dramatically high (namely Bosnia-Herzegovina, Macedonia and Serbia and Montenegro). The data presented in Deliverable 2 for 2006, show that the share of immigrants from CAND-6 with tertiary education amounts to around 5%, with upper secondary education to around 35% and with lower secondary education, primary, or no education to around 60%. The skill structure of nationals from CAND-6 appears therefore similar to the one observed before the enlargement, slightly more skewed towards upper secondary levels.

8  The labour market situation of immigrants from NMS-10, NMS-2 and CAND-6 and its implications for the national labour market

Immigrants represent a growing and increasingly important resource for the Italian labour market, characterised by high demand of unskilled labour in low-technology sectors and high demand of personal and domestic services. The incidence of employed immigrants aged 15 and above on total national employment was 3% in 2001 (Census data, ISTAT 2006c), it had grown to 4.6% by the first quarter of 2005 to reach 6.6% in the first quarter of 2008 (Quarterly labour force surveys data, ISTAT 2008b).

As shown in Table 7, immigrants’ incidence is higher in the regions of the North and the Centre, which are made more attractive by more favorable job opportunities and by a more dynamic labour demand; the North presents as well higher prevalence of male immigrants. Most importantly, immigrants have been contributing impressively to the last years’ employment growth: 58% of the newly
employed persons between the first quarter of 2007 and the first quarter of 2008 were foreigners, 41% in the North, 17% in the Centre and 1% in the South (ISTAT, 2008b).

Table 7. % Incidence of immigrants in the total population: I quarter 2008

<table>
<thead>
<tr>
<th></th>
<th>15-64</th>
<th></th>
<th>15+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>North</td>
<td>Centre</td>
<td>South</td>
</tr>
<tr>
<td>Population</td>
<td>8.2</td>
<td>7.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Male</td>
<td>8.4</td>
<td>7.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Female</td>
<td>8.0</td>
<td>7.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Labour force</td>
<td>8.7</td>
<td>8.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Male</td>
<td>9.5</td>
<td>8.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Female</td>
<td>7.7</td>
<td>8.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Employment</td>
<td>8.3</td>
<td>8.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Male</td>
<td>9.2</td>
<td>8.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Female</td>
<td>7.0</td>
<td>8.5</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: own elaborations based on ISTAT Quarterly labour force surveys (2008b).

The figures for visas holders by visa type reported in Table A10 in the Appendix show that immigrants from NMS-10, NMS-2 and CAND-6 account respectively for 4.8%, 14% (of which 13.2% are immigrants from Romania) and 15.5% of the foreigners regularly employed. The incidence of nationals from NMS-10 and NMS-2 is slightly higher among the employed than in the total stock of regular visa holders (4.4% and 12.3% respectively, of which 11.2% corresponding to Romanian nationals), while CAND-6 nationals are relatively under-represented among the employed, as they account for nearly 18% of the stock. Since the number of employed immigrants with regular visa at the end of 2006 (1.422.110) appears in line with the figure provided by the Quarterly labour force statistics for the total number of immigrants employed (1.382.456), we can roughly estimate that immigrants from NMS-10 and NMS-2 at the end of 2006 accounted for around 1% of national employment. According to the estimates by the last Caritas report (Caritas, 2008), at the end of 2007, Romanian nationals amount to one million of residents (11% aged below 18). Caritas’ estimates show that the Romanian labour force consists of nearly 700.000 employed (around 586.00 employees, 16.000 self-employed, 13.000 irregular or temporary workers, and around 107.000 involved in informal sector type of jobs) corresponding to 3% of the total employed population in the country, and 56.000 unemployed.
Table 8: Labour market indicators by nationality (Census 2001)

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Men</th>
<th>Women</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment rate</td>
<td>Unemployment rate</td>
<td>Employment rate</td>
</tr>
<tr>
<td>Italy</td>
<td>54.3</td>
<td>9.5</td>
<td>31.8</td>
</tr>
<tr>
<td>NMS-10</td>
<td>71.1</td>
<td>8.2</td>
<td>43.7</td>
</tr>
<tr>
<td>Poland</td>
<td>72.4</td>
<td>9.1</td>
<td>45.6</td>
</tr>
<tr>
<td>NMS-8</td>
<td>71.4</td>
<td>8.2</td>
<td>44.1</td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>73.9</td>
<td>10.2</td>
<td>48.1</td>
</tr>
<tr>
<td>Romania</td>
<td>84.2</td>
<td>6.7</td>
<td>49.8</td>
</tr>
<tr>
<td>CAND-6</td>
<td>77.7</td>
<td>8.3</td>
<td>31.3</td>
</tr>
<tr>
<td>Albania</td>
<td>77.8</td>
<td>8.7</td>
<td>29.2</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>78.5</td>
<td>6.3</td>
<td>40.9</td>
</tr>
<tr>
<td>Croatia</td>
<td>77.9</td>
<td>5.2</td>
<td>45.2</td>
</tr>
<tr>
<td>Macedonia</td>
<td>85.2</td>
<td>5.2</td>
<td>20.7</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>72.5</td>
<td>10.8</td>
<td>33.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>74.2</td>
<td>7.7</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Note: population aged 15 and above.

Source: own elaborations based on ISTAT (2006c).

As in the previous section, we compare 2001 Italian Census data with the 2006 European Labour Force Survey data presented in Deliverable 2, with the aim of comparing the labour market performance of immigrants from NMS-10, NMS-2 and CAND-6 countries before and after the enlargement. Table 8 shows that in 2001 immigrants from NMS-10, NMS-2 and CAND-6 exhibited higher employment rates than natives. Men immigrants, in particular, registered employment rates above 70% among all nationalities; females from NMS-10 and NMS-2 displayed higher than natives employment rates while CAND-6 women’s performance was poorer, reflecting probably that the main reason for female migration from CAND-6 countries had been family re-union rather than work. Immigrant women also exhibit much higher unemployment rates than man as well as than native women suggesting important gender differences in the job finding probability. Figures from 2006 reported in Deliverable 2 and displayed hereby (Table 9) show a similar overall picture. Though the two group of statistics are not exactly comparable since the ELFS refer to the population aged 15-64, given the low share of immigrants population above 65 (as documented in Tables A7-A8 in the Appendix) we can argue that the increase in the employment rate for all immigrants groups considered has been substantial.

Looking at the composition of employed immigrants by sector, in the first quarter of 2008, nearly 60% of the foreign employed were concentrated in the service sector, against around 25% in the industry sector (of which 14% in the construction sector) and less than 5% in agriculture. The sector of the economy in which the incidence of immigrants on total employment has been rising most steeply is the construction sector, where, at the beginning of 2008, foreign workers amounted to
more than 13% of total employment against 9% registered at the beginning of 2005. The increase in immigrants share in other sectors such as non-construction industry and services has been less sustained, in the order of 2% during the same period, while the incidence of immigrants in the agriculture sector has not changed substantially (ISTAT, 2008b).

**Table 9: Composition of working age population by nationality: 2006 (ELFS 2008)**

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Inactive (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>58.4</td>
<td>4.0</td>
<td>37.6</td>
<td>100</td>
</tr>
<tr>
<td>NMS - 8</td>
<td>57.4</td>
<td>3.7</td>
<td>38.9</td>
<td>100</td>
</tr>
<tr>
<td>NMS - 2</td>
<td>73.3</td>
<td>8.2</td>
<td>18.4</td>
<td>100</td>
</tr>
<tr>
<td>CAND - 6</td>
<td>62.7</td>
<td>8.4</td>
<td>28.9</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: population aged 15-64.

Source: Deliverable 2, Table 10, based on Eurostat Labour Force Surveys.

Census data by nationality show that in 2001 the employment composition by sector of immigrants from NMS-10 and from Bulgaria was very similar to the one of Italian nationals, being foreign workers mostly concentrated in the service sector (around 65% of the total employed) rather than in industry (30%) and agriculture (5%). The aggregate composition hides important gender differences, since half of male employment was concentrated in the industry sector (an important share of which most likely in the construction sector) while on average more than 70% of female employment was concentrated in the service sector (of which around 50% in personal services, e.g. home and domestic care). With respect to nationals from Romania and CAND-6 instead, men’s concentration in the industry sector (nearly 70%) resulted even higher, probably because of their higher participation in the construction sector related to their relatively lower skill profile. Further, in the latest years, the incidence of Romanian nationals in the construction sector is likely to have increased, as a consequences of the measures undertaken to enhance the regularization of irregular employment (the so-called “pacchetto Bersani” for the construction sector, Law 4th of August 2006), which, according to Caritas estimates, should have interested 70.000 Romanian workers.

The overall picture emerging from these data signals that the most required profile among immigrants from New Member States and Candidate countries over the last years remains prevalently that of low-skilled and low-qualified workers. Given the low availability of native workers for occupations, it is unlikely that immigrants crowd natives out in the labour market. This aspect is supported by the evidence documented in past research by Gavosto, Villosio and Venturini (1999) and more recently by Villosio and Venturini (2006), showing that immigrants’ presence does not reduce the employment probability of the natives, but rather natives and immigrants labour market participation display complementarities. Further, Villosio and Venturini (1999), show that immigrants’ labour market participation affects positively the wage of the natives. In addition, an analysis by CNEL (2004) reports
the existence of an excess demand of immigrant workers in the Italian labour market with respect to the number of regularizations actually realized, according to the firm-level survey Unioncamere in 2002 (700,000 posts available vs. 650,000 regularizations). This aspect might lead to opt for an immigration policy more able to adapt quickly to changes and in labour market demands and needs as opposed to ad-hoc regularizations, which seem to add rather than ease Italian’s labour market rigidities.

Table 10: Employment composition by sector and nationality (Census 2001)

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>5.5</td>
<td>33.1</td>
<td>19</td>
<td>42.4</td>
<td>100</td>
</tr>
<tr>
<td>NMS-10</td>
<td>4.6</td>
<td>28.5</td>
<td>22.1</td>
<td>44.8</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>6.1</td>
<td>50.8</td>
<td>15.4</td>
<td>27.6</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>3.9</td>
<td>17.6</td>
<td>25.4</td>
<td>53.1</td>
<td>100</td>
</tr>
<tr>
<td>Poland</td>
<td>5.2</td>
<td>28.9</td>
<td>18.9</td>
<td>47.0</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>7.0</td>
<td>53.0</td>
<td>14.1</td>
<td>25.8</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>4.3</td>
<td>16.6</td>
<td>21.3</td>
<td>57.8</td>
<td>100</td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>6.8</td>
<td>35.9</td>
<td>20.9</td>
<td>36.4</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>7.3</td>
<td>52.1</td>
<td>13.7</td>
<td>26.9</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>6.3</td>
<td>20.3</td>
<td>27.8</td>
<td>45.6</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>4.8</td>
<td>51.2</td>
<td>14.9</td>
<td>29.1</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>5.2</td>
<td>69.0</td>
<td>10.7</td>
<td>25.8</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>4.2</td>
<td>26.0</td>
<td>20.9</td>
<td>48.9</td>
<td>100</td>
</tr>
<tr>
<td>CAND-6</td>
<td>8.1</td>
<td>60.4</td>
<td>13.2</td>
<td>18.3</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>8.8</td>
<td>68.9</td>
<td>10.6</td>
<td>11.8</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>5.9</td>
<td>33.3</td>
<td>21.4</td>
<td>39.3</td>
<td>100</td>
</tr>
<tr>
<td>Albania</td>
<td>9.3</td>
<td>61.6</td>
<td>12.5</td>
<td>16.6</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>9.9</td>
<td>69.6</td>
<td>10.5</td>
<td>10.0</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>7.1</td>
<td>32.6</td>
<td>19.7</td>
<td>40.6</td>
<td>100</td>
</tr>
<tr>
<td>Bosnia and Hercegovina</td>
<td>3.8</td>
<td>64.3</td>
<td>13.4</td>
<td>18.5</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>3.6</td>
<td>74.5</td>
<td>9.6</td>
<td>12.3</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>4.4</td>
<td>40.6</td>
<td>22.2</td>
<td>32.8</td>
<td>100</td>
</tr>
<tr>
<td>Croatia</td>
<td>2.8</td>
<td>45.8</td>
<td>19.3</td>
<td>32.1</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>3.1</td>
<td>59.8</td>
<td>13.9</td>
<td>23.2</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>2.3</td>
<td>25.3</td>
<td>27.2</td>
<td>45.2</td>
<td>100</td>
</tr>
<tr>
<td>Macedonia</td>
<td>14.4</td>
<td>67.0</td>
<td>9.2</td>
<td>9.4</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>14.5</td>
<td>70.2</td>
<td>8.2</td>
<td>7.1</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>13.4</td>
<td>44.4</td>
<td>16.1</td>
<td>26.2</td>
<td>100</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>4.1</td>
<td>58.3</td>
<td>14.1</td>
<td>23.5</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>4.3</td>
<td>67.6</td>
<td>10.5</td>
<td>17.5</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>3.6</td>
<td>35.1</td>
<td>23.0</td>
<td>38.4</td>
<td>100</td>
</tr>
<tr>
<td>Turkey</td>
<td>7.5</td>
<td>53.3</td>
<td>20.8</td>
<td>18.4</td>
<td>100</td>
</tr>
<tr>
<td>Men</td>
<td>7.4</td>
<td>58.7</td>
<td>19.2</td>
<td>14.7</td>
<td>100</td>
</tr>
<tr>
<td>Women</td>
<td>8.1</td>
<td>31.6</td>
<td>27.0</td>
<td>33.3</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: population aged 15 and above.

Source: own elaborations based on ISTAT (2006c).
9 The Public perception of immigrants in Italy and the situation of the Roma

Assessing the public perception of the immigration phenomenon in Italy is a complex task, since the debate of immigration issues is highly politicized and Italian nationals seem quite uninformed on immigration in general. This latter aspect emerges from a survey realized for the Ministry of Internal Affairs (2007b) based on a small sample of 1000 individuals representative of the national population for sex and age. The first noticeable aspect emerging from the survey is that among the interviewed sample there is a considerable misperception about the number of immigrants resident in Italy, in particular about illegal immigrants. Nearly two thirds of the interviewed, in fact, declare to ignore the number of immigrants living in the country, only 5% can guess a figure close to the true value, while 17% underestimate it and the remaining 12% overestimate it. Further, among those providing an estimate, nearly half are convinced that at least 50% of the immigrants are irregular residents, only 8% believe that irregular immigrants are less than 20% of the total, and according to the remaining 40%, the share of irregulars lies between 20% and 50%. In contrast with such view, there is evidence (Ministry of Internal Affairs, 2007a, 2007c) that in 2006 the number of irregular immigrants amounted between 10% and 20% of the total residents. In addition, the survey reveals that there exist mixed and contrasting sentiments of the native population with respect to immigrants: on the one hand of comprehension and solidarity, on the other of fear and distance. For example, from the survey it emerges that there exist a consensus on the usefulness of immigrants with respect to elderly care. The majority of the interviewed agree that immigrants represent an economic resource for the country since they help solving the demand for unskilled labour from the firms. On the other hand, the majority of the interviewed think that immigrants represent a social cost since they perceive they do not pay taxes. There is a polarization of opinions on whether immigrants represent a menace to native workers since they accept lower wages and worse working conditions. Finally, the majority of the interviewed think that immigrants do not represent a menace towards the national social and cultural identity, but at the same time, the majority does not agree that immigrants might bring new values that might enrich the Italian society as a whole.

The general concern existing among a large share of the Italian population, which associates immigrants’ presence to less security and higher crime rates, does not seem to be fully well grounded. In fact, if on the one hand, crime rates have increased among immigrants over the last five years, on the other, such increase has been registered mainly among irregular immigrants, while regular migrants exhibit crime rates similar to the natives, in particular Romanian nationals (Ministry of Internal Affairs, 2007c). A concern of the government should be then identifying (and possibly eradicate) those factors which make Italy particularly attractive for immigrants with a high propensity to exert crime. One of the most important is
surely the large underground economy, which provides a natural incentive for illegal activities and imposes high monitoring costs for the government.

Finally, we briefly review the current situation of the Roma minorities. Though no official statistics are available, Roma's population in Italy is estimated between 120,000 and 250,000 units, corresponding to around 3.5% - 7% of the immigrants population, a much smaller figure than the numbers estimated for instance for Spain (around 700,000 units). A precise estimation is also probably complicated by the fact that an important part of the Roma resident in Italy holds Romanian nationality. From the standpoint of the social inclusion policy, the Italian agenda still lacks a systematic approach towards the integration of the Roma. Italy in fact has never applied so far to EU funds for the inclusion of the Roma as other European countries. The first mention of inclusion initiatives appears in the Social Inclusion Report of 2006, but the resources invested seem modest if compared to the effort of other EU countries such as Spain, for instance in the case of the program “Acceder” (European Commission, 2004). For some recent episodes related to police operations in some Roma camps and to the proposal of registering Roma's fingerprints, the Italian Government has been criticized by some international organizations (see European Roma Rights Centre at http://www.errc.org/) and NGOs for the risk of violating the no racial discrimination principle enforced by the EU Treaty.

10 Conclusions

This study has shown that immigration from NMS-10, NMS-2, and CAND-6 had an increasing importance for employment growth in Italy over the last decade, contributing dramatically in particular in the years after the enlargement. Further, immigrants from both New Member States and Candidate Countries appear to act as complement rather than substitutes of native labour given the high national demand for unskilled manual and non-manual workers, in particular in the construction sector, and for personal and domestic care workers. Immigrants from NMS-10 and Bulgaria are in general better qualified than natives, mainly for the relatively higher educational level of foreign women while the skill structure of immigrants from Romania and CAND-6 is more skewed towards lower skill levels. Overall, the skill distribution of immigrants from New Member States and Candidate Countries do not seem to have worsened after the enlargement. Further, both NMS and CAND-6 foreigners show higher employment rates than natives, in particular men, while the labour market performance of women from CAND-6 is weaker. Overall, total unemployment has not grown following the sharp increase of foreign workers in the country, but on the contrary has fallen, and employment growth has been stronger in the regions with a larger presence of immigrants. With respect to immigration policy, the current quota system should become more able to take into account the existing demand of foreign labour, in particular to adjust more rapidly with local labour demand. Finally, given the importance of immigrants’ labour
market integration, steps forward should be done in terms of inclusion and no-discrimination policy, in particular of excluded minorities as the Roma.
### Table A1. Stock of regular visa holders ("Permessi di soggiorno") by nationality: 1991-2006 (Men and Women)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>228</td>
<td>183</td>
<td>176</td>
<td>163</td>
<td>186</td>
<td>186</td>
<td>153</td>
<td>137</td>
<td>152</td>
<td>166</td>
<td>151</td>
<td>154</td>
<td>158</td>
<td>148</td>
<td>110</td>
<td>144</td>
</tr>
<tr>
<td>Estonia</td>
<td>10</td>
<td>39</td>
<td>41</td>
<td>72</td>
<td>108</td>
<td>152</td>
<td>226</td>
<td>250</td>
<td>305</td>
<td>354</td>
<td>513</td>
<td>550</td>
<td>638</td>
<td>662</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>23</td>
<td>73</td>
<td>110</td>
<td>114</td>
<td>134</td>
<td>187</td>
<td>226</td>
<td>333</td>
<td>426</td>
<td>566</td>
<td>662</td>
<td>877</td>
<td>920</td>
<td>1.218</td>
<td>1.271</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>686</td>
<td>682</td>
<td>743</td>
<td>774</td>
<td>751</td>
<td>751</td>
<td>793</td>
<td>798</td>
<td>802</td>
<td>850</td>
<td>851</td>
<td>830</td>
<td>679</td>
<td>666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>12.139</td>
<td>10.490</td>
<td>11.719</td>
<td>12.400</td>
<td>13.955</td>
<td>23.163</td>
<td>22.938</td>
<td>23.258</td>
<td>29.478</td>
<td>30.419</td>
<td>32.889</td>
<td>34.980</td>
<td>64.912</td>
<td>65.511</td>
<td>73.191</td>
<td>78.930</td>
</tr>
</tbody>
</table>

**Note:** NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey; Other CEE (Central Eastern European Countries): Belarus, Moldova, Russia, Ukraine; EU: EU15 until 2003, EU25: 2004-2005, EU27: 2006. Data as of 31st of December (See note Figure 1).


<table>
<thead>
<tr>
<th>Year</th>
<th>New Member States</th>
<th>CAND-6 and other CEEC</th>
<th>EU</th>
<th>Europe (Total)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>1,120</td>
<td>1.148</td>
<td>41.355</td>
<td>103.535</td>
<td>389.885</td>
</tr>
<tr>
<td>1992</td>
<td>912</td>
<td>18.479</td>
<td>42.710</td>
<td>105.322</td>
<td>329.969</td>
</tr>
<tr>
<td>1993</td>
<td>867</td>
<td>18.347</td>
<td>43.867</td>
<td>105.322</td>
<td>359.318</td>
</tr>
<tr>
<td>1994</td>
<td>960</td>
<td>18.095</td>
<td>44.011</td>
<td>105.322</td>
<td>362.824</td>
</tr>
<tr>
<td>1995</td>
<td>1,072</td>
<td>20.301</td>
<td>43.920</td>
<td>105.322</td>
<td>362.824</td>
</tr>
<tr>
<td>1996</td>
<td>1,672</td>
<td>48.586</td>
<td>44.011</td>
<td>105.322</td>
<td>384.620</td>
</tr>
<tr>
<td>1997</td>
<td>1,826</td>
<td>50.287</td>
<td>44.395</td>
<td>105.322</td>
<td>384.620</td>
</tr>
<tr>
<td>1998</td>
<td>2,008</td>
<td>55.916</td>
<td>45.000</td>
<td>105.322</td>
<td>394.220</td>
</tr>
<tr>
<td>1999</td>
<td>3,129</td>
<td>87.748</td>
<td>45.500</td>
<td>105.322</td>
<td>414.220</td>
</tr>
<tr>
<td>2000</td>
<td>3,245</td>
<td>93.268</td>
<td>46.000</td>
<td>105.322</td>
<td>434.220</td>
</tr>
<tr>
<td>2001</td>
<td>3,454</td>
<td>97.570</td>
<td>46.500</td>
<td>105.322</td>
<td>454.220</td>
</tr>
<tr>
<td>2002</td>
<td>3,583</td>
<td>100.874</td>
<td>47.000</td>
<td>105.322</td>
<td>474.220</td>
</tr>
<tr>
<td>2003</td>
<td>7,547</td>
<td>149.407</td>
<td>47.500</td>
<td>105.322</td>
<td>494.220</td>
</tr>
<tr>
<td>2004</td>
<td>7,256</td>
<td>149.074</td>
<td>48.000</td>
<td>105.322</td>
<td>514.220</td>
</tr>
<tr>
<td>2005</td>
<td>7,285</td>
<td>159.715</td>
<td>48.500</td>
<td>105.322</td>
<td>534.220</td>
</tr>
<tr>
<td>2006</td>
<td>7,074</td>
<td>168.500</td>
<td>49.000</td>
<td>105.322</td>
<td>554.220</td>
</tr>
</tbody>
</table>

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey; Other CEE (Central Eastern European Countries): Belarus, Moldova, Russia, Ukraine; EU: EU15 until 2003, EU25: 2004-2005, EU27: 2006. Data as of 31st of December (See note Figure 1).


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>105</td>
<td>89</td>
<td>86</td>
<td>81</td>
<td>95</td>
<td>74</td>
<td>71</td>
<td>80</td>
<td>84</td>
<td>81</td>
<td>86</td>
<td>85</td>
<td>83</td>
<td>58</td>
<td>90</td>
<td>76</td>
</tr>
<tr>
<td>Estonia</td>
<td>4</td>
<td>26</td>
<td>28</td>
<td>57</td>
<td>92</td>
<td>165</td>
<td>140</td>
<td>188</td>
<td>206</td>
<td>225</td>
<td>278</td>
<td>324</td>
<td>482</td>
<td>502</td>
<td>580</td>
<td>604</td>
</tr>
<tr>
<td>Latvia</td>
<td>18</td>
<td>62</td>
<td>93</td>
<td>86</td>
<td>112</td>
<td>156</td>
<td>188</td>
<td>224</td>
<td>292</td>
<td>373</td>
<td>491</td>
<td>584</td>
<td>784</td>
<td>822</td>
<td>1.077</td>
<td>1.122</td>
</tr>
<tr>
<td>Lithuania</td>
<td>32</td>
<td>65</td>
<td>103</td>
<td>135</td>
<td>152</td>
<td>197</td>
<td>221</td>
<td>251</td>
<td>314</td>
<td>398</td>
<td>563</td>
<td>703</td>
<td>1.277</td>
<td>1.391</td>
<td>1.842</td>
<td>1.994</td>
</tr>
<tr>
<td>Malta</td>
<td>537</td>
<td>536</td>
<td>556</td>
<td>581</td>
<td>583</td>
<td>569</td>
<td>574</td>
<td>596</td>
<td>587</td>
<td>572</td>
<td>597</td>
<td>613</td>
<td>631</td>
<td>617</td>
<td>489</td>
<td>494</td>
</tr>
<tr>
<td>CAND-6 and other CEEC</td>
<td>6.196</td>
<td>7.056</td>
<td>8.559</td>
<td>10.533</td>
<td>12.034</td>
<td>16.657</td>
<td>18.307</td>
<td>22.024</td>
<td>34.155</td>
<td>38.772</td>
<td>47.891</td>
<td>55.928</td>
<td>130.401</td>
<td>137.073</td>
<td>155.201</td>
<td>161.192</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>175</td>
<td>85</td>
<td>84</td>
<td>86</td>
<td>102</td>
<td>120</td>
<td>132</td>
<td>146</td>
<td>156</td>
<td>174</td>
<td>192</td>
<td>211</td>
<td>230</td>
<td>249</td>
<td>278</td>
<td>307</td>
</tr>
<tr>
<td>Ukraine</td>
<td>43.115</td>
<td>41.691</td>
<td>47.758</td>
<td>52.073</td>
<td>58.224</td>
<td>78.157</td>
<td>84.071</td>
<td>93.803</td>
<td>110.193</td>
<td>119.697</td>
<td>128.285</td>
<td>131.912</td>
<td>161.542</td>
<td>167.870</td>
<td>174.707</td>
<td>188.497</td>
</tr>
</tbody>
</table>

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey; Other CEE (Central Eastern European Countries): Belarus, Moldova, Russia, Ukraine; EU: EU15 until 2003, EU25: 2004-2005, EU27: 2006. Data as of 31st of December (See note Figure 1).

Table A4. Regular residents by nationality and gender (Men and Women)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>7.324</td>
<td>14.311</td>
<td>15.374</td>
<td>17.746</td>
<td>19.924</td>
<td>33.477</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td>110</td>
<td>132</td>
<td>144</td>
<td>112</td>
<td>160</td>
<td>168</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.081</td>
<td>3.814</td>
<td>4.328</td>
<td>4.709</td>
<td>4.905</td>
<td>5.499</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>266</td>
<td>383</td>
<td>482</td>
<td>555</td>
<td>630</td>
<td>734</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>2.920</td>
<td>3.446</td>
<td>3.734</td>
<td>4.051</td>
<td>4.389</td>
<td>5.467</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>484</td>
<td>690</td>
<td>862</td>
<td>1.085</td>
<td>1.286</td>
<td>1.559</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>485</td>
<td>864</td>
<td>1.278</td>
<td>1.735</td>
<td>2.184</td>
<td>3.006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>721</td>
<td>741</td>
<td>778</td>
<td>803</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>8.047</td>
<td>9.914</td>
<td>11.801</td>
<td>17.860</td>
<td>23.610</td>
<td>41.587</td>
<td>74.865</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>2087</td>
<td>3092</td>
<td>3895</td>
<td>4345</td>
<td>5416</td>
<td>7.463</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.116</td>
<td>1.417</td>
<td>1.326</td>
<td>1.577</td>
<td>1.658</td>
<td>1.819</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td>41.541</td>
<td>66.619</td>
<td>68.620</td>
<td>80.672</td>
<td>95.153</td>
<td>118.013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAND-6 and other CEEC</td>
<td>346.331</td>
<td>456.488</td>
<td>487.518</td>
<td>533.861</td>
<td>575.770</td>
<td>611.807</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>6.974</td>
<td>9.130</td>
<td>37.971</td>
<td>47.632</td>
<td>55.803</td>
<td>68.591</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>37.573</td>
<td>44.088</td>
<td>48.808</td>
<td>49.467</td>
<td>49.830</td>
<td>51.742</td>
<td>56.736</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>12.730</td>
<td>20.152</td>
<td>93.441</td>
<td>107.118</td>
<td>120.070</td>
<td>132.718</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey; Other CEEC (Central Eastern European Countries): Belarus, Moldova, Russia, Ukraine; EU: EU15 until 2003, EU25: 2004-2005, EU27: 2006. Data for 2001 are Census data; for all other years: data as of 31st of December (See note Figure 1).

Table A5. Regular residents by nationality and gender (Men)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>44</td>
<td>57</td>
<td>62</td>
<td>44</td>
<td>69</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>525</td>
<td>703</td>
<td>762</td>
<td>836</td>
<td>840</td>
<td>1.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>25</td>
<td>44</td>
<td>49</td>
<td>62</td>
<td>65</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>592</td>
<td>714</td>
<td>763</td>
<td>832</td>
<td>928</td>
<td>1.401</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>61</td>
<td>92</td>
<td>129</td>
<td>169</td>
<td>202</td>
<td>265</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>69</td>
<td>133</td>
<td>217</td>
<td>307</td>
<td>406</td>
<td>576</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>196</td>
<td>214</td>
<td>225</td>
<td>237</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>2.610</td>
<td>3.269</td>
<td>3.920</td>
<td>7.527</td>
<td>10.815</td>
<td>13.550</td>
<td>19.686</td>
<td>34.806</td>
<td>44.348</td>
<td>86.754</td>
<td>162.154</td>
<td>294.212</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>550</td>
<td>858</td>
<td>1.246</td>
<td>1.371</td>
<td>1.713</td>
<td>2.573</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>717</td>
<td>871</td>
<td>789</td>
<td>900</td>
<td>966</td>
<td>967</td>
<td>1.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAND-6 and other CEEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>18.665</td>
<td>20.460</td>
<td>22.081</td>
<td>37.628</td>
<td>47.660</td>
<td>77.534</td>
<td>97.398</td>
<td>121.004</td>
<td>155.082</td>
<td>182.145</td>
<td>196.744</td>
<td>209.209</td>
<td>222.198</td>
<td></td>
</tr>
<tr>
<td>Belarus</td>
<td>243</td>
<td>403</td>
<td>505</td>
<td>610</td>
<td>737</td>
<td>822</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>23.159</td>
<td>27.191</td>
<td>30.042</td>
<td>30.271</td>
<td>30.899</td>
<td>33.035</td>
<td>29.559</td>
<td>28.551</td>
<td>32.618</td>
<td>35.408</td>
<td>42.943</td>
<td>37.925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>4.171</td>
<td>5.553</td>
<td>6.826</td>
<td>7.471</td>
<td>8.040</td>
<td>8.631</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>2.437</td>
<td>8.551</td>
<td>15.516</td>
<td>19.525</td>
<td>23.058</td>
<td>28.954</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>10.887</td>
<td>14.559</td>
<td>17.976</td>
<td>21.667</td>
<td>26.536</td>
<td>34.697</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey; Other CEEC (Central Eastern European Countries): Belarus, Moldova, Russia, Ukraine; EU: EU15 until 2003, EU25: 2004-2005, EU27: 2006. Data for 2001 are Census data; for all other years: data as of 31st of December (See note Figure 1).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>66</td>
<td>75</td>
<td>82</td>
<td>68</td>
<td>91</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.556</td>
<td>3.111</td>
<td>3.566</td>
<td>3.873</td>
<td>4.065</td>
<td>4.496</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>241</td>
<td>339</td>
<td>433</td>
<td>493</td>
<td>565</td>
<td>683</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>2.328</td>
<td>2.732</td>
<td>2.971</td>
<td>3.219</td>
<td>3.461</td>
<td>4.066</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>423</td>
<td>598</td>
<td>733</td>
<td>916</td>
<td>1.084</td>
<td>1.294</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>416</td>
<td>731</td>
<td>1.061</td>
<td>1.428</td>
<td>1.778</td>
<td>2.430</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>525</td>
<td>527</td>
<td>553</td>
<td>566</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>399</td>
<td>546</td>
<td>537</td>
<td>677</td>
<td>692</td>
<td>738</td>
<td>811</td>
<td>1.206</td>
<td>1.589</td>
<td>1.137</td>
<td>1.196</td>
<td>1.376</td>
<td>1.446</td>
<td></td>
</tr>
<tr>
<td>CAND-6 and other CEEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>6.060</td>
<td>8.396</td>
<td>11.131</td>
<td>18.020</td>
<td>24.206</td>
<td>36.615</td>
<td>49.615</td>
<td>75.666</td>
<td>95.578</td>
<td>115.301</td>
<td>134.514</td>
<td>152.069</td>
<td>166.738</td>
<td>179.751</td>
</tr>
<tr>
<td>Croatia</td>
<td>206</td>
<td>588</td>
<td>1.749</td>
<td>2.819</td>
<td>3.458</td>
<td>5.033</td>
<td>6.959</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macedonia</td>
<td>13.635</td>
<td>20.762</td>
<td>23.700</td>
<td>26.833</td>
<td>36.558</td>
<td>33.096</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>4.955</td>
<td>5.262</td>
<td>26.212</td>
<td>31.439</td>
<td>36.315</td>
<td>45.598</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2.668</td>
<td>2.969</td>
<td>3.213</td>
<td>3.679</td>
<td>4.272</td>
<td>5.299</td>
<td>6.092</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>3.012</td>
<td>5.914</td>
<td>4.251</td>
<td>4.888</td>
<td>5.492</td>
<td>5.931</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>10.293</td>
<td>11.601</td>
<td>77.925</td>
<td>87.593</td>
<td>97.012</td>
<td>106.764</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe (Total)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: NMS-10: New Member States as of 1st of May 2004; NMS-2: Bulgaria and Romania, CAND-6: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Turkey; Other CEEC (Central Eastern European Countries): Belarus, Moldova, Russia, Ukraine; EU: EU15 until 2003, EU25: 2004-2005, EU27: 2006. Data for 2001 are Census data; for all other years: data as of 31st of December (See note Figure 1).

Table A7: Immigrants’ age composition by gender: 1997 (31st December) regular visas

<table>
<thead>
<tr>
<th>Age groups</th>
<th>up to 17</th>
<th>18-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe (Total)</td>
<td>3.2</td>
<td>14.6</td>
<td>19.6</td>
<td>17.2</td>
<td>11.8</td>
<td>8.0</td>
<td>5.5</td>
<td>4.0</td>
<td>3.4</td>
<td>2.8</td>
<td>9.8</td>
<td>100</td>
</tr>
<tr>
<td>EU-15</td>
<td>0.8</td>
<td>9.7</td>
<td>13.9</td>
<td>15.8</td>
<td>11.3</td>
<td>7.5</td>
<td>6.1</td>
<td>5.9</td>
<td>5.9</td>
<td>5.1</td>
<td>18.1</td>
<td>100</td>
</tr>
<tr>
<td>CECE</td>
<td>4.6</td>
<td>18.7</td>
<td>24.5</td>
<td>19.0</td>
<td>12.5</td>
<td>8.5</td>
<td>5.0</td>
<td>2.5</td>
<td>1.6</td>
<td>1.0</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td>Albania</td>
<td>3.5</td>
<td>23.1</td>
<td>26.4</td>
<td>19.6</td>
<td>12.7</td>
<td>6.8</td>
<td>3.3</td>
<td>1.5</td>
<td>1.1</td>
<td>0.8</td>
<td>1.0</td>
<td>100</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>6.2</td>
<td>17.5</td>
<td>18.5</td>
<td>18.6</td>
<td>14.4</td>
<td>10.9</td>
<td>6.1</td>
<td>2.7</td>
<td>1.8</td>
<td>1.3</td>
<td>1.7</td>
<td>100</td>
</tr>
<tr>
<td>Croatia</td>
<td>4.4</td>
<td>14.7</td>
<td>18.5</td>
<td>19.5</td>
<td>15.3</td>
<td>11.8</td>
<td>7.6</td>
<td>3.2</td>
<td>2.0</td>
<td>1.2</td>
<td>1.8</td>
<td>100</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>5.1</td>
<td>13.1</td>
<td>18.3</td>
<td>18.3</td>
<td>13.5</td>
<td>11.3</td>
<td>7.9</td>
<td>4.2</td>
<td>2.9</td>
<td>1.7</td>
<td>3.7</td>
<td>100</td>
</tr>
<tr>
<td>Macedonia</td>
<td>5.3</td>
<td>22.0</td>
<td>26.0</td>
<td>22.0</td>
<td>13.4</td>
<td>6.8</td>
<td>2.7</td>
<td>1.0</td>
<td>0.5</td>
<td>0.2</td>
<td>0.1</td>
<td>100</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.1</td>
<td>12.9</td>
<td>14.9</td>
<td>14.1</td>
<td>15.2</td>
<td>12.7</td>
<td>5.2</td>
<td>3.0</td>
<td>1.6</td>
<td>1.2</td>
<td>3.0</td>
<td>100</td>
</tr>
<tr>
<td>Poland</td>
<td>2.3</td>
<td>15.2</td>
<td>26.1</td>
<td>19.8</td>
<td>12.8</td>
<td>8.9</td>
<td>6.0</td>
<td>2.9</td>
<td>1.8</td>
<td>1.2</td>
<td>3.0</td>
<td>100</td>
</tr>
<tr>
<td>Romania</td>
<td>3.6</td>
<td>19.2</td>
<td>30.7</td>
<td>18.0</td>
<td>10.7</td>
<td>8.1</td>
<td>4.4</td>
<td>2.0</td>
<td>0.9</td>
<td>0.5</td>
<td>1.9</td>
<td>100</td>
</tr>
<tr>
<td>Russia</td>
<td>15.1</td>
<td>15.9</td>
<td>23.1</td>
<td>17.2</td>
<td>10.3</td>
<td>6.9</td>
<td>3.9</td>
<td>2.4</td>
<td>1.6</td>
<td>1.2</td>
<td>2.5</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe (Total)</td>
<td>3.3</td>
</tr>
<tr>
<td>EU-15</td>
<td>0.8</td>
</tr>
<tr>
<td>CECE</td>
<td>4.6</td>
</tr>
<tr>
<td>Albania</td>
<td>3.3</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>5.9</td>
</tr>
<tr>
<td>Croatia</td>
<td>4.4</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>4.4</td>
</tr>
<tr>
<td>Macedonia</td>
<td>3.9</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2.3</td>
</tr>
<tr>
<td>Poland</td>
<td>3.6</td>
</tr>
<tr>
<td>Romania</td>
<td>3.6</td>
</tr>
<tr>
<td>Russia</td>
<td>31.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe (Total)</td>
<td>3.0</td>
</tr>
<tr>
<td>EU-15</td>
<td>0.9</td>
</tr>
<tr>
<td>CECE</td>
<td>4.7</td>
</tr>
<tr>
<td>Albania</td>
<td>4.0</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>6.6</td>
</tr>
<tr>
<td>Croatia</td>
<td>4.4</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>6.1</td>
</tr>
<tr>
<td>Macedonia</td>
<td>10.4</td>
</tr>
<tr>
<td>Slovenia</td>
<td>4.4</td>
</tr>
<tr>
<td>Poland</td>
<td>1.7</td>
</tr>
<tr>
<td>Romania</td>
<td>3.7</td>
</tr>
<tr>
<td>Russia</td>
<td>9.8</td>
</tr>
</tbody>
</table>

### Table A8: Immigrants’ age composition by gender: 2006 (31st December), regular visas

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>up to 17</th>
<th>18-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50-54</th>
<th>55-59</th>
<th>60+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Europe (Total)</strong></td>
<td>4.0</td>
<td>12.5</td>
<td>16.0</td>
<td>17.0</td>
<td>15.1</td>
<td>11.0</td>
<td>9.2</td>
<td>6.4</td>
<td>3.8</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td><strong>EU 27</strong></td>
<td>2.5</td>
<td>9.7</td>
<td>18.1</td>
<td>19.3</td>
<td>17.1</td>
<td>10.7</td>
<td>8.6</td>
<td>5.8</td>
<td>3.2</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td><strong>EU 15</strong></td>
<td>0.7</td>
<td>5.4</td>
<td>12.1</td>
<td>14.2</td>
<td>15.4</td>
<td>14.8</td>
<td>9.9</td>
<td>6.8</td>
<td>5.6</td>
<td>15.0</td>
<td>100</td>
</tr>
<tr>
<td><strong>New Member States</strong></td>
<td>3.1</td>
<td>11.2</td>
<td>26.1</td>
<td>29.1</td>
<td>17.7</td>
<td>9.5</td>
<td>8.1</td>
<td>5.4</td>
<td>2.4</td>
<td>1.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Bulgaria</strong></td>
<td>4.1</td>
<td>9.6</td>
<td>13.0</td>
<td>17.3</td>
<td>16.9</td>
<td>12.5</td>
<td>10.6</td>
<td>7.7</td>
<td>4.4</td>
<td>3.9</td>
<td>100</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>1.7</td>
<td>9.1</td>
<td>19.3</td>
<td>21.0</td>
<td>13.9</td>
<td>9.9</td>
<td>10.1</td>
<td>8.2</td>
<td>4.3</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>3.5</td>
<td>11.7</td>
<td>20.5</td>
<td>21.1</td>
<td>19.1</td>
<td>9.0</td>
<td>7.6</td>
<td>4.6</td>
<td>1.7</td>
<td>1.2</td>
<td>100</td>
</tr>
<tr>
<td><strong>CAND-6 and other CE EC</strong></td>
<td>5.3</td>
<td>15.0</td>
<td>14.3</td>
<td>15.2</td>
<td>13.5</td>
<td>11.2</td>
<td>9.7</td>
<td>6.8</td>
<td>4.3</td>
<td>4.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Albania</strong></td>
<td>5.7</td>
<td>19.9</td>
<td>16.4</td>
<td>15.2</td>
<td>12.9</td>
<td>9.5</td>
<td>6.7</td>
<td>4.1</td>
<td>3.1</td>
<td>6.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>1.7</td>
<td>9.1</td>
<td>19.3</td>
<td>21.0</td>
<td>13.9</td>
<td>9.9</td>
<td>10.1</td>
<td>8.2</td>
<td>4.3</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>3.5</td>
<td>11.7</td>
<td>20.5</td>
<td>21.1</td>
<td>19.1</td>
<td>9.0</td>
<td>7.6</td>
<td>4.6</td>
<td>1.7</td>
<td>1.2</td>
<td>100</td>
</tr>
<tr>
<td><strong>CAND-6 and other CE EC</strong></td>
<td>5.3</td>
<td>15.0</td>
<td>14.3</td>
<td>15.2</td>
<td>13.5</td>
<td>11.2</td>
<td>9.7</td>
<td>6.8</td>
<td>4.3</td>
<td>4.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Albania</strong></td>
<td>5.7</td>
<td>19.9</td>
<td>16.4</td>
<td>15.2</td>
<td>12.9</td>
<td>9.5</td>
<td>6.7</td>
<td>4.1</td>
<td>3.1</td>
<td>6.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>1.7</td>
<td>9.1</td>
<td>19.3</td>
<td>21.0</td>
<td>13.9</td>
<td>9.9</td>
<td>10.1</td>
<td>8.2</td>
<td>4.3</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>3.5</td>
<td>11.7</td>
<td>20.5</td>
<td>21.1</td>
<td>19.1</td>
<td>9.0</td>
<td>7.6</td>
<td>4.6</td>
<td>1.7</td>
<td>1.2</td>
<td>100</td>
</tr>
<tr>
<td><strong>CAND-6 and other CE EC</strong></td>
<td>5.3</td>
<td>15.0</td>
<td>14.3</td>
<td>15.2</td>
<td>13.5</td>
<td>11.2</td>
<td>9.7</td>
<td>6.8</td>
<td>4.3</td>
<td>4.6</td>
<td>100</td>
</tr>
</tbody>
</table>

Table A9: Immigrants’ composition by visa type by gender: 1997 (31st of December)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Work</th>
<th>Self-employed</th>
<th>Looking for job</th>
<th>Other</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Europe (Total)</strong></td>
<td>56,5</td>
<td>21,3</td>
<td>5,4</td>
<td>9,4</td>
<td>0,8</td>
<td>0,4</td>
<td>0,1</td>
</tr>
<tr>
<td><strong>BJ 15</strong></td>
<td>43,3</td>
<td>15,4</td>
<td>5,9</td>
<td>10,4</td>
<td>18,7</td>
<td>5,4</td>
<td>0,4</td>
</tr>
<tr>
<td><strong>CIS</strong></td>
<td>45,8</td>
<td>21,2</td>
<td>2,5</td>
<td>0,8</td>
<td>2,4</td>
<td>1,1</td>
<td>0,6</td>
</tr>
<tr>
<td><strong>Albania</strong></td>
<td>1,6</td>
<td>0,2</td>
<td>0,2</td>
<td>1,9</td>
<td>0,9</td>
<td>0,2</td>
<td>0,2</td>
</tr>
<tr>
<td><strong>Bosnia-Herzegovina</strong></td>
<td>0,5</td>
<td>0,2</td>
<td>0,2</td>
<td>1,9</td>
<td>0,9</td>
<td>0,2</td>
<td>0,2</td>
</tr>
<tr>
<td><strong>Croatia</strong></td>
<td>2,8</td>
<td>1,5</td>
<td>1,5</td>
<td>0,7</td>
<td>6,0</td>
<td>0,9</td>
<td>0,0</td>
</tr>
<tr>
<td><strong>Serbia and Montenegro</strong></td>
<td>1,5</td>
<td>1,5</td>
<td>1,5</td>
<td>1,7</td>
<td>1,4</td>
<td>0,7</td>
<td>0,3</td>
</tr>
<tr>
<td><strong>Macau</strong></td>
<td>1,3</td>
<td>3,4</td>
<td>3,4</td>
<td>1,8</td>
<td>11,4</td>
<td>0,5</td>
<td>0,0</td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
<td>4,2</td>
<td>6,3</td>
<td>6,3</td>
<td>2,0</td>
<td>69,4</td>
<td>12,0</td>
<td>5,6</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>59,5</td>
<td>5,6</td>
<td>5,6</td>
<td>8,0</td>
<td>56,5</td>
<td>21,3</td>
<td>5,4</td>
</tr>
<tr>
<td><strong>Russia</strong></td>
<td>39,4</td>
<td>5,6</td>
<td>5,6</td>
<td>8,0</td>
<td>56,5</td>
<td>21,3</td>
<td>5,4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>21,2</td>
<td>2,5</td>
<td>2,5</td>
<td>0,8</td>
<td>2,4</td>
<td>1,1</td>
<td>0,6</td>
</tr>
</tbody>
</table>

Table A10: Immigrants’ composition by visa type by gender: 2006 (31st of December)

<table>
<thead>
<tr>
<th>Country</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self employed</td>
<td>Looking for job</td>
</tr>
<tr>
<td>Europe (Total)</td>
<td>65.0</td>
<td>9.9</td>
</tr>
<tr>
<td>EU 27</td>
<td>66.0</td>
<td>9.2</td>
</tr>
<tr>
<td>EU 15</td>
<td>41.4</td>
<td>9.3</td>
</tr>
<tr>
<td>New Member States</td>
<td>73.9</td>
<td>9.1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>69.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Poland</td>
<td>70.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Romania</td>
<td>74.8</td>
<td>9.7</td>
</tr>
<tr>
<td>CAN D-8 and CEE</td>
<td>65.1</td>
<td>10.4</td>
</tr>
<tr>
<td>Albania</td>
<td>66.0</td>
<td>10.7</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>69.3</td>
<td>13.3</td>
</tr>
<tr>
<td>Croatia</td>
<td>74.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Macdonia</td>
<td>67.8</td>
<td>12.5</td>
</tr>
<tr>
<td>Moldova</td>
<td>65.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Russia</td>
<td>29.0</td>
<td>13.1</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>58.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Ukraine</td>
<td>66.7</td>
<td>3.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>63.8</td>
<td>12.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Asylum</th>
<th>Humanitarian</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe (Total)</td>
<td>65.0</td>
<td>9.9</td>
<td>1.9</td>
<td>76.8</td>
</tr>
<tr>
<td>EU 27</td>
<td>66.0</td>
<td>9.2</td>
<td>2.9</td>
<td>76.0</td>
</tr>
<tr>
<td>EU 15</td>
<td>41.4</td>
<td>9.3</td>
<td>7.8</td>
<td>58.7</td>
</tr>
<tr>
<td>New Member States</td>
<td>73.9</td>
<td>9.1</td>
<td>1.3</td>
<td>84.3</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>69.5</td>
<td>7.9</td>
<td>0.9</td>
<td>78.3</td>
</tr>
<tr>
<td>Poland</td>
<td>70.3</td>
<td>6.2</td>
<td>3.0</td>
<td>78.5</td>
</tr>
<tr>
<td>Romania</td>
<td>74.8</td>
<td>9.7</td>
<td>1.0</td>
<td>85.5</td>
</tr>
<tr>
<td>CAN D-8 and CEE</td>
<td>65.1</td>
<td>10.4</td>
<td>1.2</td>
<td>76.6</td>
</tr>
<tr>
<td>Albania</td>
<td>66.0</td>
<td>10.7</td>
<td>1.2</td>
<td>78.5</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>69.3</td>
<td>13.3</td>
<td>0.7</td>
<td>83.6</td>
</tr>
<tr>
<td>Croatia</td>
<td>74.1</td>
<td>9.1</td>
<td>0.8</td>
<td>84.0</td>
</tr>
<tr>
<td>Macdonia</td>
<td>67.8</td>
<td>12.5</td>
<td>0.6</td>
<td>80.7</td>
</tr>
<tr>
<td>Moldova</td>
<td>65.4</td>
<td>6.9</td>
<td>1.4</td>
<td>73.7</td>
</tr>
<tr>
<td>Russia</td>
<td>29.0</td>
<td>13.1</td>
<td>0.9</td>
<td>43.0</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>58.1</td>
<td>11.0</td>
<td>1.2</td>
<td>70.4</td>
</tr>
<tr>
<td>Ukraine</td>
<td>66.7</td>
<td>3.8</td>
<td>2.1</td>
<td>72.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>63.8</td>
<td>12.3</td>
<td>1.8</td>
<td>77.8</td>
</tr>
</tbody>
</table>

Table A11. Distribution of immigrants by region

<table>
<thead>
<tr>
<th>New Member States</th>
<th>Friuli Venezia Giulia</th>
<th>Veneto</th>
<th>Toscana</th>
<th>Umbria</th>
<th>Lazio</th>
<th>Campania</th>
<th>Abruzzo</th>
<th>Molise</th>
<th>Puglia</th>
<th>Basilicata</th>
<th>Calabria</th>
<th>Sicilia</th>
<th>Sardegna</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>5.0 0.0 0.9 28.3 1.0 5.3 1.3 12.1 3.6 6.3 2.7 19.3 2.2 3.2 0.1 2.2 0.7 3.8 1.3 0.5</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td>1.9 0.0 3.1 13.1 0.0 15.0 0.6 5.6 1.3 23.8 8.8 16.3 4.4 0.0 0.0 0.6 0.0 3.1 2.5 0.0</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>5.1 0.2 2.3 16.4 6.0 12.5 4.6 11.8 4.9 9.9 3.1 10.9 2.0 2.9 0.1 2.2 0.4 1.5 1.9</td>
<td>1.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>6.5 0.2 3.8 24.9 1.3 9.0 2.4 11.1 3.5 19.0 2.7 5.2 1.3 2.9 0.2 0.3 0.2 1.9 1.9</td>
<td>1.7</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>5.2 0.1 2.4 17.7 7.0 14.1 5.1 11.3 3.2 7.9 2.1 9.8 1.6 2.7 0.1 1.0 0.0 0.8 1.9</td>
<td>5.8</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>5.8 0.2 2.9 27.4 1.2 7.7 2.4 19.8 3.4 6.8 2.3 5.1 3.3 3.5 0.5 1.4 0.5 1.2 2.2</td>
<td>2.5</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>14.4 0.3 3.1 19.6 1.8 8.1 0.0 13.9 0.0 7.2 0.0 7.6 3.6 7.8 1.2 3.0 0.6 3.6 1.9</td>
<td>2.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>2.8 0.3 1.9 10.2 0.3 1.9 0.4 4.2 2.3 5.7 2.6 30.6 3.3 2.1 0.0 2.3 0.0 2.7 2.6</td>
<td>0.0</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>3.2 0.1 1.6 8.4 2.2 5.4 1.4 10.0 5.0 8.3 3.0 26.3 10.7 2.7 0.5 2.1 0.4 3.4 4.3</td>
<td>1.0</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>17.4 0.2 1.1 16.5 1.4 14.1 2.5 6.4 2.5 8.1 2.3 22.2 0.9 1.7 0.2 0.6 0.2 0.6 1.0</td>
<td>0.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>4.3 0.2 2.0 15.0 14.9 14.1 3.9 11.7 4.7 5.6 2.3 8.3 1.0 2.1 0.3 3.6 0.2 2.6 1.7</td>
<td>1.5</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>2.1 0.1 0.8 15.6 1.6 15.6 39.7 4.1 1.2 7.0 0.8 3.8 3.3 0.8 0.1 1.3 0.1 0.8 0.9</td>
<td>0.4</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAND-6 and other CEEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>9.6 0.2 3.8 20.3 2.5 9.5 2.9 11.8 4.8 13.7 3.6 4.9 1.6 2.9 0.2 5.1 0.4 0.7 1.5</td>
<td>0.1</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belarus</td>
<td>5.5 0.2 1.6 16.1 2.7 7.7 3.0 11.9 6.5 6.4 3.2 11.8 4.3 2.5 0.2 1.8 0.7 8.9 2.8</td>
<td>2.2</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bosnia-Herzegovna</td>
<td>7.0 0.1 0.9 16.9 5.6 31.3 11.9 8.7 3.2 3.2 0.6 6.1 1.0 0.6 0.0 0.4 0.1 0.2 0.2</td>
<td>1.8</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>4.8 0.2 1.3 0.0 6.0 35.8 25.7 9.3 2.9 3.5 0.6 5.8 0.7 0.9 0.1 0.9 0.1 0.4 0.5</td>
<td>0.4</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macedonia</td>
<td>7.7 0.1 0.4 9.7 5.8 21.0 4.6 9.5 12.7 6.6 5.8 6.5 1.1 6.0 0.1 1.1 0.0 0.3 0.8</td>
<td>0.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>8.7 0.2 0.9 14.2 2.5 27.9 1.8 17.8 3.4 4.0 2.6 11.8 1.9 0.8 0.1 0.5 0.0 0.7 0.2</td>
<td>0.2</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>7.6 0.2 3.3 20.3 1.3 7.0 2.6 12.2 6.0 10.2 2.7 9.0 6.5 2.5 0.3 1.2 0.4 3.0 2.6</td>
<td>0.8</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>2.3 0.0 0.6 15.1 6.7 34.8 11.8 6.6 1.7 6.4 0.3 6.5</td>
<td>0.4 2.7 0.0 1.4 0.0 0.5 1.7</td>
<td>0.4</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>3.5 0.0 7.9 40.0 1.6 4.5 1.7 24.5 0.5 6.0 0.5 4.8 0.5 0.3 0.0 0.9 0.3 1.8 0.6</td>
<td>0.1</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>4.0 0.1 1.5 17.9 1.7 7.7 2.3 12.0 2.9 5.0 2.6 9.7 2.2 2.4 0.2 1.4 0.5 3.9 1.0</td>
<td>0.6</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-10</td>
<td>3.7 0.1 1.7 10.5 3.2 7.1 3.1 10.2 4.6 8.2 2.8 22.2 8.7 2.7 0.4 2.1 0.4 3.0</td>
<td>3.9</td>
<td>1.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-2</td>
<td>16.7 0.2 1.1 17.1 1.4 13.6 2.5 6.7 2.5 8.0 2.4 22.1</td>
<td>1.0 1.8 0.2 0.7 0.2 0.8</td>
<td>1.0</td>
<td>0.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAND-6</td>
<td>8.1 0.1 2.9 18.0 3.6 15.6 5.2 11.0 5.3 11.0 3.2 5.4</td>
<td>1.3 3.0 0.2 3.7</td>
<td>0.3</td>
<td>0.6</td>
<td>1.3</td>
<td>0.3</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other CEEC</td>
<td>5.7 0.1 1.5 17.1 1.9 13.3 2.2 13.6 3.4 5.3 2.6 10.3</td>
<td>14.7 1.9 0.2 1.1</td>
<td>0.4</td>
<td>3.0</td>
<td>1.0</td>
<td>0.6</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11 References


**Caritas-Migrantes** (2008) *Dossier statistico sull’immigrazione*.


**European Roma Rights Center** (http://www.errc.org/).


**ISTAT** (2008b) *Rilevazione trimestrale sulle forze di lavoro*.

**ISTAT** (2008c) *Conti Economici Nazionali*.


**ISTAT** (2006a), *Gli stranieri nella rilevazione sulle forze di lavoro*.


**Ministry of Internal Affairs** (2007b), *Una ricerca sociale sull’immigrazione: indagine estensiva sugli italiani*.


**OECD** (2007a) *Economic Survey of Italy*.

**OECD** (2007b) *PISA 2006 Science Competencies for Tomorrow’s World: Volume 1 Analysis, and Volume 2: Data*. 

fwrite(38)
Abstract

Latvia constitutes a good example of economy of a small size, with all its consequences with regard to people’s, trade’s and capital’s mobility. With approximately 40 thous. persons who left Latvia in the aftermath of the 2004 EU enlargement, the number of Latvian migrants has not been elevated in comparison to other sending countries. However, the intensity of the postaccession outflow could be rated among the highests in the group of NMS. The international labour mobility, together with such macroeconomic imbalances as consumption-driven economic growth, the investment-domestic savings gap and inflationary pressure, caused serious distortions in the Latvian labour market developments. The most important include substantial increase in the wage level and severe labour shortages in several economic sectors, such as administration, transport and manufacturing. Remittances sent from abroad are mostly spent on domestic consumption and, therefore, the impact of migrants’ incomes seems to be of less significance to economic development. Last, but not least, due to the aging process and the so-called youth-drain, demographic forecasts reflect a real depopulation of the country, which anticipates elevated labour immigration in the near future.
Contents

1. Introduction ............................................................................................................... 1
  1.1. Macroeconomic and Labour Market Development ............................................. 1
      1.1.1 Macroeconomic Development ................................................................ 1
      1.1.2. Labour Market Development .................................................................. 4
  1.2. Institutional setting for labour migration ...................................................... 6
      1.2.1. Regulations on migration ....................................................................... 6
      1.2.2. Labour market institutions ..................................................................... 9

2. Patterns of labour mobility from Latvia ............................................................... 11
  2.1. Relevant data sources and limitations .......................................................... 11
  2.2. Stocks and flows of NMS migrants before and after EU enlargement .......... 12
  2.3. Characteristics of migrants from Latvia ...................................................... 17

3. Effects of migration on the Latvian economy ..................................................... 23
  3.1. Demographic effect ..................................................................................... 23
  3.2. Labour shortages and immigration ............................................................. 24
  3.3. Remittances .................................................................................................. 27

Conclusions ............................................................................................................... 29

References .................................................................................................................. 31
1. Introduction

1.1. Macroeconomic and Labour Market Development

1.1.1 Macroeconomic Development

Latvia, as the other two Baltic States, easily strode across political and economic turbulences accompanying the restoration of independence. In fact, since the mid 1990s the macroeconomic stability underpinned one of the highest economic growth rates among all post-communist countries (Table 1). Later on, the 2004 EU Enlargement strongly stimulated the growth of Latvian economy. In fact, the deepening of economic integration in the period 2004-2007 was associated with large disbursement of EU structural funds, lower nominal interest rates and substantial flows of foreign investments to Latvian financial institutions (IMF, 2006). Consequently, the rate of economic growth, already high at the beginning of the 2000s, has increased rapidly to the level of 10.6% in 2006 and 12.2% in 2007.

This spectacular rate of economic growth, however, was driven mainly by the final consumption expenditure and, to lesser extent, gross fixed capital formation, whereas the current balance remained negative (Table 1). The largest factor contributing to the negative current balance was trade in goods, with growing import driven by strong domestic demand that outdistanced the supply capacity. In 2007 the ratio of export to import levelled off at 55%, whereas the current account balance was -23.4% of GDP. Very similar trade imbalance and the key role of consumption in the GDP growth were observed in the other two Baltic States.
Table 1: Main Macroeconomic Indicators, Latvia 2001-2007

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>8.0</td>
<td>6.5</td>
<td>7.2</td>
<td>8.7</td>
<td>10.6</td>
<td>12.2</td>
<td>10.3</td>
</tr>
<tr>
<td>Gross value added, % change from previous year</td>
<td>8.4</td>
<td>6.6</td>
<td>7.1</td>
<td>8.8</td>
<td>10.8</td>
<td>11.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Gross value added in industry, % change from previous year</td>
<td>17.5</td>
<td>17.2</td>
<td>16.7</td>
<td>16.4</td>
<td>15.5</td>
<td>14.5</td>
<td>13.6</td>
</tr>
<tr>
<td>Exports of goods Nominal, billion Euro</td>
<td>2.5</td>
<td>2.7</td>
<td>2.8</td>
<td>3.4</td>
<td>4.4</td>
<td>4.9</td>
<td>6.0</td>
</tr>
<tr>
<td>Imports of goods Nominal, billion Euro</td>
<td>4.0</td>
<td>4.3</td>
<td>4.6</td>
<td>5.7</td>
<td>6.8</td>
<td>9.8</td>
<td>10.9</td>
</tr>
<tr>
<td>Current account balance in % of GDP</td>
<td>-7.6</td>
<td>-6.7</td>
<td>-8.2</td>
<td>-12.3</td>
<td>-12.5</td>
<td>-22.3</td>
<td>-23.4</td>
</tr>
<tr>
<td>Public balance in % of GDP</td>
<td>-2.1</td>
<td>-2.3</td>
<td>-1.6</td>
<td>-1.0</td>
<td>-0.4</td>
<td>-0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Long-term interest rate in %</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.85</td>
<td>3.53</td>
<td>4.16</td>
<td>5.63</td>
</tr>
<tr>
<td>Foreign direct investment, as % of GDP</td>
<td>1.6</td>
<td>2.8</td>
<td>2.7</td>
<td>4.6</td>
<td>4.4</td>
<td>8.3</td>
<td>8.0</td>
</tr>
<tr>
<td>Growth of foreign investments, current price</td>
<td>-</td>
<td>18.2</td>
<td>18.5</td>
<td>36.2</td>
<td>29.8</td>
<td>40.5</td>
<td>42.8</td>
</tr>
<tr>
<td>Consumer price index, in %</td>
<td>2.5</td>
<td>2.0</td>
<td>2.9</td>
<td>6.2</td>
<td>6.9</td>
<td>6.6</td>
<td>10.1</td>
</tr>
<tr>
<td>Consumer price index (2000=100)</td>
<td>102.5</td>
<td>104.5</td>
<td>107.5</td>
<td>114.2</td>
<td>121.9</td>
<td>129.9</td>
<td>143.0</td>
</tr>
<tr>
<td>Producer price index (2000=100)</td>
<td>101.7</td>
<td>102.7</td>
<td>105.9</td>
<td>115.0</td>
<td>124.0</td>
<td>136.8</td>
<td>158.8</td>
</tr>
<tr>
<td>Employment growth, in %</td>
<td>2.2</td>
<td>2.3</td>
<td>1.0</td>
<td>1.1</td>
<td>1.5</td>
<td>4.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Economic activity rate (15-64)</td>
<td>67.7</td>
<td>68.8</td>
<td>69.2</td>
<td>69.7</td>
<td>69.6</td>
<td>71.3</td>
<td>72.8</td>
</tr>
<tr>
<td>Unemployment rate, LFS definition</td>
<td>12.9</td>
<td>12.2</td>
<td>10.5</td>
<td>10.4</td>
<td>8.9</td>
<td>6.8</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: Central Statistical Bureau of Latvia, Eurostat, International Monetary Fund.

The consumption-driven growth of GDP in Latvia posed a threat of so-called overheating. The main contribution in the economic overheating was paid by the rising level of credits released to the private sector, mostly to the households (Table 1). The average annual growth of credits to the private sector reached in Latvia the record level of almost 50%, which was the highest among the all EU NMS (Figure 1). Increased investments, however, have not been accompanied with increased domestic savings but relied on foreign liabilities. This, after the current account deficit, created another economic imbalance (WB, 2006).
Rapid credit growth and strong demand have been soon accompanied by the inflationary pressure. The rise of price level has been to some extent determined by external factors, such as increase in food and energy prices. In 2006-2007, wage demands – strengthened by labour shortages and post-accession outflows – also played a role (Figure 2). All in all, in 2007 the inflation rate reached a threshold of 10.1%, and the expected level is 15.3% in 2008.
The disadvantageous structure of GDP growth, the widening deficit of current account and inflation pressure, which constitute the indicators of macroeconomic imbalances in a small open economy, deteriorated the economic situation of Latvia. Therefore, certain tightenings in monetary policy are expected to be introduced. The International Monetary Fund forecasted the drop in growth of real GDP to 3.8% in 2008 and 2.5% in 2009. Already at the beginning of 2008 this forecast turned out to be in line with the economic slowdown.

1.1.2. Labour Market Development

Paralelly to the economic and wage growth, and despite shrinking stock of persons at economic active age, Latvia records increase in the number of persons employed (Figure 3, Table 2). In two year period, from the first quarter of 2006 to the first quarter of 2008, the employment level rose by 8%, whereas the economic activity rate rose from 69.8% in the fourth quarter of 2005 to 74.4% two years later. This was possible due to creation of new jobs, mostly in services and construction sector. Consequently, since mid 2004 the unemployment rate has been significantly declining, in particular the youth (aged 15-24) unemployment rate: at the end of 2007 the former reached the record level of 5.3%, the latter – 5.4%. Out of all East-European NMS such low unemployment rates were registered only in the Baltic States and Slovenia.
Since the EU enlargement the Latvian labour market has been tightening with labour shortages emerging in several sectors. Apart from economic upswing, a major factor contributing to the labour shortages in Latvia was accession-related outmigration. In the period 2004-2006 Latvia has experienced a significant outflow of the workforce, estimated by Krisjane et al. (The geographic mobility, 2007a) at around 85 thous. persons. The losses were much more serious in particular economic sectors.

As a consequence, the number of reported by employers vacancies increased in 2005-2007 from 12,3 thous. do 20,2 thous., and the job vacancy rate from 1.3% to 1.9%. The most spectacular increase in number of vacancies was registered in construction, real estate and education sector, while the most disadvantageous situation (the highest vacancies rate) referred to public administration (5.2%), transport (3.0%) and manufacturing (2.3%). As far as certain professions were concerned, the highest skill mismatch (the undersupply of professions) included craft and trades workers (the vacancies rate of 2.7%, Figure 4), machine operators and assemblers (2.7%), and professionals (2.2%). According to the research quoted by the World Bank (2007), labour shortages constitute a relevant obstacle in operation and growth of companies. In Latvia 45% companies reported difficulties in activities due to labour shortages. The latest study
among Latvian construction companies revealed that due to labour shortages 20% of newly hired employees had lower qualifications than originally demanded.

**Figure 4:** Job vacancies by major occupational groups at the end of 2007.

![Job Vacancies by Major Occupational Groups](image)

Source: Central Statistical Bureau of Latvia.

In the context of labour market situation, the threat posed by outmigration became the key issue in further economic developments. As a matter of fact, the main concerns raised in the EU Enlargement-related public debate referred to the outflow of workers, in particular professionals and graduates. This, to some extent, proved to be well-grounded.

**1.2. Institutional setting for labour migration**

**1.2.1. Regulations on migration**

The entry and residence of people in Latvia are controlled by the Office of Citizenship and Migration Affairs (PMLP), the Border Guard, and the Consular Department of the Latvian Foreign Ministry. The work of foreigners in Latvia is regulated by the law on immigration and the Cabinet of Ministers regulations that are subordinated to it. If a foreigner – a citizen of a third country – wishes to work in Latvia on the basis of a job contract or other legal agreement, or if that person wishes to be a self-employed person, then he or she must receive a work permit.
The way in which work permits are requested and issued is regulated in Cabinet of Ministers Regulation No. 44, “Regulations on work permits for foreigners”. The foreigner pays a fee for the review of the necessary document in accordance with Cabinet of Ministers rules. Invitations for foreigners to come and work in Latvia are approved by the State Employment Agency (NVA). The PMLP issues residency and work permits for such workers.

A work permit is not necessary if a foreigner has received a permanent residency permit or has received a temporary residency permit in accordance with Section 23.1.19 of the law, if residence in the Republic of Latvia is related to pupil or student exchange, practice or apprenticeship in one of the educational establishments of the Republic of Latvia or in a commercial company registered in the commercial register or performance of another task (in which case the validity of the permit is no more than one year), and only if the individual does not receive compensation for the work. A work permit is also not needed if the individual has arrived in the Republic of Latvia for a performance on tour (concert on tour) as a performer (musician, singer, dancer, actor, circus performer and others), an author (composer, choreographer, director, set designer and others), administrative or technical worker to ensure the performance (concert) and the intended length of stay does not exceed 14 days. Finally, the permit is not necessary if the individual has received the residency permit of a permanent inhabitant of the European Communities.

Latvia’s immigration law rules for the entry, presence, transit, departure and detention of foreigners, as well as the procedure whereby foreigners are protected in the Republic of Latvia or expelled for the country. The institutions which are responsible for documenting and controlling the arrival and presence of foreigners, according to Section 3 of the law, are the Office of Citizenship and Migration Affairs, the Border Guard, the diplomatic and consular offices of the Republic of Latvia, and the Consular Department of the Foreign Ministry. The law says that a foreigner who wishes to establish legal work relations must conclude an employment contract or can be employed on the basis of another civil agreement (for instance, the person can be a member of a company’s governing or executive institutions). foreigners can also be self-employed, but in any case, they require work permits. Work and entrepreneurship are seen as important reasons for granting temporary residency permits. The validity of permits for groups related to labour mobility may not exceed one year if the individual is self-employed, or five years if the individual is registered in the Commercial Register as a person who is registered in the commercial register as a member of a partnership who has the right to represent the partnership, a member of the board of directors, a member of the council, proctor; administrator, liquidator or a person who is authorised to represent the activities of a merchant (foreign merchant), which are associated with a branch. The validity of the permit cannot exceed four years if the foreigner is a representative of the representation office of a foreign merchant or if the foreigner is involved in scientific co-operation, and it cannot be valid for more than one year if the person is involved in the implementation of an international agreement or project in which the Republic of Latvia is involved, or if the individual is offering assistance to the state or local government institutions of the Republic of Latvia (Section 23). The validity of these temporary residency permits is not
very long, and that does not really encourage foreign companies to look at the Latvian labour market. Permanent residency permits are not even intended for highly qualified specialists. This is something that must be considered if the government hopes to attract such specialists from abroad.

Citizens from European Union member states and countries in the European Economic Zone and members of their families can enter and reside in Latvia in accordance with European Union regulations. The process is regulated by Cabinet of Ministers Regulation No. 586, which was approved on July 18, 2006, in accordance with the requirements of Section 69 of the immigration law, “Procedures for the Entry into and Residence in the Republic of Latvia of Citizens of European Union Member States and European Economic Area States and their Family Members”. The regulations specify the rights of people from the EU, the EEZ and Switzerland and their family members to enter Latvia and to register their presence with the Office of Citizenship and Migration Affairs if they are planning to spend more than 90 days in Latvia. If a citizen of the EU or a family member who is also a citizen of the EU is to spend a specific period of time in the Republic of Latvia, then he or she receives a residency certificate. If a family member of the EU is not a citizen of the EU and plans to remain in the Republic of Latvia on an ongoing basis, then a permanent residency permit is issued. If an EU citizen or family member has a job relationship in Latvia or is self-employment, then a working permit is not needed. The regulations do include a few exceptions with respect to people who do not have to register with the Office of Citizenship and Migration Affairs if they spend more than 90 days in the Republic of Latvia. This is true if the individual spends up to six months a year in Latvia, starting from the first day of arrival if the reason for the individual’s presence in Latvia is to establish a legal job relationship here, or if the individual is employed in Latvia but lives in another EU member state and goes home at least once a week. This is a norm, which applies to labour migrants from border areas.

In 2004, the Cabinet of Ministers approved Regulation No. 44 (“Regulations on Work Permits for Aliens”) defining the procedure for requesting and receiving such permits, as well as the fees which must be paid in return for the review of the necessary documents. Working permits in this case are issued by the Office of Citizenship and Migration Affairs. The rules say that an individual or legal entity which is considered an employer in accordance with the law “On national social insurance” may employ a foreigner only in the profession, area of specialisation or job which is shown in the foreigner’s work permit. The regulations were amended on September 13, 2005, to say that a document calling on a foreigner to come to Latvia for work can be approved only if the agency affiliate has registered a job vacancy that has been vacant for no less than one month after it is registered. The fee for a single foreigner’s work permit is 35 lats in a calendar month. If the period of employment is shorter than a month, the full monthly fee must nonetheless be paid. The fee has been instituted so as to limit the involvement of “cheap” foreign workers in the Latvian job market. The rules also define those categories of foreigners who receive job permits on easier terms – information technology specialists (up to 100 job permits a year), scientists, professional sportsmen, as well as members of those groups which were discussed previously in the context of the immigration law.
On October 3, 2006, the Cabinet of Ministers approved Regulation No. 813, "Regulations on Residency Permits" to declare the process for inviting foreigners to come to Latvia; the documents that are needed to request a residency permit; the process for issuing, registering and annulling the permits; and the use of the information that is submitted. The regulation also defines the range of foreigners who have the right to submit documents to the Office of Citizenship and Migration Affairs so as to request a residency permit in relation to their work or entrepreneurship in Latvia. The regulation defines limits on entrepreneurship among foreigners, taking the economic and domestic security interests of the Republic of Latvia into account. These regulations also define the procedure for paying compensation for departing for permanent life abroad, as well as the procedure whereby foreigners announce their absence from the Republic of Latvia. The regulation also speaks to the information that must be included in electronic information systems, as well as the procedure for using that information.

1.2.2. Labour market institutions

Many institutions form the institutional setting of labour market, many of them are linked to labour mobility. They include:

1. The Parliament (Saeima):
   - The Committee of Social and Labour Affairs
   - The Subcommittee for Employment (established in 2006)

2. The Cabinet of Ministers:
   - National Tripartite Cooperation Council (7 subcouncils: Labour, Vocational Education and Employment, Social Insurance, Health, Transport, Environment, Regional Development)
   - Ministries, esp. Ministry of Welfare and Ministry of Economics
   - State Agencies

3. Trade Unions

4. Employers’ Confederation of Latvia

Functions of individual ministries and institutions

(i) The functions of the Ministry of Welfare include: the development of labour, social protection and gender equality policy; the organization and co-ordination of the implementation of labour, social protection and gender equality policy. In order to ensure the fulfillment of functions, the Ministry of Welfare develops the national policy in the following spheres: decrease of unemployment; ensuring of the safe and harmless working conditions and working environment for human health; determination of minimum
wages; regulating of employment legal relations; in the sphere of social insurance and social benefit provided by the state; in the sphere of social assistance, care, social and professional rehabilitation; decrease of social rejection; in order to implement the integrated approach to the dealing with the issues related to the gender equality. The tasks of the Ministry of Welfare include: participation in the development of employment policy and the improvement of career guidance system; ensuring the qualitative development of social care and social rehabilitation service network.

(ii) Since 2003, the state policy in the field of unemployment decrease and the support of job seekers is controlled by the Ministry of Welfare, but implemented – by the State Employment Agency (NVA). The objectives of NVA are determined by “Law on the Support to the Unemployed and Job Seekers” and the regulations of NVA. They provide for the following functions of NVA: to organize the active employment measures and to facilitate the diversification of these measures in conformity with the demand of the labour market, as well as to facilitate the surveillance and cost analysis of the implementation of active employment measures.

(iii) The State Labour Inspectorate is a direct administration institution under the supervision of the Ministry of Welfare. Its main task is to take the measures for the public administration and control in the field of employment legal relations, labour protection and technical monitoring of dangerous equipment.

(iv) The Ministry of Economics performs the economic policy elaboration and develops economic development forecasts on a macro-economic level, analyse of the labour market. The forecasts are used in elaboration of strategic development documents, for instance, the Latvian National Lisbon Program.

(v) The Office of Citizenship and Migration statutes state that the agency implements the state’s migration and refugee policies, determines the legal status of people who are in Latvia, registers the residents of the country, and issues documents which confirm an individual’s identity and allow him or her to travel. When it comes to national migration policies, the fact is that such policies have been manifested as registration of immigration, including repatriation, as well as registration of those who have moved to other countries permanently.

(vi) Free Trade Union Confederation of Latvia is an institution, which functions outside the state administration and is related to the implementation of labour market policy. FTUCL unites on the voluntary basis the independent trade unions of the industries of Latvia and the professional trade union associations of employees, the administration of which are the public level institutions, for the purpose of the defence of common interests and the achievement of common goals.

(vii) Employers’ Confederation of Latvia is the biggest organization representing the interests of employers.
Table 3: Ministries and their responsibilities

<table>
<thead>
<tr>
<th>Institution</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Economics</td>
<td>- National Lisbon Reform Programme 2005-2008</td>
</tr>
<tr>
<td></td>
<td>- Programmes for Development of Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>- Medium and Long-term Labour Market Forecasting (starting from 1 July, 2007)</td>
</tr>
<tr>
<td>Ministry of Education and Science</td>
<td>- Programmes for Development of Higher Education, Science and Technology</td>
</tr>
<tr>
<td></td>
<td>- Programmes for Development of Vocational Education and Training</td>
</tr>
<tr>
<td></td>
<td>- Strategy for Life-long Learning</td>
</tr>
<tr>
<td></td>
<td>- Career Guidance in Schools</td>
</tr>
<tr>
<td>Ministry of Regional Development</td>
<td>- National Development Plan 2007-2013</td>
</tr>
<tr>
<td></td>
<td>- Structural Funds 2007-2013</td>
</tr>
<tr>
<td></td>
<td>- Concept of Taxes</td>
</tr>
<tr>
<td>Ministry of Welfare</td>
<td>- Programmes for support to unemployed and jobseekers</td>
</tr>
<tr>
<td></td>
<td>- Programmes for Diminishing of Poverty and Social Exclusion</td>
</tr>
<tr>
<td></td>
<td>- Programmes for Gender Equality</td>
</tr>
</tbody>
</table>

Source: Labour Market in Latvia, 2008.

2. Patterns of labour mobility from Latvia

2.1. Relevant data sources and limitations

(i) Central Statistical Bureau of Latvia (CSB) collects and publishes data about long-term migrants according to UN recommendations. These are persons who move to a country as permanent residents or for a period of time that is equal to or longer than one year, as well as people who move from one country to another with the intention of staying there permanently or for one year or more. However, many people have gone abroad with the intention of returning home in a few months or years, and these people did not officially declare their change in residence. That is why there is an absence of statistical data about the volume of this flow of migrants, particularly for the period since Latvia joined the EU and its system of free movement of labour.

(ii) To find out the volume of economic migration and its characterisation, in 2007 the CSB included additional questions on this subject in the Labour Force Survey. However, the sample survey was not sufficient to obtain information on the number of Latvia population employed abroad adequate to the actual situation and to the criterions of the data reliability, but the survey gives partly characterisation of this group.

(iii) Data about long-term migration and about migration of the citizens of third countries (both incoming and outgoing) are collected by the Office of Citizenship and Migration...
Affairs. This means that there are data about the number of temporary and permanent residence permits that have been issued, about work permits, visas, and people entering and departing the country, including those who are repatriating to another country. The data are divided up by country.

(iv) A relevant source of information on migration from the NMS is constituted by the data gathered in the main destination countries, which as far as Latvia is concerned, include Ireland and the UK. The limitation of those data sources is based on the fact that they register only inflow of migrants and cannot detect the scale of returns.

Another source of data on migrations is constituted by the research “The Geographic Mobility of the Labour Force”\(^1\). This is a complex research about the geographic mobility of the labor force in Latvia as an EU member state. There was qualitative and quantitative research – a survey of 8,005 Latvian residents in 2006, expert interviews, formalized interviews with Latvian residents who work abroad, as well as statistic and econometric analysis of data. Respondents in the survey were people of working age (aged 15 to 65). The cohort was sufficient to offer representative data not only about Latvia as a whole, but also about each Latvian region individually.

2.2. Stocks and flows of NMS migrants before and after EU enlargement

Political, social, and economic changes in the early 1990s in Latvia meant a fundamental shift in the volume and direction of population mobility, and Latvia, which during Soviet times was an immigration-dominated republic, became an emigration-dominated country.

There is also the fact that many people left Latvia in the early 1990s when the Russian armed forces were withdrawn and when Latvia’s industrial sector (all subsectors) shrunk substantially. In 1992, the year of the greatest level of emigration, more than 50,000 people (most of them of Russian origin) left Latvia, and most of them moved to countries in the CIS (Table 4). Analysing Latvia in the context of international migration processes, there was stabilization in these processes after five to seven years in the 1990s. This has to do with the stabilization of Latvia’s economic situation and society-integrating policies that the Latvian government has been implementing.

Between 2000 and 2002, international migration processes stabilised, mostly because they were based on the endogenous migration potential. Links to the countries of the CIS have become far weaker, even though that group of countries still involves the majority of external migration. Official migration data show that the people of Latvia have emigrated most often to Russia, Germany and other CIS member states. It should be noted that the proportion of emigrants and the balance of migration with CIS countries

\(^{1}\) Project No. VPD1/ESF/NVA/04/NP/3.1.5.1/0003, “The Geographic Mobility of the Labour Force”, financed through a national programme related to the European Union’s Structural Funds, “Labour Market Research”. The study was conducted by researchers at the University of Latvia and by invited experts, all working under the leadership of Zaiga Krišjāne in 2005-2007.
have both declined. Since Latvia’s accession to the EU, there have been a larger number of people who move permanently to the EU, while the number of those who emigrate to the CIS countries has declined.

Table 4: International long-term migration according to the official statistical data

<table>
<thead>
<tr>
<th>Year</th>
<th>Immigration</th>
<th>Emigration</th>
<th>Net migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>14,684</td>
<td>29,729</td>
<td>-15,045</td>
</tr>
<tr>
<td>1992</td>
<td>6,199</td>
<td>59,673</td>
<td>-53,474</td>
</tr>
<tr>
<td>1993</td>
<td>4,114</td>
<td>36,447</td>
<td>-32,333</td>
</tr>
<tr>
<td>1994</td>
<td>3,046</td>
<td>25,869</td>
<td>-22,823</td>
</tr>
<tr>
<td>1995</td>
<td>2,799</td>
<td>16,512</td>
<td>-13,713</td>
</tr>
<tr>
<td>1996</td>
<td>2,747</td>
<td>12,828</td>
<td>-10,081</td>
</tr>
<tr>
<td>1997</td>
<td>2,913</td>
<td>12,333</td>
<td>-9,420</td>
</tr>
<tr>
<td>1998</td>
<td>3,123</td>
<td>8,874</td>
<td>-5,751</td>
</tr>
<tr>
<td>1999</td>
<td>1,813</td>
<td>5,898</td>
<td>-4,085</td>
</tr>
<tr>
<td>2000</td>
<td>1,627</td>
<td>7,131</td>
<td>-5,504</td>
</tr>
<tr>
<td>2001</td>
<td>1,443</td>
<td>6,602</td>
<td>-5,159</td>
</tr>
<tr>
<td>2002</td>
<td>1,428</td>
<td>3,262</td>
<td>-1,834</td>
</tr>
<tr>
<td>2003</td>
<td>1,364</td>
<td>2,210</td>
<td>-846</td>
</tr>
<tr>
<td>2004</td>
<td>1,665</td>
<td>2,744</td>
<td>-1,079</td>
</tr>
<tr>
<td>2005</td>
<td>1,886</td>
<td>2,450</td>
<td>-564</td>
</tr>
<tr>
<td>2006</td>
<td>2,801</td>
<td>5,252</td>
<td>-2,451</td>
</tr>
</tbody>
</table>


Official data about international migration is incomplete. People who move from Latvia to another country (most often a member state of the EU which has opened up its labour market) usually do not declare a change in their permanent place of residence, and that has nothing to do with how long they are gone – a few months, a year or several years. Estimates based on Latvian national statistics, Eurostat and LFS, presented in the Deliverable 2 “Analysis of the scale, direction and structure of labour mobility”, refer to 18 thousand persons of Latvian citizenship staying abroad in 2004, 28 thousand in 2006 and 43 thousand in 2007. These numbers, albeit indicating a sharp rise in migration proneness since the EU enlargement, underestimate the true scale of the outflow.

This is proved by the study of the geographic mobility of the labour force. The results of the study indicate that in the past or at the moment of the interview more than 85 thousand persons at working age, members of Latvian households, have ever worked or studied abroad. That constitutes 9% of all respondents. Russia, other countries in the CIS, Germany and Ireland were those countries which were cited most often by people who said that their relatives had lived abroad for more than two years. The large proportion of relatives who were living in the “post-Soviet space” can be attributed to the substantial proportion of non-Latvians (Russians, Ukrainians and Belarussians) in the country.
Figure 5: Distribution of relatives working or studying abroad before and after EU enlargement (combined), by length of stay

Source: The geographic mobility, 2007b.
Figure 6: Distribution of relatives working abroad for more than two years by country (before EU enlargement)

![Graph showing distribution of relatives working abroad before EU enlargement]


Figure 7: Distribution of relatives working abroad for more than two years by country (after EU enlargement)

![Graph showing distribution of relatives working abroad after EU enlargement]

During the two years after Latvia’s accession to the European Union in 2004, people most often travelled to the United Kingdom and Ireland for educational or work purposes (16,630 and 11,165 respectively) (The Geographic mobility, 2007b). Travel to Ireland and the UK began even before Latvia joined the EU. At that time people needed work permits to work officially, but many worked under the radar. Some respondents in the survey, too, said that they had relatives who were working or studying in Ireland and the UK for more than two years.

Young people have been more likely to leave Latvia in recent times, while older people have been gone for a far longer period of time. Table 5 shows that young people began to emigrate comparatively recently (before then they left less often than people in other age groups did), and their intended destination was most often Great Britain or Ireland in specific.

Table 5: Distribution of relatives working or studying abroad by age group and duration of stay

<table>
<thead>
<tr>
<th>Age group</th>
<th>Working or studying abroad for up to 2 years (before EU enlargement)</th>
<th>Working or studying abroad for more than 2 years (after EU enlargement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-27</td>
<td>44.3</td>
<td>16.7</td>
</tr>
<tr>
<td>28-40</td>
<td>35.3</td>
<td>35.8</td>
</tr>
<tr>
<td>41-55</td>
<td>19.2</td>
<td>33.7</td>
</tr>
<tr>
<td>56-65</td>
<td>1.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


According to the data gathered in destination countries, Ireland and the United Kingdom registered a significant inflow of Latvian migrant workers. In Ireland foreigners should apply for a Personal Public Service number (PPS number) which allows for taking up employment, making use of social services, establishing a bank account or even making a driving licence. In the period January, 2004 – April 2007 over 25 thou. Latvian migrants applied for the PPS number. According to the Irish Department of Social and Family Affairs, only 71% of registered migrants from Latvia took up employment in Ireland. The United Kingdom registered comparable in size inflow from Latvia. In the period May 1st, 2004 – September 30th, 2007 36 thousand of Latvian migrants registered in the British Workers Registration Scheme (WRS). However, the intensive inflow lasted only one year since the EU enlargement, while since the third quarter of 2005 the inflow has been significantly lower (Figure 8). The British National Insurance Number system (NINO system) registered each fiscal year (from April 1st to March 31st) 2004-2005 and 2005-2006 12 thousand Latvian applications.
Figure 8: The number of Latvian applications to the WRS (a) and the absolute change respectively to the corresponding period of previous year (b), May 1st 2004-30th September 2007

Source: based on Accession Monitoring Report 2007, after the British WRS.

2.3. Characteristics of migrants from Latvia

According to The Geographic Mobility survey conducted in 2006, 9% of respondents had ever worked abroad for a longer or shorter period of time. Men had done so more often than women – 12.1% of men and 6.2% of women ever migrated.

Young people dominated in the structure of those people from Latvia who have gone abroad to find work – 62% of the emigrants were aged 15 to 40, whereas the age group 20-29 constituted the largest group (Table 6). 37.5% of male migrants were aged 20 to 29 when they have gone abroad, and the same was true of 39.0% of the female migrants. The labour migrants in the UK and Ireland were comparatively younger – 43% of them were between 15 and 27 years of age.
Table 6: The age and gender structure of those who had worked abroad, 2006

<table>
<thead>
<tr>
<th>Age group</th>
<th>Men</th>
<th>Women</th>
<th>Total, N=721</th>
<th>Percentage of all respondents, N=8,005</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>1.5</td>
<td>5.1</td>
<td>2.8</td>
<td>11.2</td>
</tr>
<tr>
<td>20-29</td>
<td>37.5</td>
<td>39.0</td>
<td>38.0</td>
<td>20.8</td>
</tr>
<tr>
<td>30-39</td>
<td>25.5</td>
<td>23.6</td>
<td>24.8</td>
<td>19.5</td>
</tr>
<tr>
<td>40-49</td>
<td>21.6</td>
<td>18.5</td>
<td>20.5</td>
<td>21.6</td>
</tr>
<tr>
<td>50-59</td>
<td>11.1</td>
<td>9.8</td>
<td>10.7</td>
<td>17.0</td>
</tr>
<tr>
<td>60-65</td>
<td>2.8</td>
<td>3.9</td>
<td>3.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Migration turned out to be selective with regard to the level of education. The proportion of University graduates was significantly higher among migrants (30.9%) than in the overall population (21.1%, Table 7). That can in part be attributed to the age structure of those who have been abroad – young persons who, as a rule in postcommunist countries, are better educated, were also more prone to undertaking migration. Moreover, some of the respondents had worked abroad and at the same time pursued an education, which to some extent facilitated the development of a higher level of education among migrants.

Table 7: The education of respondents who had and had not worked abroad, in %

<table>
<thead>
<tr>
<th>Education</th>
<th>Had worked abroad</th>
<th>Had not worked abroad</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary or lower</td>
<td>9.8</td>
<td>21.0</td>
<td>20.0</td>
</tr>
<tr>
<td>General secondary</td>
<td>20.4</td>
<td>23.8</td>
<td>23.5</td>
</tr>
<tr>
<td>Specialised secondary</td>
<td>38.8</td>
<td>34.1</td>
<td>34.5</td>
</tr>
<tr>
<td>Higher</td>
<td>30.9</td>
<td>21.1</td>
<td>22.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Both the Geographic Mobility survey and the Labour Force Survey indicate that Latvian migrants had jobs in Latvia before departing from the country. In 2007, according to the LFS, three fifths of Latvian migrants had been employed before the departure, each fifth (18.3%) had been a pupil or student, and only each sixth (17.4%) had been unemployed. Among migrants who had been employed before leaving Latvia, each fifth (19%) was working in trade, each sixth (16%) - in construction, each seventh (13.8%) - in manufacturing, each tenth (9.8%) – in the field of agriculture, hunting and forestry, each eleventh (9.4%) – in transport and communications, each fifteenth (6.5%) was employed in the other community, social and personal activities, and almost every twentieth (5.2%) was working in the field of hotels and restaurants. Parallelly, these are also the economic sectors endangered by labour shortages in Latvia (see Section 1.1.2).

In the Geographic Mobility survey economic motivations were of key importance to labor migrants, particularly in terms of the ability to earn more money (Figure 9). Wages were
Many studies have shown that the dominant motivation for migrants today is often of economic nature, and typically these are people who live abroad only temporarily. This assumption is confirmed in the structure of labour force migration from Latvia to other countries – mostly EU member states which have opened up their labour markets. Most often this involves migration without a permanent change in the place of residence, and that is not dependent upon the duration of the stay abroad – a few months, one year or several years. Some migrants go abroad once and without interruption, while others do so on a periodic basis. The main trend in migration in Latvia is that people do tend to keep a declared and physical place of residence in Latvia so as to be sure that they have a place to return to.

The most common duration of migration is up to 3 months (Figure 10). Latvian labour migrants have usually gone abroad for one or two years. Among those who worked abroad, a comparatively higher proportion of respondents said that they would like to go
abroad to find work once again. Most of them, however, did not plan to do so in the nearest period of time.

**Figure 10: Time spent working abroad by sex, in %**

![Bar chart showing time spent working abroad by sex.


As far as directions of mobility are concerned, the people of Latvia have worked in more than 50 countries. On average, 33% of those who have worked abroad have done so in more than just one country. Six countries were cited by respondents most often – Germany (17.8% of those who had worked abroad), the United Kingdom (17.6%), Russia (11.1%), Ireland (9.8%), Sweden (8.6%) and the USA (6.7%). According to the 2007 LFS, almost two fifths (39.1%) of all Latvia population employed abroad chose United Kingdom, each third (31.9%) – Ireland, in Germany was employed (4.9%), slightly less (4.5%) – in Norway, 3% worked in Russia, 2.5% - in USA, and 2.4% in Italy.

According to LFS survey most migrants – each fourth (24.5%), who went to work abroad, were from the region of Latgale (Eastern part of the country, with the highest share of unemployed), slightly less (23.5%) from Riga, one sixth (15.7%) from Kurzeme, each eight (12.7) lived in Vidzeme, slightly less (12.4%) lived in Pieriga, each ninth (11.2%) of those, who went to work abroad, lived in Zemgale. The regional distribution of respondents who have worked abroad differs from place to place. People from the Latgale region, as well as people from the region of Zemgale, which is highly agricultural, have more often traveled to the UK than to other countries. People from the Vidzeme region have more often chosen Ireland, which suggests that distinct social networks have emerged among migrants.

Table 8 shows the destination of migrants in comparison to place of residence. We see that people from the capital city most often found work in Great Britain and Germany, while people from the countryside did so most often in the UK and the Nordic countries. Among major cities, the distribution is quite similar to that in Riga, although Ireland is cited considerably less frequently. Even though the unemployment rate in Riga is so low that there tend to be substantial numbers of job vacancies, many of the city’s residents have simply been dissatisfied with the low wages that are offered. In other cities and
rural areas, there are insufficient jobs, the spectrum of potential jobs is narrower, and wages are far lower than in Riga. People from the countryside and district centers in Latvia have traditionally gone to find work in larger cities or the capital city. When they find work abroad, they go directly there, most often using the services of low-price airlines.

Table 8: The main destination countries for urban and rural labour migrants, in %

<table>
<thead>
<tr>
<th></th>
<th>Riga</th>
<th>Major towns</th>
<th>District centres</th>
<th>Other towns</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>33</td>
<td>25</td>
<td>16</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>32</td>
<td>14</td>
<td>14</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>Ireland</td>
<td>14</td>
<td>7</td>
<td>12</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Nordic countries</td>
<td>13</td>
<td>13</td>
<td>24</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Baltic countries</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other EU/EEZ</td>
<td>24</td>
<td>20</td>
<td>14</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Russia</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Other CIS</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>USA</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>4</td>
<td>3</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: The geographic mobility, 2007b.

With the hope of earning more than they could in other places, respondents have gone to Great Britain, Ireland and the USA (Table 9). Germany and Russia have been selected because a respondent’s employer sent him or her there, because a job in the respondent’s area of specialization was on offer, or because there were better career opportunities. The motivation of choice is different when it comes to Ireland – the second most important motivation for respondents who have gone to Ireland to earn money is that people who were already living there suggested that they do so. The determinant factor for those who have chosen Sweden has been an offer from an employer or previous experience in Sweden. This shows that there are several Latvian companies, branches of companies, or companies with capital from Latvia which have been operating in Sweden for a longer period of time (Brunowskis et al., 2004). The desire to earn more money than elsewhere ranks only third in terms of the motivations of those who have gone to work in Sweden. Some respondents chose the UK or the USA because they already spoke English or wished to learn the language. Russia was often chosen because relatives or acquaintances lived there.
<table>
<thead>
<tr>
<th>Country</th>
<th>Most important reason</th>
<th>Second reason</th>
<th>Third reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Employer sent me; job offered in my area of specialisation; career opportunities</td>
<td><strong>Better wages than elsewhere</strong></td>
<td>Spoke/wanted to learn the language; relatives, friends lived there; family circumstances</td>
</tr>
<tr>
<td>UK</td>
<td><strong>Better wages than elsewhere</strong></td>
<td>Employer sent me; job offered in my area of specialisation; career opportunities</td>
<td>Spoke/wanted to learn the language</td>
</tr>
<tr>
<td>Russia</td>
<td>Employer sent me; job offered in my area of specialisation; career opportunities</td>
<td><strong>Better wages than elsewhere</strong></td>
<td>Relatives, friends lived there; family circumstances</td>
</tr>
<tr>
<td>Ireland</td>
<td><strong>Better wages than elsewhere</strong></td>
<td>People already there recommended it</td>
<td>Relatives, friends lived there; family circumstances</td>
</tr>
<tr>
<td>USA</td>
<td><strong>Better wages than elsewhere</strong></td>
<td>Employer offered job; been there before; no real reason</td>
<td>Employer sent me; job offered in my area of specialisation; career opportunities</td>
</tr>
<tr>
<td>Sweden</td>
<td>Employer offered job; been there before; no real reason</td>
<td><strong>Better wages than elsewhere</strong></td>
<td></td>
</tr>
</tbody>
</table>


The most common type of employment for men and women in other countries has been agricultural work of various kinds. In second place for men was construction work, while for women – baby-sitting (Figure 11). These types of employment are most often not in line with the education level or qualifications of the migrants.
3. Effects of migration on the Latvian economy

Since they joined the European Union, new member states have found that a factor which promotes population mobility is the EU’s principle of the free movement of labour. Migration in Latvia has become a topic of economic, political and social importance. However, there has been insufficient evaluation of how migration affects economic development in Latvia, especially in the view of increasing demand for labour.

3.1. Demographic effect

In Latvia, as in other post-communistic countries with aging populations and depopulation, the departure of young people only exacerbates the problem with the population’s age structure. Full generational replacement becomes less likely, as does the possibility that the labour force will be regenerated, and this means problems with the qualitative improvement of that force (Eglite, 2006). Various demographic forecasts, prepared in Latvia and by international organizations, predict reduction of overall population of Latvia to between 2.115 to 2.161 million residents by 2030. Depopulation would be mostly caused by low fertility rate, but also by negative net migration. The most unfavourable phenomenon is constituted by the outflow of the young persons, “the future parents”. The “youth drain” is exacerbating the problem of depopulation, and natural movement no longer ensures regeneration of generations and a replacement of those who end up emigrating for good.
3.2. Labour shortages and immigration

As already stated, the number of Latvian migrants who have migrated could be estimated at 85 thous. If this number could be treated as a flow, defined in a specific period of time, it would constitute more than 10% of the national labour force.

Fast economic growth combined with growing internal labour shortages have led many Latvian companies to invite workers from abroad. Since the 2004 EU enlargement the number of work permits issued in Latvia has been increasing gradually, reaching the level of 2 thous. in 2005 (Table 10) and 5 thous. in 2007. Most of these people come from the CIS countries, because the average wage in Latvia may seem competitive to them even though life is becoming more and more expensive in Latvia. However, immigration from so-called third countries, including the CIS, became more complex since the EU enlargement. Little is known about immigration of EU citizens (mostly Bulgarians, Romanians, Lithuanians and Poles), as majority of them work less than 6 months and, therefore, do not need work permits. People arriving from the West are almost always representatives of foreign companies, including specialists from enterprises which have bought companies in Latvia. Still, the total of immigrants in Latvia is rather small, covering approximately 1.6% of the overall population.

### Table 10: The number of work permits issued in Latvia per sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>01.05-31.12.2004</th>
<th>01.01-30.06.2006</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, hunting and forestry</td>
<td>90</td>
<td>76</td>
<td>25</td>
<td>191</td>
</tr>
<tr>
<td>Fishing</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Extracting industries and mining</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Processing industries</td>
<td>280</td>
<td>388</td>
<td>179</td>
<td>847</td>
</tr>
<tr>
<td>Supply of electricity, gas and water</td>
<td>9</td>
<td>17</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Construction</td>
<td>53</td>
<td>123</td>
<td>90</td>
<td>266</td>
</tr>
<tr>
<td>Wholesale or retail; repairs of cars, motorcycles, individual use objects and household appliances and equipment</td>
<td>193</td>
<td>315</td>
<td>112</td>
<td>620</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>94</td>
<td>140</td>
<td>83</td>
<td>317</td>
</tr>
<tr>
<td>Transport, storage, communications</td>
<td>53</td>
<td>144</td>
<td>90</td>
<td>287</td>
</tr>
<tr>
<td>Financial mediations</td>
<td>35</td>
<td>51</td>
<td>36</td>
<td>122</td>
</tr>
<tr>
<td>Real estate operations, leasing and other commercial activities</td>
<td>169</td>
<td>291</td>
<td>154</td>
<td>614</td>
</tr>
<tr>
<td>Governance and defence, compulsory social insurance</td>
<td>4</td>
<td>17</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Education</td>
<td>135</td>
<td>145</td>
<td>31</td>
<td>311</td>
</tr>
<tr>
<td>Health care and social care</td>
<td>8</td>
<td>17</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>Public, social and individual services</td>
<td>118</td>
<td>322</td>
<td>166</td>
<td>606</td>
</tr>
<tr>
<td>Extraterritorial organisations and institutions</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Household activities</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,254</strong></td>
<td><strong>2,076</strong></td>
<td><strong>1,011</strong></td>
<td><strong>4,341</strong></td>
</tr>
</tbody>
</table>

Source: based on Office of Citizenship and Migration Affairs (PMLP).

The bottom line here is that during the first few years of EU membership, Latvia experienced immigration that was much different than that in the old member states:
• There were few factors in Latvia which would attract immigrants, and that was probably true in the “unofficial” economy, as well;

• Immigration has been accompanied by emigration, which meant that population numbers did not increase, while the composition of the population changed to a certain degree;

• Immigrants into Latvia are highly qualified representatives of Europe’s traditional culture, as opposed to poorly qualified people from very different cultures;

• The low rate of immigration and the specifics of those who have arrived have not caused any problems in the integration of immigrants;

• It is not expected that the specialists who have immigrated will stay in Latvia because of their competitiveness and because of the high standard of living in their countries origin.

The situation may change over the next five to 10 years, as both the volume and the composition of the migrant flow may change. There are, however, several reasons why the number and composition of the immigrants may well change over the next five to 10 years. Because working people have actively been emigrating to countries which are economically developed, and paralelly Latvia, as a small country, does not train specialists for all professions, employers have already encountered difficulties in finding specialists with the necessary qualifications, particularly because salaries in Latvia remain low. Some businesspeople and researchers feel that the solution could be the immigration of people from Eastern neighbouring or near countries such as Ukraine, Belarus and Moldova, where the salaries are even lower than in Latvia.

However, the scale of immigration in the future is very hard to assess. Researchers from the old EU member states used that technique in the 10 new member states in advance of the 2004 enlargement, but people who immigrate to Latvia come from a far wider range of countries than that, and in a broader survey, the number of people who indicate that they might like to immigrate to as small a country as Latvia might be insufficient for any forecasts.

For that reason, immigration forecasts are based on the anticipated capacities of the recipient country’s labour market and the ability of the local labour force to satisfy demand in this area. In Latvia’s case, there was low fertility in the 1990s, and that means that beginning in 2010, the number of working age people will drop by some 200,000, and that does not include the losses caused by emigration. The former director of the Latvian office of the International Migration Organisation has said in the news media that this shortage of workers will have to be compensated with immigrants from neighbouring countries to the East, as some countries in Western Europe have had to do (Kesnere, 2005). That would mean the arrival of some 20,000 guest workers each year,
without thinking about how many family members they might bring with them, and how many of the immigrants would or would not find a life here in Latvia.

Such intense migration would exceed not just the irreversible emigration that is anticipated in survey data, but even the increased migration that was experienced in the 1970s and 1980s, when Latvia was still part of the Soviet Union. Back then, 12,000 to 13,000 people arrived in Latvia each year (Demogrāfiā, 2006). Since then the legal terms for migration have changed, because people from the East must cross the EU border to get to Latvia. It is presumable that in the potential countries of origin of these immigrants, the collapse of the Soviet Union and its economic system and the social crisis which occurred as a result of this caused lower fertility rates at the same time as they occurred in Latvia. That means that in those neighbouring countries from which immigrants might most easily arrive in Latvia and find it easier to adapt to life in Latvia if only because of the vast number of Russian speakers in the country, employment opportunities in the local market will increase, and the number of potential emigrants will inevitably decline. It is no accident that the president of Russia has already called upon all Russians who are living abroad to return to their ethnic homeland.

For these reasons, attempting to forecast immigration in Latvia just on the basis of the anticipated reduction in the number of people of working age is not sufficiently justified. The second way of forecasting immigration – on the basis of labour market demand, similarly to emigration forecasts that are based on the stated intentions of local residents – again is one which ensures only short-term forecasts. Employers tend to state the number of jobs that are vacant, but they do not try to forecast how many vacancies there will be in five or 10 years, to say nothing of the more distant future. Employers also are by no means unanimous on the level of qualifications that is needed among would-be employees (Kazāks et al., 2006).

Even if companies in Latvia have started to call for more extensive immigration, the fact is that the National Development Plan, which relates to the EU’s Lisbon Strategy, speaks to a knowledge-based economy, as opposed to a labour-intensive one. This would be in line with the anticipated changes in the size of the European and the Latvian workforce and the relevant local resources. As the number of residents of active age diminishes and societies grow older, the EU is focusing more on the fuller employment of local labour forces, including attempts to extend the working lives of older people through the process that is known as active aging (Kesnere, 2005).

Observations in various parts of the world and particularly in the eastern reaches of the former Soviet Union, indicate that labour demand in and of itself does not tend to be a decisive pull factor in migration unless higher wages and better standards of living than those in the country of departure are guaranteed. If wage levels in Latvia remain static, it is very unlikely that the flow of immigrants will satisfy the hopes of employers. Bringing wages closer to the EU average would be justifiable in economic terms if companies were also to ensure that there is an equal increase in productivity and output. That would reduce the need for additional workers, and it would reduce the intensity of emigration, which would mean a lesser need for guest workers. The number of Latvians who return
from other countries would increase, and that would be a different flow of immigration. It would reduce population losses that are caused by emigration.

According to what potential emigrants have said in a wide variety of surveys, the vast majority – 96 to 97% - think even before they leave that they will be back in Latvia after two or three months, after a year, and certainly no longer than after five years. Once people start living abroad, however, their opinions change – only 29% say that they plan to return, 38% say that they won’t, and 33% haven’t made up their minds, according to Eglīte in 2006. This confirms the common view that the longer someone is abroad, the less likely it is that that person will return. This means that the possible volume of return migration flows does not keep up with the number of emigrants if the conditions which caused people to emigrate in the first place have not changed and if their period of emigration has become too long.

3.3. Remittances

Since outflow from Latvia is mostly constituted by labour migration, it is important to assess the scale of remittances sent back home and their role in economic development. According to the estimates by World Bank (2006), in the period 2000-2006 the remittances sent to Latvia increased six-fold, from app. 75 million USD to app. 475 million USD (Figure 12). The sharp increase was registered especially since the 2004 EU enlargement. In 2004 the the share of remittances in the GDP was 2.5%, which was higher than in Poland (1.5%) and comparable to Lithuania (3%).
In the Geographical Mobility survey nearly two-thirds of respondents declared that they had gone abroad so as to earn more money, but 50% of them did not send any money back to Latvia. Of these, 9% spent all of the money while abroad, and 40% spent most of the money there. The remaining respondents send 20 to 80% of their income back to Latvia.

This relatively low level of remittances can be attributed in part to the age of those who were abroad and the amount of time that they spent abroad. Those who worked for three months or less sent virtually no remittances to Latvia. On the other hand, those who had spent more than five years abroad reported spending most of their money in the place where they lived. Among those who worked for no more than six months, 60% sent nothing to Latvia, and among those who worked for one to three years, 36% did the same. Men were more likely than women to send nothing of their earnings back to Latvia. Most of the money – as much as 80% - was sent to Latvia by women and by men who are now aged 35-44.

Most spent most of the money that they had earned abroad on everyday needs (Table 11). The second most commonly cited use of money was the purchase, construction or renovation of real estate – 30.5% of respondents said that they had done so. Most of them had built or renovated property as opposed to buying real estate. The fact that much of the money which people earned abroad was spent on everyday needs has substantially reduced other options as to what to do with the money.
Table 11: The purpose of money earned abroad, in %

<table>
<thead>
<tr>
<th>Spending</th>
<th>% of respondents</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Men</td>
</tr>
<tr>
<td>Everyday needs</td>
<td>69.6</td>
<td>71.9</td>
</tr>
<tr>
<td>Purchase, construction, renovation of real estate</td>
<td>30.5</td>
<td>32.1</td>
</tr>
<tr>
<td>Appliances, furniture</td>
<td>18.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Purchase, renovation of motor vehicles</td>
<td>17.1</td>
<td>21.3</td>
</tr>
<tr>
<td>Education (respondent’s or someone else’s)</td>
<td>13.1</td>
<td>10.8</td>
</tr>
<tr>
<td>Repayment of loans, debts</td>
<td>12.7</td>
<td>12.9</td>
</tr>
<tr>
<td>Other</td>
<td>16.1</td>
<td>15.6</td>
</tr>
<tr>
<td>Total %</td>
<td>177.8</td>
<td>183.2</td>
</tr>
</tbody>
</table>

Note: The total exceeds 100% because respondents were allowed to give more than one answer. This question was not answered by those who spent all of their money abroad.

A very similar result was obtained in the research conducted in 2003 by Eglite et al. (2006). Most migrant used money earned abroad for their or their family living, or household expenditures, such as new flat, house, household’s equipment, car (Table 12). Education and business were ranked as less important purposes.

Table 12: The purpose of money earned abroad, in %

<table>
<thead>
<tr>
<th>Goals</th>
<th>% among already worked</th>
<th>Ranging</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>men</td>
<td>women</td>
</tr>
<tr>
<td>One’s own living</td>
<td>51.4</td>
<td>53.4</td>
</tr>
<tr>
<td>Maintenance of the family</td>
<td>27.8</td>
<td>19.8</td>
</tr>
<tr>
<td>Own/children studies</td>
<td>15.3</td>
<td>25.9</td>
</tr>
<tr>
<td>New flat/house</td>
<td>15.3</td>
<td>12.9</td>
</tr>
<tr>
<td>Household’s equipment</td>
<td>23.6</td>
<td>17.2</td>
</tr>
<tr>
<td>Car</td>
<td>23.6</td>
<td>12.1</td>
</tr>
<tr>
<td>To start business</td>
<td>2.8</td>
<td>2.6</td>
</tr>
<tr>
<td>To set up family</td>
<td>9.7</td>
<td>8.6</td>
</tr>
<tr>
<td>Travel</td>
<td>18.1</td>
<td>22.4</td>
</tr>
<tr>
<td>Other</td>
<td>5.6</td>
<td>11.2</td>
</tr>
</tbody>
</table>

Note: Total exceeds 100% because some mentioned several goals.
Source: Eglite et al. (2006).

Conclusions

In the post-accession period, in comparison to Poland or Romania, Latvia has sent marginal numbers of migrants. However, in economic, social and even demographic dimension the impact of the outflow was much more serious in the Latvian case. In fact, Latvia constitutes a good example of small open economy, with all its consequences with regard to people’s, trade’s and capital’s mobility. According to the estimates, at the end of 2007 43 thousand Latvian citizens have stayed abroad, more than twice in comparison to the pre-accession period. Given the fact that the period of time when this outflow took place was very short, this number renders a real post-accession labour exodus. The
A survey conducted in Latvia indicates the number of 85 thousand migrants, mostly young and educated persons, who have ever worked or studies abroad. This means that every tenth economically active person has ever migrated.

In the period of economic transition migration pattern has drastically changed in Latvia. At the beginning of the 1990s a massive outflow took place, which was to a great extent long-term and ethnically driven, and found its outlet in the CIS countries and Germany. In the mid 1990s this ethnic migration potential ceased to exist and the scale of outmigration lowered. Still, the international mobility took place, but was limited to short-lasting and mostly unregistered flows of migrant workers. At the turn of the 20th and 21st centuries, and especially since the 2004 EU accession the outflow from Latvia took on higher proportions and was directed mostly to those EU member states that did not introduce transitional periods toward Latvian labour force: Ireland, Sweden, and United Kingdom. Just like in mid 1990s, post-accession workers were interested mostly in undertaking short-term mobility and the intention of acquiring higher financial capital dominated.

Therefore, what was initially not expected in Latvia but has increasingly become evident, the post-accession outflow, although short-term in nature, posed a threat to the domestic labour market. What was not observed in the major sending country of the region, namely Poland, just some years since the accession to the EU, a high level of unemployment in the country was replaced by difficulties in finding workers in various professions. Employers have been forced to raise salaries at least to the level which was needed to ensure provision for families. Every fifth employer had to employ a person with lower qualifications than initially desired. These effects warranted the need for recruitment of foreign labour force. Another detrimental consequence of emigration from Latvia, not observed in the major sending countries, refers to loss of demographic potential. The youth drain, along with unfavourable tendencies in fertility, exacerbates the problem with generational replacement.

In the case of Latvia the negative effects of post-accession outflow seem to displace the positives. The scale of remittances is relatively low and, moreover, migrants' incomes are mostly spent of everyday needs, rather than on education and investment. However, it must be stated that the consequent rise of salaries in Latvia improved living standard and could already have reduced potential migration, as the dominant motivation for migration is that the individual hopes to earn more money abroad. It also might force the employers to use the work force more efficiently. To benefit the most from the accession, the Latvian state should reduce those factors which encourage people to leave, and encourage those who have already left to come back home.

Labour migration towards to the old EU member states has largely been the result of different wages in the sending and receiving countries. During the economic recession there have also been differences in employment opportunities. Rapid growth of unemployment is one of the factors why more people start to think about emigration from Latvia. Despite earlier assumptions that the declining economic situation in the UK and Ireland would encourage return Latvian workers, only few have come back so far.
References


The 2004 EU enlargement constituted one of the most important emigration stimulus in the whole contemporary history of Poland. In fact, no other historical event has been associated with such a rapid outflow and a fundamental change in mobility directions and socio-demographic structure of migrants. According to recent estimates the number of Polish nationals staying abroad for longer than 2 months increased within 3 years – from 2004 to 2007 – from approximately 1 to 2.3 million. These developments are to be associated not only with the demographic potential of Poland but also with a situation, where there is a great number of people who are redundant in economic terms, and who could easily be turned into a highly mobile population. The post-accession migration developments in Poland are strongly correlated with the institutional framework. The increase in inflow from Poland was observed in all European countries, but the three countries that in 2004 did not introduce labour market restrictions towards Polish citizens became major migration magnets, while the role of those countries that introduced Transitory Arrangements (including Germany) significantly diminished. United Kingdom became the most important receiving country for Polish migrants attracting more than half a million persons (a 25-fold increase since 2002). In fact, recent migration from Poland to the UK is one of the most rapid and intense flows in contemporary Europe. The introduction of the Transitory Arrangements is also to be linked with significant changes with regard to structural features of migration. Polish citizens choosing countries that did not introduce labour market restrictions are, generally, younger and better educated, and are originating from both small and large cities. Demographic impact of recent migration is particularly severe in the south-eastern part of Poland. With regard to the labour market, migration is typically perceived as a main contributor to recent changes leading from jobs’ shortages to shortage of workers. However, due to the fact that massive post-accession outflow is accompanied by good economic performance and gradual improvement of the situation on the labour market there are serious difficulties with assessment of the impact of migration on the labour market. As we argue, the impact of the post-accession outflow on the Polish labour market is greatly exaggerated. The recent labour market situation is rather an outcome of an interplay between complex set of factors. Within them, migration plays an important, but definitely not decisive, role.

† Centre of Migration Research, University of Warsaw
††Faculty of Economic Sciences, University of Warsaw

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
Contents

1 Introduction .................................................................................................................. 1

2 Macroeconomic and Labour Market Development ....................................................... 2
   2.1 Macroeconomic Development ........................................................................ 2
   2.2 Labour Market Development ......................................................................... 6

3 Institutional setting for labour migration .................................................................. 9
   3.1 Regulations on migration ............................................................................ 9
   3.2 Main documents and programs shaping Polish migration policy ............... 10

4 Patterns of labour mobility from Poland .................................................................. 11
   4.1 Relevant data sources and their limitations ............................................... 11
   4.2 Scale and directions of the outflow from Poland before and after EU
       enlargement ............................................................................................... 13
   4.3 Characteristics of Polish migrants ................................................................ 19

5 Effects of migration on the Polish economy ............................................................. 23
   5.1 Demographic effects .................................................................................. 23
       5.1.1 Short-term effects ........................................................................ 23
       5.1.2 Long-term effects ........................................................................ 25
   5.2 Labour market effects – from oversupply to the shortage of labour? ..... 28
   5.3 Remittances .............................................................................................. 35

6 Conclusions .............................................................................................................. 38

7 References .............................................................................................................. 40
1 Introduction

Poland is by far demographically the largest NMS of the European Union. Its meaning for European migration results not only from that. Another, probably the main factor here is a great number of people who are redundant under present economic conditions and present stage of the transition, and who are or could easily be turned into a highly mobile population.

Since 1948 through early 21st century migration in Poland had been repressed. Initially, in accord with the doctrine of ‘cold war’, the communist regime discouraged and strictly controlled all international movements of the population. In effect, in the early 1950s the border crossing was virtually accidental. The thaw of the post-Stalinist period and a detente in international relations, especially after the mid-1970s, brought about a limited freedom of international travelling and some forms of migration, mainly related to family reunion. Still only a tiny minority of the population were able to become a migrant.

In the 1970s and 1980s a growing number of Poles involved in a circular international travelling under the guise of tourism, mainly to neighbouring countries. Major motive of those journeys was money making, either through petty trade, or merchandise smuggling, or occasional work. Rationale behind those movements, which usually took a couple of weeks to a couple of months and were rewarded with proverbial pennies, was a dysfunctional Polish market characterised among other things by persistent shortages of consumer goods, very low cost of living (and wage rates) and greatly overvalued foreign currencies (relative to the official exchange rate). Even a small amount of money earned by means of a foreign trip or a small quantity of goods privately imported by a traveller significantly contributed to his/her household affluence.

Circular mobility of Polish false tourists took on a massive scale after 1988 when the freedom of out-movements became unlimited. Other forms of mobility, especially regular migration for work, however, remained scarce. Although many principal receiving countries lifted the visa requirement to the citizens of Poland, they continued to protect their labour market against the inflow of Polish workers. This is why a huge migratory potential, which has been activated in the 1990s was mainly channelled to clandestine employment in western and southern countries of Europe and in USA.

Paralelly, since the beginning of the economic transition the internal mobility within Poland remained at a relatively low scale. As indicated by the Central Population Register and the 2002 Population Census, propensity of the Polish workforce to move between Polish regions and/or between urban and rural areas has not been elevated. This stemmed from the fact that in Poland, in contrary to the countries in
Western Europe, there was no metropoly or industrial region able to absorb large numbers of non-resident population. Moreover, work in such large Polish cities, as Warsaw, Cracow or Wroclaw has never been more profitable than in Berlin, Brussels, London or Rome, while the living costs have been much the same. The development of the services sector in the Polish cities, as well as investments in infrastructure partially financed by European Funds, may increase the level of internal mobility in the future.

The importance of the accession of Poland to the European Union for the population movements stems from the very fact that after long history of struggling for the freedom to move, it created the very first opportunity for Polish people not only to decide if they want to stay or go but above all to choose the form of mobility, residence status in a foreign country, length of stay or employment there, and to a large degree the country of destination.

2 Macroeconomic and Labour Market Development

2.1 Macroeconomic Development

At the turn of decades Poland experienced a significant fall in GDP growth rates, which was caused by so-called Russian crisis and Persian Gulf events combined with restrictive monetary policy. In 2003 the situation considerably improved and this tendency reinforced in the following years, after the Poland’s accession to the European Union in May 2004 (Figure 1).

Like a major part of economies in the Centre and East European region Poland is in the period of a strong GDP growth. In 2006 real GDP growth reached 6.2% y/y and in 2007 – 6.6% y/y, compared to 6.4% and 6.5%, respectively, in the Czech Republic, 8.5% and 10.4% in Slovakia, 3.9% and 1.3% in Hungary (source: Eurostat).
Domestic demand has been the main driving force of the GDP growth in Poland since 2003 (Figure 2, Table 1). The structure of GDP growth is favorable. Polish economy faces strong investment dynamics: gross capital formation grew by 16.1% in 2006 and by 19.9% in 2007. It is combined with relatively high consumption dynamics: consumption expenditures increased by 5.2% y/y in 2006 and 2007 (Table 2). Exports continue to rise significantly (14.6% y/y in 2006 and 8.4% y/y in 2007), yet due to recovery in the domestic demand and import acceleration (annual growth rate of 17.3% in 2006 and 12.2% in 2007), the contribution of the net export to GDP growth has been negative since the 3rd quarter of 2006. The most recent figures of the 1st quarter 2008 show the annual GDP growth rate of 6.1%.
Figure 2: Structure of GDP growth, contribution of selected components, annual data

Source: Central Statistical Office.

Table 1: Structure of GDP growth, contribution of selected components, quarterly data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>2.4</td>
<td>3.2</td>
<td>4.3</td>
<td>4.4</td>
<td>5.4</td>
<td>6.3</td>
<td>6.6</td>
<td>7.3</td>
<td>6.5</td>
<td>6.5</td>
<td>6.4</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Domestic uses</td>
<td>1.4</td>
<td>0</td>
<td>2.7</td>
<td>5.6</td>
<td>5.8</td>
<td>6.4</td>
<td>7.6</td>
<td>9.3</td>
<td>9.5</td>
<td>9.4</td>
<td>8.6</td>
<td>6.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Consumption expenditure</td>
<td>1.6</td>
<td>2</td>
<td>2.6</td>
<td>2.7</td>
<td>5.1</td>
<td>4.1</td>
<td>4.4</td>
<td>3.5</td>
<td>5.8</td>
<td>4.4</td>
<td>4.2</td>
<td>2.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Individual consumption expenditure</td>
<td>0.9</td>
<td>1.1</td>
<td>1.8</td>
<td>1.5</td>
<td>3.4</td>
<td>3</td>
<td>3.5</td>
<td>2.7</td>
<td>4.5</td>
<td>3.1</td>
<td>3.1</td>
<td>2</td>
<td>3.7</td>
</tr>
<tr>
<td>Gross capital formation</td>
<td>-0.2</td>
<td>-2</td>
<td>0.1</td>
<td>2.9</td>
<td>0.7</td>
<td>2.3</td>
<td>3.2</td>
<td>5.8</td>
<td>3.7</td>
<td>5</td>
<td>4.4</td>
<td>3.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>0.1</td>
<td>0.7</td>
<td>1.1</td>
<td>2.6</td>
<td>1</td>
<td>2.4</td>
<td>3</td>
<td>4.2</td>
<td>3</td>
<td>3.3</td>
<td>3.2</td>
<td>4.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Net export</td>
<td>1</td>
<td>3.2</td>
<td>1.6</td>
<td>-1.2</td>
<td>-0.4</td>
<td>-0.1</td>
<td>-1</td>
<td>-2.7</td>
<td>-2.2</td>
<td>-2.9</td>
<td>-2.1</td>
<td>-0.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>Gross value added</td>
<td>2</td>
<td>2.9</td>
<td>3.3</td>
<td>3.4</td>
<td>4.4</td>
<td>5.3</td>
<td>5.3</td>
<td>5.9</td>
<td>6.9</td>
<td>5.7</td>
<td>5.5</td>
<td>5.4</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Source: Central Statistical Office.

Table 2: Growth of the real GDP and its components (in per cent, y/y)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>4.3%</td>
<td>1.2%</td>
<td>1.4%</td>
<td>3.9%</td>
<td>5.3%</td>
<td>3.6%</td>
<td>6.2%</td>
<td>6.6%</td>
</tr>
<tr>
<td>DOMESTIC USES</td>
<td>3.1%</td>
<td>-1.3%</td>
<td>1.0%</td>
<td>2.8%</td>
<td>6.2%</td>
<td>2.5%</td>
<td>7.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Consumption expenditure</td>
<td>2.9%</td>
<td>2.3%</td>
<td>3.0%</td>
<td>2.7%</td>
<td>4.3%</td>
<td>2.7%</td>
<td>5.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Individual consumption expenditure</td>
<td>3.0%</td>
<td>2.3%</td>
<td>3.4%</td>
<td>2.1%</td>
<td>4.7%</td>
<td>2.1%</td>
<td>5.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Public consumption expenditure</td>
<td>2.1%</td>
<td>2.7%</td>
<td>1.4%</td>
<td>4.9%</td>
<td>3.1%</td>
<td>5.2%</td>
<td>6.1%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Gross capital formation</td>
<td>3.9%</td>
<td>-13.4%</td>
<td>-7.2%</td>
<td>3.3%</td>
<td>14.7%</td>
<td>1.4%</td>
<td>16.1%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>2.7%</td>
<td>-9.7%</td>
<td>-6.3%</td>
<td>-0.1%</td>
<td>6.4%</td>
<td>6.5%</td>
<td>14.9%</td>
<td>17.6%</td>
</tr>
<tr>
<td>EXPORTS</td>
<td>23.2%</td>
<td>3.1%</td>
<td>4.8%</td>
<td>14.2%</td>
<td>14.0%</td>
<td>8.0%</td>
<td>14.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>IMPORTS</td>
<td>15.5%</td>
<td>-5.3%</td>
<td>2.8%</td>
<td>9.6%</td>
<td>15.8%</td>
<td>4.7%</td>
<td>17.3%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

Source: Central Statistical Office.

As far as growth prospects are concerned, according to the most recent macroeconomic projection prepared by the National Bank of Poland (2008a), there
will be a slowdown in the economic growth in the second half of 2008 to below 5.0% y/y, followed by a gradual increase of the growth rate to approx. 5.0% in 2010 (Figure 3). GDP dynamics is expected to stay close to or slightly below the growth rate of the potential output, which will on average amount to 5.5% y/y in 2008-2010. The high growth rate of the potential output will be supported by a significant accumulation of the capital stock and a reduction in the equilibrium unemployment rate (NAIRU), partly explained by increasing productive capacity.

**Figure 3: GDP growth projection, 2008-2010**

Source: National Bank of Poland.

Table 3 presents main macroeconomic indicators in 2001-2007. The following observations should be made:

- Current account balance and general government balance are under control.

- Since the EU accession in May 2004 Polish economy foreign direct investment has increased substantially.

- Fast growth of the economy (demand pressure) combined with increased dynamics of prices of foodstuffs, fuels and energy have made CPI inflation rise sharply from 1.0% y/y in 2006 to 2.5% y/y in 2007 (annual averages). Since the 3rd quarter 2007 CPI inflation has been above the NBP inflation target of 2.5%, being equal 3.5% in the 4th quarter 2007 and 4.1% in the 1st quarter 2008.

- An acceleration of the GDP growth since 2003 has been accompanied by a significant fall in the unemployment rate, from 19.9% in 2002 to 9.6% in 2007, according to LFS data (at the same time registered unemployment rate decreased from 20% in 2002 to 11.4% in 2007) However, the economic activity rate has been relatively stable in the period under consideration.
Table 3: Main macroeconomic indicators, 2001-2007

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>1.2</td>
<td>1.4</td>
<td>3.9</td>
<td>5.3</td>
<td>3.6</td>
<td>6.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Current account balance in % of GDP</td>
<td>-2.8</td>
<td>-2.5</td>
<td>-2.1</td>
<td>-4.2</td>
<td>-1.6</td>
<td>-3.2</td>
<td>-3.7</td>
</tr>
<tr>
<td>General government balance in % of GDP</td>
<td>-5.2</td>
<td>-6.1</td>
<td>-5.6</td>
<td>-5.9</td>
<td>-3.9</td>
<td>-4.0</td>
<td>-2.0</td>
</tr>
<tr>
<td>General government debt in % of GDP</td>
<td>37.6</td>
<td>42.2</td>
<td>47.1</td>
<td>45.7</td>
<td>47.1</td>
<td>47.6</td>
<td>45.2</td>
</tr>
<tr>
<td>Consumer price index in %</td>
<td>5.5</td>
<td>1.9</td>
<td>0.8</td>
<td>3.5</td>
<td>2.1</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Producer price index in %</td>
<td>5.5</td>
<td>1.9</td>
<td>0.8</td>
<td>3.5</td>
<td>2.1</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Money market rate in %, end of period</td>
<td>11.7</td>
<td>6.7</td>
<td>5.5</td>
<td>6.5</td>
<td>4.6</td>
<td>4.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Employment rate (15-64)</td>
<td>53.4</td>
<td>51.5</td>
<td>51.2</td>
<td>51.7</td>
<td>52.8</td>
<td>54.5</td>
<td>57.0</td>
</tr>
<tr>
<td>Economic activity rate (15-64)</td>
<td>65.5</td>
<td>64.6</td>
<td>63.9</td>
<td>64.0</td>
<td>64.4</td>
<td>63.4</td>
<td>63.2</td>
</tr>
<tr>
<td>Unemployment rate (Eurostat)</td>
<td>18.2</td>
<td>19.9</td>
<td>19.6</td>
<td>19.0</td>
<td>17.7</td>
<td>13.8</td>
<td>9.6</td>
</tr>
<tr>
<td>Unemployment rate (registered, end of year)</td>
<td>17.5</td>
<td>20.0</td>
<td>20.0</td>
<td>19.0</td>
<td>17.6</td>
<td>14.8</td>
<td>11.4</td>
</tr>
<tr>
<td>Average monthly gross nominal wages and salaries, annual dynamics in %</td>
<td>8.0</td>
<td>2.6</td>
<td>4.2</td>
<td>4.0</td>
<td>3.8</td>
<td>4.9</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Source: Central Statistical Office, National Bank of Poland, Eurostat, International Monetary Fund.

2.2 Labour Market Development

Fast economic growth, which contributed significantly to decrease in unemployment rate, did not cause improvement in economic activity of the Polish society. Activity rate has remained almost unchanged during recent years (Figure 4), amounting in the 1st quarter 2008 to 53.7%, which is far below the EU average. The main factor behind the low activity rate in Poland is the deactivation of large number of people acquiring rights for early retirement benefits. In 2007 the activity rate of population aged 55-64 reached 31.8% and was the second lowest in the EU (according to Eurostat data only Malta noted lower activity rate of this age group). Another explanation of this phenomenon is the low activity rate of females. As a consequence, a relatively high number of economically inactive persons constitutes a serious problem of the Polish labour market. This number was growing during last few years (from 14 millions in the 4th quarter 2005 to 14.5 millions in the 1st quarter 2008). Low rate of economic activity combined with significant outflow of workforce (see Table 4 in the 4th section) have created difficulties for the employers to find highly qualified as well as not qualified workers. On the other hand, some positive trends in the Polish labour market in the recent period can be noted. Except decreasing unemployment rate (as indicated by registered unemployment rate as well as LFS data), a number of employed persons has been gradually growing and the structure of employment has become more beneficial (decrease of employment in agriculture and increase in services).

Since the 3rd quarter 2006 a percentage of Polish enterprises declaring problems with hiring employees has been above 10%, reaching 14.2% in the 3rd quarter 2007. Shortage of employees remains one of the most important barriers in enterprises’ activity (Figure 5). Lack of employees is evident mostly in the
construction – more than 25% of firms has been facing a problem of this kind since 2006, approaching 35% in the 1st quarter 2007. In other sectors of the economy a mismatch between labour demand and supply seems narrower but still severe – more than 10% of enterprises in the industrial manufacturing sector and less than 10% in the transport and trade sectors are affected.

**Figure 4: Unemployment rate and activity rate in Poland, 2005-2008**

![Chart showing unemployment rate and activity rate in Poland, 2005-2008](chart)

Source: Central Statistical Office.

Also the number of vacancies reported by employers increased in 2005-2007 from approximately 193 thousands to 253 thousands (Figure 6).
As a result, there has been a growing wage pressure: average monthly gross wages and salaries increased by 8.7% (in nominal terms) in 2007 compared to 4.9% in 2006 and 3.8% in 2005 (Table 3). Producer surveys show that the percentage of enterprises planning to increase wages has been growing since 2006. According to the plans formed by enterprises in the 1st quarter 2008 around 45.4% of employees were to benefit from wage increases in the 2nd quarter 2008 (source: NBP).
3 Institutional setting for labour migration

3.1 Regulations on migration

The 2004 EU enlargement enabled Polish citizens to work abroad in several EU member states without any temporal or sectoral conditions. With the passing of time, labour restrictions were lifted in the subsequent countries:

<table>
<thead>
<tr>
<th>The date of lifting labour market restrictions</th>
<th>EU member states</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since May 1st, 2004</td>
<td>Three old EU member states: Ireland, Sweden and the UK</td>
</tr>
<tr>
<td>Since May 1st, 2006</td>
<td>Eight new EU member states: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovakia, Slovenia</td>
</tr>
<tr>
<td>Since July 31st, 2006</td>
<td>Four old EU member states: Finland, Greece, Spain, Portugal; Iceland (EEA)</td>
</tr>
<tr>
<td>Since January 1st, 2007</td>
<td>Italy</td>
</tr>
<tr>
<td>Since May 1st, 2007</td>
<td>Two new EU member states: Bulgaria and Romania</td>
</tr>
<tr>
<td>Since November 1st, 2007</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Since July 1st, 2008</td>
<td>Luxembourg</td>
</tr>
<tr>
<td></td>
<td>France</td>
</tr>
</tbody>
</table>

The rest of EU member states, namely Austria, Belgium, Denmark, Germany, and Malta, hold transitional periods with the reference to labour migrants from the new EU member states, and probably this situation will remain unchanged until May 1st, 2009.
In Poland several institutions of public authorities are competent with respect to the inflow of non-citizens. They are:

- Ministry of Interior and Administration shapes Polish migration policy and deals with the matters related to citizenship and repatriation;
- The Office for Foreigners deals with entry of foreigners in the territory of Poland, the residence in it, and grants legal protection of refugee or tolerated status;
- Ministry of Labour and Social Policy deals with work permits to foreign citizens.

3.2 Main documents and programs shaping Polish migration policy

The most important acts, issued over the last decade, reflect the most important challenges to be met by Poland. These challenges included the adjustment of Polish law to the standards of the EU, and, over the last 2 or 3 years, encountering the shortages at the domestic labour market.

As far as the Polish EU accession is concerned, several important acts should be mentioned. The most recent include the 2006 Act on the “Entry into the Territory of the Republic of Poland, Stay and Exit from Such Territory of the Nationals of European Union Members States and Their Family Members”. This act implemented the resolution of the European Parliament with regard to the right of the EU citizens to move and reside freely within the NMS. In 2007 the amendment to the “Act on State Border Protection and Border Guard” was implemented. According to this act, after entering the Schengen zone the rules of crossing the Polish borders will be regulated by the Schengen Borders Code.

As far as the labour shortages are concerned, many amendments issued by the Ministry of Labour and Social Policy were introduced in order to promote employment of aliens in Poland, especially recruiting from the eastern neighbours of Poland. Since 2007 citizens of Belarus, Russian Federation and Ukraine are allowed to work without permit up to 3 months in span of 6 months in the following economic sectors: agriculture, cultivation, breeding or on the boards of companies. Except for the latter, seasonal workers still need visa with permission to work, however, this permit is issued by a consul once a foreigner submitted an intention statement from the Polish employer. In the subsequent amendment, the Ministry lowered the fee paid by the Polish employers wishing to employ a foreigner.

Since the inclusion of Poland into the Schengen zone, the so-called Polish Chart was implemented. The Polish Chart, confirming belonging to the Polish nation, is entitled to the people of Polish origins living at the territory of the former Soviet Union. The owners of the Polish Chart are entitled to receive the Polish visa free of
charge, take up employment and conduct economic activity in Poland on the same basis as the Polish citizens. According to the estimates quoted by Kępińska (2007), they are approximately 2.7 million people of Polish origin living in the former Soviet Union, mostly in Belarus and Ukraine. The true scale of inflow to Poland is yet unknown, as Polish Charts started to be issued in April 2008 (according to non-official data, the scale of phenomenon is very small, so far).

Last, but no least, in 2007 two programs directed towards Polish emigrants were introduced. The first one, entitled “Closer to work, closer to Poland” and implemented by the Ministry of Foreign Affairs, aims at increasing protection of Polish migrants abroad. As part of this program, new consulates are to be open, standards of services in the old ones is to improved and information on working conditions in the EU is to be distributed. It includes also actions of Polish diplomats in the EU countries, such as visiting Polish organizations abroad or looking after a good image of the Polish society. The second program, entitled “Comeback” and implemented by the Ministry of Labour and Social Policy, aims at promoting returns of Polish emigrants. As part of this program, a special website was created, consisting of information regarding taxes and insurance in Poland, useful documents forms and job offers on the Polish labour market.

4 Patterns of labour mobility from Poland

4.1 Relevant data sources and their limitations

There are several sources of information on international migration to and from Poland, none of them, however, serve as a comprehensive and fully reliable dataset. In contrast to the old EU member states, specific migration registration system applied in the East-Central Europe relies on the fact of cancellation permanent stay, which is by most emigrants perceived as unnecessary, or even disadvantageous. Thus, the definition of an emigrant applies to a person who cancelled the permanent residence in Poland and declared an intention to leave for another country, whereas of immigrant to a person (of Polish or foreign citizenship) who registers as a permanent resident coming from abroad. This concept of migrant in no way relates to the duration (neither actual nor declared) of stay in the destination country, which makes migration statistics in the EU NMS countries incompatible with the respective statistics in a large majority of other countries (Okólski, 1997).

It might be stated that from all NMS Poland has the most numerous and the most trustworthy sources of information on international migration. They include:
1. The Central Population Register (so-called PESEL register), gathered by the Central Statistical Office in Poland, includes records on permanent residents of Poland, among them migrants (persons who have cancelled their permanent residence in Poland). This category overwhelms a small fraction of all actual migrants.

2. Population Censuses, conducted by the Central Statistical Office in Poland, which reflect the actual number of immigrants and emigrants. This is a very comprehensive and detailed source of information; however, the last Population Census was conducted in 2002, which makes its results useless in the view of postaccession migration developments.

3. Data gathered by Polish government institutions, such as the Ministry of Labour and Social Policy, the Ministry of Economy, the Ministry of Health, the Social Insurance Institution. The data gathered by the above-mentioned institutions is limited to a narrow categories of migrants (such as migration of health professionals) and, since not published regularly, not easily available.

4. The Polish Labour Force Survey, conducted every quarter since 2004 by the Central Statistical Office in Poland, serves as a detailed and comprehensive datasource. According to the applied methodology, a randomly selected household is visited by a pollster who gathers information about every household member, regardless of his/her status: in Poland or abroad. However, if all members of a household are emigrants, there is nobody left to report it to a pollster. Therefore, the LFS underestimates the scale of the outflow.

5. Information gathered in the main destination countries, which differ from each other in character and quality. It has been proved that in spite of efforts the trial of creating unified, international, harmonious system of gathering and verifying migration data, failed (Bijak et al., 2004). Consequently, information referring to the same migration flow, but gathered by two countries (of origin and of destination) differ significantly.

The subsequent analysis is based on most of the above-mentioned datasources, although the most use is made of the LFS. It was already mentioned that the LFS underestimates the scale of emigration. However, as it follows from the comparison of outcomes of the LFS data and the last Population Census, several mobility features, such as dynamics, directions of flows, demographic and social structure of migrants, seem to be well reflected and representative. The hitherto-dominating outflow from Poland has consisted mostly of single family members, not of the whole families and, therefore, the LFS served as a good reflection of the real mobility phenomena. This pattern of the emigration may change in the future, but for the first years after the EU Enlargement the LFS remains the best available datasource referring to directions of mobility and socio-demographic characteristics of migrants.
On the basis of the Polish LFS the so-called Migrants’ Database has been compiled. It consists of two categories of migrants aged 15 and over, each as numerous as over 1,800 persons, who have stayed abroad for at least 2 months either in the period 1999-2003 (further called pre-accession migrants), or in the period from 1st May 2004 to 31st December 2006 (post-accession migrants)\(^1\).

4.2 Scale and directions of the outflow from Poland before and after EU enlargement

The 2004 EU enlargement constituted one of the most important emigration stimuli in the whole contemporary history of Poland. In fact, no other historical event has been associated with such a rapid outflow and a fundamental change in mobility directions and socio-demographic structure of migrants. Several data sources indicate that since the beginning of the year 2004 the scale of the outflow from Poland remained at an elevated level.

To start with the population register, that captures only those migrants who change their permanent, in the 1990s and 2000s approximately 20-25 thous. persons deregistered yearly from Poland. In 2006 this number reached 47 thous. persons, which might herald an increased propensity of long-term emigration. All in all, the number of those who de-registered in the period 2004-2006 (88 thous.) constitutes only a marginal fraction of those who *de facto* decided to leave the country.

Due to the fact that the population register does not provide a reliable information on the post-accession outflow, the Central Statistical Office (CSO, 2008) prepared estimates of emigration based on the Polish LFS and data gathered in the destination countries. These estimates render a true post-accession exodus: the number of Polish nationals staying abroad for longer than 2 months increased within 3 years – from 2004 to 2007 – from app. 1 to 2.3 million (Table 4). This increase was observed in all European countries, both in the countries that prior to 2004 were the main destinations, such as Germany and Italy, and new countries, such as Ireland and the United Kingdom. Very rapidly, in the two years after the EU enlargement the United Kingdom became the most important receiving country for Polish migrants attracting more than half a million persons, which was a 25-fold increase since 2002. A similar situation occurred in Ireland which occupied the third position among destinations as far as number of Polish migrants is concerned.

\(^1\) Unfortunately, due to methodological reasons it is impossible to distinguish between short- and long-term migrants in the general category of those who left after May 1st 2004.
Table 4: The number of Polish citizens staying abroad for longer than two months by destination country, estimates, in thous.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>786</td>
<td>1000</td>
<td>1950</td>
<td>2270</td>
</tr>
<tr>
<td>European Union</td>
<td>451</td>
<td>750</td>
<td>1550</td>
<td>1860</td>
</tr>
<tr>
<td>Austria</td>
<td>11</td>
<td>15</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>Belgium</td>
<td>14</td>
<td>13</td>
<td>28</td>
<td>31</td>
</tr>
<tr>
<td>France</td>
<td>21</td>
<td>30</td>
<td>49</td>
<td>55</td>
</tr>
<tr>
<td>Germany</td>
<td>294</td>
<td>385</td>
<td>450</td>
<td>490</td>
</tr>
<tr>
<td>Ireland</td>
<td>2</td>
<td>15</td>
<td>120</td>
<td>200</td>
</tr>
<tr>
<td>Italy</td>
<td>39</td>
<td>59</td>
<td>85</td>
<td>87</td>
</tr>
<tr>
<td>Netherlands</td>
<td>10</td>
<td>23</td>
<td>55</td>
<td>98</td>
</tr>
<tr>
<td>Spain</td>
<td>14</td>
<td>26</td>
<td>44</td>
<td>80</td>
</tr>
<tr>
<td>Sweden</td>
<td>6</td>
<td>11</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>24</td>
<td>150</td>
<td>580</td>
<td>690</td>
</tr>
</tbody>
</table>


The Polish Labour Force Survey confirms the conclusions made by the CSO with regard to the fundamental change of geographic directions of Poles’ mobility. According to the LFS, the position of main and dominant destination country, which was prior to the EU enlargement occupied by Germany (32% of pre-accession migrants, Table 4.2), has been thereafter overwhelmed by the United Kingdom (31% of post-accession migrants). Together with Ireland and Sweden, the three countries that in 2004 did not introduce labour market restrictions attracted 12.1% of pre-accession migrants and as many as 42.4% of post-accession migrants (increase by 30% percentage points, Table 5, Figure 7), whereas respective shares for the main receiving countries prior to the accession: Germany, US and Italy, decreased from 63% to 36%. Thus, the role (the rank and the percentage of Polish migrants) of those countries that in 2004 introduced short- or long-term labour market restrictions towards Polish citizens significantly diminished (Figure 7), although most countries registered a significant increase in number of Polish migrants.

---

2 Countries with short-term restrictions include those, that on May 1st, 2004, introduced labour restrictions but until today withdrew them. Countries with long-term restrictions include those that are going to keep labour restrictions until May 1st, 2009 (see subsection 3).
Table 5: Polish pre- and post-accession migrants by destination country, in per cent

<table>
<thead>
<tr>
<th>Destination country</th>
<th>Pre-accession %</th>
<th>Rank</th>
<th>Post-accession %</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>32.1</td>
<td>1</td>
<td>18.9</td>
<td>2</td>
</tr>
<tr>
<td>US</td>
<td>19.3</td>
<td>2</td>
<td>9.1</td>
<td>3</td>
</tr>
<tr>
<td>Italy</td>
<td>11.9</td>
<td>3</td>
<td>8.4</td>
<td>4</td>
</tr>
<tr>
<td>UK</td>
<td>9.7</td>
<td>4</td>
<td>31.4</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>3.8</td>
<td>5</td>
<td>3.2</td>
<td>5</td>
</tr>
<tr>
<td>Belgium</td>
<td>3.4</td>
<td>6</td>
<td>1.7</td>
<td>10</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.0</td>
<td>7</td>
<td>3.0</td>
<td>7</td>
</tr>
<tr>
<td>Austria</td>
<td>2.9</td>
<td>8</td>
<td>1.5</td>
<td>11</td>
</tr>
<tr>
<td>Spain</td>
<td>2.6</td>
<td>9</td>
<td>3.1</td>
<td>6</td>
</tr>
<tr>
<td>Greece</td>
<td>1.6</td>
<td>10</td>
<td>1.5</td>
<td>11</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.4</td>
<td>11</td>
<td>9.1</td>
<td>3</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.0</td>
<td>12</td>
<td>1.9</td>
<td>9</td>
</tr>
<tr>
<td>Canada</td>
<td>1.0</td>
<td>13</td>
<td>0.8</td>
<td>12</td>
</tr>
<tr>
<td>Norway</td>
<td>0.5</td>
<td>14</td>
<td>2.0</td>
<td>8</td>
</tr>
<tr>
<td>Other in Europe</td>
<td>1.8</td>
<td></td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Other not in Europe</td>
<td>3.9</td>
<td></td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Pre-accession migrants: aged 15 and over who have been abroad for at least 2 months in the period 1999-2003; Post-accession migrants: aged 15 and over who have been abroad for at least 2 months in the period May 1st 2004-31st December 2006. Source: CMR Migrants’ Database, based on the Polish LFS.
Figure 7: The change in mobility directions. Polish pre- and post-accession migrants by group of destination countries, in per cent

Notes: Pre-accession migrants: aged 15 and over who have been abroad for at least 2 months in the period 1999-2003; Post-accession migrants: aged 15 and over who have been abroad for at least 2 months in the period May 1st 2004-31st December 2006; Destination countries without restrictions: Ireland, UK, Sweden, the NMS (excluding Bulgaria, Malta and Romania); with short-term restrictions: Finland, France, Greece, Island, Italy, the Netherlands, the NMS (including Bulgaria and Romania), Portugal and Spain; with long-term restrictions: Austria, Belgium, Denmark, Germany, Luxembourg, Norway.

Source: CMR Migrants’ Database, based on the Polish LFS.

The British case provides the best example of how lack of labour market restrictions influenced directions of the outflow from Poland. Recent migration from Poland to the UK is one of the most rapid and intense flows in contemporary Europe. According to the UK national insurance system, until the fiscal year 2002/03 (which was April 1st 2002-March 31st 2003) Poles did not constitute any important national group of immigrants (Table 6). However, just one year later over 11 thous. Poles applied for a national insurance number and, thus, became 9th most numerous nationality. Since then Polish migrants have been occupying the first rank among all nationalities entering the British labour market, with 63 thous. applications in 2004/05 (14% of all applications), 171 thous. in 2005/06 (26%) and 223 thous. in 2006/07 (31%).
Table 6: The number of national insurance numbers allocated to foreigners in the UK, by country of citizenship (10 most important) in fiscal years (April 1st-31st March) 2002/03-2006/07

<table>
<thead>
<tr>
<th>Country</th>
<th>2002/3</th>
<th>2003/4</th>
<th>2004/5</th>
<th>2005/6</th>
<th>2006/7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>349,2</td>
<td>370,8</td>
<td>439,7</td>
<td>662,4</td>
<td>713,5</td>
</tr>
<tr>
<td>India</td>
<td>25</td>
<td>31,3</td>
<td>62,6</td>
<td>171,4</td>
<td>222,8</td>
</tr>
<tr>
<td>Australia</td>
<td>18,9</td>
<td>17,1</td>
<td>20,3</td>
<td>30,5</td>
<td>38,8</td>
</tr>
<tr>
<td>South Africa</td>
<td>16,8</td>
<td>19,3</td>
<td>24,4</td>
<td>24,4</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>17,1</td>
<td>20,3</td>
<td>26,4</td>
<td>24,1</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>16,8</td>
<td>19,3</td>
<td>24,4</td>
<td>24,1</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>13,8</td>
<td>14</td>
<td>24</td>
<td>24,4</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>11,7</td>
<td>13,1</td>
<td>13,3</td>
<td>22,3</td>
<td>20,2</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>10,3</td>
<td>11,9</td>
<td>17,2</td>
<td>16,9</td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td>10,1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>10,7</td>
<td>15,5</td>
<td>14,2</td>
<td>15,2</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>10,5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>13,3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>15,2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


According to the Worker Registration Scheme allotted exclusively for the NMS citizens, in the period May 1st 2004-30th September 2007 over 470 thous. Poles entered this country in order to work (Figure 8a). The most intensive inflow took place in 2005 and 2006, mostly in non-winter months. Recently, however, this inflow has been suppressed: in three quarters of 2007 over 110 thous. Poles were registered, which was less than a year before (Figure 8b). Among all NMS citizens Poles constituted the vast majority: 78%.
Figure 8: The number of Polish applications to the WRS (a) and the absolute change respectively to the corresponding period of previous year (b), May 1st 2004-30th September 2007

Source: Accession Monitoring Report (2007), based on the British WRS.

With regard to migration to Germany one remark must be made, namely, the LFS does not include mobility that lasts less than 2 months. This in particular applies to seasonal flows of Polish workers, who in number of almost 280 thous. persons migrate each year from Poland to Germany. If this number was added to the total
of Polish migrants in Germany, the latter, instead of the UK, would remain the main destination for Polish workers. However, when the average length of stay abroad is considered, the United Kingdom became in 2004 the key geographical direction of Polish migrants.

4.3 Characteristics of Polish migrants

According to the Polish LFS, prior to the 2004 EU enlargement the outflow from Poland has been masculinized (men constituted 57% of migrants) and thereafter this feature became even more visible (65%). This, in comparison to 47% of men in general adult population of Poland, reveals high selectivity of outmigration with regard to sex. The rise in men’s general propensity to undertaking international migration was observed in most destination countries.

Another selective force of migration from Poland refers to young persons. The outflow from Poland is dominated by persons aged 20-39, especially aged 20-29, who constituted 45% prior to the EU enlargement and 52% thereafter. Female migrants were on average younger by 1 year than males. Since the EU enlargement the age structure of Polish migrants became significantly younger: the mean age decreased by 1.5 year (from 33.9 to 32.4), whereas the median age by 2 years (from 30 to 28). This change in age structure was mostly caused by the rising importance of Ireland and the United Kingdom among the destination countries. As a matter of fact, these countries attract in particular very young migrants: before the EU enlargement and afterwards the percentage of those aged 20-29 was as high as 70% in the UK, whereas the median age was 25, which was the lowest among all receiving countries. In other words, the increase in share of those going to Ireland and the United Kingdom resulted in the rise in number of young migrants.

Apart from the gender and age, the level of education is another selective factor as far as the outflow from Poland is concerned. In general, in the 1990s Polish migrants were rather low-qualified, which resulted from the fact that institutional restrictions in EU15 pushed Polish migrants into ‘informal’ (‘secondary’) segment of the labour market, which was highly disadvantageous for the highly-skilled. Working abroad was then related rather with performing simple, low-paid and insecure jobs, which could be profitable only for unemployed and low-qualified Poles.

According to the Polish LFS, the pre-and post-accession outflow from Poland was dominated by persons with secondary vocational and vocational degree, who constituted, respectively, 61% and 59% of migrants. After 2004, however, the share of University graduates significantly rose. Every fifth post-accession migrant has graduated from University, which in comparison to 14.3% of University
graduates in the overall population of Poland (in 2004) indicates the appearance of brain drain phenomenon. This is in particular the case of female migrants, out of whom 27% were highly-skilled persons.

Again, just like in the case of age distribution, this change in migrants’ education structure has been caused by increasing dominance of the UK and Ireland among destinations, as those two countries to the greatest extent attract University graduates. The post-accession flow of highly-skilled migrants into the above-mentioned two countries consisted mostly of very young persons: at the moment of the EU enlargement 50% of them were aged 25 and under, further 25% aged 26-27. This leads to the conclusion that many University graduates going to Ireland and the UK have never searched for employment opportunities in the home-country but left Poland straight after finishing education.

From the above analysis appears that the three EU15 member states that did not introduce labour market restrictions, have attracted younger and better educated persons, probably having at least basic knowledge of English (or other foreign languages) than traditional destinations. Most of those young persons who headed for UK and Ireland whatsoever initialized their occupational activity by undertaking international migration. This means that the possibility of working without restrictions in the EU15 gave an impulse for emigration to a new group of persons, mostly those who would not cope with working regulations abroad in the previous time. It might be also probable that, to some extent, young migrants who before May 1st 2004 went to countries other than Ireland, Sweden and the United Kingdom, after the Polish accession have changed their hitherto directions of mobility and moved to the three above-mentioned countries.

This change not only in scale of migration, but also in the socio-demographic structure of migrants, resulted from increasing role of pull factors in migration mechanism. Due to the lack of transitional restrictions in Ireland, Sweden and the United Kingdom, the entrance into foreign labour markets involved little effort and cost and, thereby, little risk. In opposite to what took place prior to the EU enlargement, when migration constituted a necessity for those who could not make their living in the region of origin, thereafter foreign labour markets attracted younger and better educated persons, as these particular features increase the chances of success at the labour market. In this way such pull factors, as possibility of acquiring higher level of financial and human capital started to play a more relevant role than in the previous period.

The higher propensity of migration would not have taken place, if the main post-accession destination countries had not registered economic prosperity and ensuing high demand for labour (expressed inter alia in huge numbers of vacant jobs). The United Kingdom and Ireland serve as good examples of large labour markets
absorbing tens of thousands Polish labour migrants within a very short, two- or three-year period. In this context, however, high percentage of university graduates among migrants in those countries may not be associated with the full use of human capital at destination labour markets. On the contrary, data gathered by the British WRS indicate that, regardless of the level of education, migrants from the NMS are involved mostly in occupations requiring low qualifications. Consequently, limited promotion prospects at the British labour market may result in the wave of returns, especially as far as University graduates are concerned, which could create instability in labour supply.

In spite of the growing role of the pull factors, push factors related to the transition to market economy seem to be crucial as far as the post-accession outbreak of international mobility is concerned. They include relevant problems in the way the Polish labour market functions, such as maintaining high level of unemployment and coming to the fore serious skill mismatches. This is particularly visible in geographic context of the outflow from Poland. Most pre- and post-accession migrants recruit from rural areas and small (less than 50 thous. inhabitants) cities. The share of persons from the two above-mentioned kinds of settlement constituted 70 of pre- and 67% of post-accession migrants, whereas of those from medium (50-100 thous. inhabitants) and large (over 100 thous. inhabitants) cities were, respectively, 10% and 20% of pre-accession, and 9% and 24% of post-accession migrants. Moreover, migrants are mostly recruited from Southern and Eastern Poland. These regions are either rural and underdeveloped (the case of the East and the South-East) or the most populated areas (the case of South-Centre and South-West). This pattern of spatial selectivity of Polish migrants is strongly related to work opportunities at the place of residence.

To summarize, the 2004 EU enlargement has been followed by rapid increase in the scale of international mobility from Poland. This rise was recorded in most European countries, those that introduced and those that did not introduce labour restrictions. However, the latter started to play a more important, or in the case of UK, the key role among destinations. As long as in the period prior to the 2004 EU enlargement Polish migration potential found an outlet in incomplete mobility of temporary, mostly irregular workers to Germany, Italy and US, since May 1st 2004 Polish labour surpluses have been set in motion all over Europe. In fact, Polish accession into the EU triggered off local development, entrepreneurship and proactive attitudes and behaviours, including spatial mobility, among individuals.

The deterioration of the world economic trends in 2008 and 2009 has provoked the questions on possible future migration flows, especially return migration. In 2008 the Central Statistical Office conducted a supplementary LFS based study on inflow of foreigners and return migrants to Poland (CSO 2008b). The latter were defined as Polish citizens aged 15 and over who have been abroad for at least 3 months.
Estimates based on the BAEL survey indicate a notable increase in the scale of return migration in the recent years: as far as the number of return migrants has been constant in the period 2000-2003 at the level of 30-40 thousand annually, it increased in the following years to 60 thousand in 2005 and 213 thousand in 2007. Still, however, the increase in return migration does not pose a transition of Poland from a net sending to a net receiving country.

The recent inflow to Poland has been to a large extent determined by initial plans made by migrants themselves: according to the CSO (2008b), 38% of migrants who returned in 2004-2008 had not planned to stay longer abroad, mostly due to the fact that they had performed only a seasonal or temporary work there. Those who returned due to the change in economic situation in Poland constituted a marginal proportion of all return migrants (2%), whereas those whose contracts abroad had not been prolonged merely 12%. In this context an important point is that most Polish migrants working in the EU members states have already access to the social benefit systems of the receiving countries, which might prevent them from returning to Poland in case of unemployment.

Recent economic developments seriously strengthen the public debate on future migration flows. However, links between economic crisis and migration from Poland are unambiguous. On the one hand, the majority of recent Polish migrants constitute labour migrants. Thus, worse economic conditions in countries of destination are supposed to seriously impact the scale of future outflow from Poland. Additionally, migrants from the New Member States are strongly represented in those sectors of economy which are particularly affected by economic slowdown (construction, manufacturing). Higher living costs in most important destination countries are another factor which could induce more people to return. However, working conditions abroad may still remain better than those in Poland. Moreover, labour force from the NMS proved to be highly flexible and much cheaper than natives. In case of the UK, unemployment rates of Polish migrants are increasing on much smaller pace than those of native labour force. In many cases, economic downturn may lead to shifts from legal to illegal jobs with neutral effect on migration itself. All in all, it is very important not to overestimate the role of world economic trends for future outflows and return migration to Poland. It depends on a complex set of factors which remain unclear for both participants as well as observers of migratory phenomena.
5 Effects of migration on the Polish economy

As described in the previous part, EU-enlargement and the opening of the EU labour markets to Polish citizens has led to massive outflow in post-2004 period. Such a massive migration is supposed to have a significant impact on the economy and society. Following part summarizes recent findings related to demographic and economic effects of post-accession mobility from Poland.

5.1 Demographic effects

5.1.1 Short-term effects

Already quoted estimate of recent migration from Poland provided by the Central Statistical Office speaks of one million and 950 thousand persons as for 1 January 2007. Additionally, from their analysis it follows that the size of that category of the population increased by one million and 70 thousands after 1 May 2004. Due to the fact that over the corresponding period approximately 80 thousand people emigrated from and 25 thousand people immigrated to Poland, the total net loss of population between May 2004 and 1 January 2007 could be estimated at around one million and 100 thousand, i.e. 2.8% of the total population of Poland. With regard to persons at age 15-59 the net loss was slightly higher and equaled 4.0% of the resident population at that age (Okólski, Mioduszewska, 2008).

Following the line of reasoning as presented in the previous part, we will refer now to major demographic and social characteristics. A point of reference should be the share of net outflow in the post-accession period relative to respective resident population (on 1 May 2004), i.e. 3.3% (Kaczmarczyk, Okólski, 2008b):

With regard to sex and age, the outflow of men (net loss – 4.4%) was by more than 50 per cent greater than that of women (2.2%). The largest loss according to age was noted in the group 25-29 years (9.3%) whereas the other groups lost, respectively: 20-24 years – 8.8%, 30-44 years – 3.8%, 45+ years – 1.1% and 15-19 years – 0.8%.

With regard to the educational attainment, three categories of educational attainment - tertiary (university diploma or equivalent), other post-secondary and secondary completed, and vocational - encountered loss of around 4%. In the group with education level lower than vocational the loss was merely 1%. There were, however, considerable differences between males and females. Males with post-secondary (other than tertiary) and secondary education suffered the largest loss (5.8%), followed by those with vocational education (5.4%), tertiary (5.0%) and lower (1.4%). In females the largest

---

3 Due to methodological reasons we are not able to refer to the most recent estimate published in July 2008.
loss was noted among those with tertiary education (3.3%), whereas women with post-secondary and secondary education lost 3.1 per cent, with vocational – 2.4% and with lower – 0.6%.

In a cross-regional perspective the loss varied significantly from 1.8% (Mazowieckie voivodship, including capital city Warsaw) to 7.2% (Podkarpackie voivodship). There were also important differences noted with regard to urban/rural population, type of settlement and sexes. The population loss of rural areas was 3.5% (4.7 and 2.4%, respectively for males and females) and it exceeded the loss of urban areas by 0.4 point. Additionally, in the age group that was the most strongly affected by the population outflow - 25-29 - the loss in the rural population amounted to 9.5% and in the population of medium-sized and small towns to 10.0% whereas in the population of large towns to 8.2%. In the group 20-24 in the two former groups it was 9.6% and in the latter group 7.0%. The largest loss in male rural population was noted in in Podkarpackie voivodship (9.0%) while in male urban population – in Swietokrzyskie voivodship (10.3%). The losses in female rural and urban populations were generally much lower (between 0.6% and 5.9%) (cfg. Figure 9).

To conclude, short-term demographic consequences of the post-accession outflow reflect to a large extent a great variation of the intensity of migration among various groups of the population. Observed patterns are consequence of strong selectivity mechanisms, particularly with regard to sex, age, education, and region of origin. The selectivity analysis might lead to so-called ‘crowding out’ hypothesis claiming that a great part of the post-accession outflow involved redundant workforce living in regions or sub-regions or in some other enclaves with a significant share of semi-subsistence economy⁴. This effect seems to be particularly well taken in case of the south-eastern part of Poland and might suggest a predominance of labour overflow effects (see below).

⁴ This hypothesis, put forward by Marek Okolski, is discussed and evaluated in the chapter “Brain drain, brain gain and brain waste”. It refers to the outflow of economically redundant population from peripheral and rural regions of Poland.
5.1.2 Long-term effects

The assessment of the long-term impact of migration on the demographic structures seems to be an extremely difficult task and it is mainly due to the fact that a large part of recent mobility from Central and Eastern Europe is temporary and/or 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.

The most interesting (and reliable) demographic projection including migration phenomena presented so far was provided by the CEFMR research team (Kupiszewski, 2007). While presenting the forecast for years 2004-2054 the authors took into account different scenarios concerning both internal and international mobility. 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; the alternative scenario was also tested - in case of the ‘high fertility’ scenario a higher pace of increase (0.01 a year) was assumed and 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);

- with regard to mobility, two possible scenarios were considered: 1) ‘Development and Liberalisation’ scenario which assumes economic development (2-5% of annual GDP growth) and gradual liberalization of migration policies, 2) ‘Stagnation and Control’ scenario assuming slow pace of economic development and restrictive migration policies.

**Figure 10: Recent and forecasted structures of Polish population and Polish labour force, 2004 and 2054**

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). Accordingly, in all cases a significant decrease in the number of people is expected by 2054: by 21%, 23% and 13% respectively. However, far more important changes relate to the structure of the population (Figure 10).

Fig 10 shows severe changes in the age structure of the total population and of labour market resources. With regard to the labour force resources 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 which is supposed to have a very significant impact on the Polish labour market and the welfare system.

Moreover, we should expect a serious burden for the Polish labour market (and Polish social security system) regardless of assumed scenario. E.g. 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 still predict a decrease of
the labour force by 12% (to 15.1 million in 2054) (Bijak, 2007). This tendency is clearly visible while analyzing main demographic and labour market indicators (Figure 11).

**Figure 11: Demographic and labour market indicators: base year and forecast, 2004, 2029 and 2054**

![Figure 11: Demographic and labour market indicators: base year and forecast, 2004, 2029 and 2054](image)

Source: Kaczmarczyk, Okólski, 2008a, based on Bijak, 2007: 15.

As shown on Figure 11 Potential Support Ratio is predicted to fall by around 50% till 2029 and by 67-70% (depending on the scenario) till 2054. The value of LMSR (indicating a ratio between the economically active and the inactive population, thus this indicator may serve as a proxy of the overall support of the labour market) in 2004 was equal to 1.18 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 debate) 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).

---

**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);
5.2 Labour market effects – from oversupply to the shortage of labour?

Massive outflow of labour – as observed in Poland and other NMS – is supposed to have a significant impact on the labour market in sending countries, and the list of potential effects include decline in unemployment (in the short term), a rise in the number of vacancies, pressure on wages (in the medium term) and, ultimately, upward occupational (and social) mobility and immigration of foreign labour (in the long term) (Kaczmarczyk, Okólski, 2008b).

Most of the pre-accession public debate concentrated on the first issue and the so-called unemployment export hypothesis. This hypothesis predicts a positive impact of outgoing migration on the situation in the domestic labour market – through assumed outflow of unemployed migration is supposed to be a serious labour market relief.

Figure 12: Unemployment rates in Poland and the Baltic states, 2002-2007

![Unemployment rates in Poland and the Baltic states, 2002-2007](image)

Source: Authors’ elaboration based on the EUROSTAT data

Figure 12 shows that, in fact, since 2004 a serious improvement in the situation on the labour market is observed both in Poland and in other important sending countries of the region. It is important to note that in the pre-accession period, Poland was struggling with serious job shortages and high unemployment (in 2002 the unemployment rate reached approximately 20%). The gradual improvement of the situation in the labour market was already visible in 2003, but has gained much momentum after May 2004. Between the 2nd quarter of 2004 and the 1st quarter of 2007 the number of unemployed individuals decreased from 3.1 million to 1.5 million. In 2007 the unemployment rate (according to LFS) fell to below 10%.

Labour Market Support Ratio (LMSR) is defined as the ratio of the economically active to the economically inactive population (aged 15 years and more).
Moreover, the post-2004 migration seems to have led not only to the reduction of unemployment but also to labour shortages. As suggested already (see part 2.2.2) since 2005 the number of vacancies has been rising rapidly and a growing number of companies have been reporting hiring difficulties. The shortage of workers became particularly severe in construction (where over 30% of companies reported hiring difficulties) and in manufacturing (15%) (cf. Figure 13).

**Figure 13: Share of companies reporting problems with labour supply, by sector (in per cent)**

![Figure 13: Share of companies reporting problems with labour supply, by sector (in per cent)](image)

Source: Kaczmarczyk, Okólski, 2008a.

Since 2007, labour shortages are declared (by companies) as the most important barriers to growth. The average vacancy rate is still relatively low (just over 1% in 2007) but in some sectors (i.e., construction) it has exceeded 5% (NBP, 2007, World Bank, 2007, see also part 2.2.2).

With regard to wages, no significant wage pressure was noted on the aggregate level in the early post-accession phase. Between 2004 and 2006, wages in Poland rose rather moderately (by around 2%, in real terms). However, in 2007, the average monthly salary rose by 9% while in a few sectors the increase was significantly higher (agriculture – 11%, construction – 15.7%). Additionally, since 2006 the increase in real wages is far more dynamic that changes in productivity.
All the arguments presented above strongly support the hypothesis that, since the 2004 enlargement, migration constitutes a serious labour market relief (in terms of unemployment) and, in a relatively short period, it has led to labour shortages. This observation can be supported by the analysis of the relationship between the unemployment rate and the number of Polish migrants staying temporarily abroad (both according to LFS). From the data presented in Figure 15, it follows that from the late 1990s until EU enlargement, unemployment was one of the most important push factors (which is clearly indicated by a very high positive correlation)\(^6\). However, since 2004, the rising intensity of migration was accompanied by declining unemployment, which, in sum, led to an inverse change in the relationship and may suggest a straightforward causal relationship\(^7\).

\(^6\) Pearson correlation coefficient for the period 1999 (4\(^{th}\) quarter) - 2004 (1\(^{st}\) quarter) equaled 0.80.

\(^7\) Pearson correlation coefficient for the period 2004 (2\(^{nd}\) quarter) - 2007 (2\(^{nd}\) quarter) equaled -0.98.
However, the currently available statistical evidence does not permit a general claim to be made that labour migration (even massive migration, as in the post-accession phase) is the primary factor influencing the situation on the domestic labour market. The following points require particular emphasis:

- Since 1989, migration from Poland – a country with significant outflows of persons observed in the pre- and post-transition phase – coincided with a massive restructuring of the economy, which significantly influenced the labour market. In fact, the situation within the labour market is to be understood as an outcome of the interplay of many factors, including economic growth (business cycle), the gradual restructuring of the economy (e.g., the privatization of state-owned companies, inflow of FDI, etc.), long-term developments (see below) as well as the international mobility of persons.

- Additional effects which should be taken into account include: changes in educational system (particularly with regard to vocational education), low rates of internal mobility and low level of occupational mobility (resulting in a very low flexibility of the labour market) and last, but not least, long-term developments (demographic change, technological change, education, etc.).

- Recent analyses of the labour market situation in other CEE countries indicates that the increasing number of job openings is not necessarily a result of outflow, but rather the offshoot of a favourable economic climate (clearly visible in case of Hungary or the Czech Republic, both of which also noted significant job shortages despite the lack of (mass) (e)migration). Notwithstanding it is clear that the interplay between economic growth and mobility almost certainly exacerbates the shortages of skills and workers on the Polish labour market.
An obvious factor that brings about a reduction in the number of unemployed individuals is growth in employment. Indeed, mainly due to very good economic prospects (partially related to the EU accession) the number of employed individuals increased from 13.7 million in 2004 to 15.2 million in 2007. This effect is clearly visible in view of the data presented in Figure 16.

**Figure 16: Migration and labour market phenomena according to the LFS, 2000-2007**

![Graph showing migration and labour market phenomena](image)

Source: Kaczmarczyk, Okólski, 2008b.

If we compare the scale of migration (even as massive as it is in the Polish case) and the scale of other labour market aggregates (employment, unemployment) the most reasonable conclusion appears to be that the outflow of persons cannot influence the situation on the domestic labour market in a very significant way (cf. Figure 16).

The data presented above elicited two additional phenomena which throw the unemployment export hypothesis into question. The first one relates to the economic activity of population: a significant reduction in the number of unemployed individuals observed in last 3-4 years may have resulted from a growing number of inactive persons. This phenomenon is clearly demonstrated by the very low, and decreasing, participation rate (e.g., 53.6% in the 2\textsuperscript{nd} quarter of 2006). It may seem obvious that individuals that left the labour force within the domestic labour market can become international migrants, but this hypothesis cannot be proven on the aggregate level. Data on the micro-level suggest however that in the post-accession period international migration is relatively seldom an ‘escape’ from unemployment\(^8\).

---

\(^8\) According to recent survey data, around 50% of all leaving abroad constituted persons who have had a permanent job before leaving abroad (Kaczmarczyk 2008).
From the preceding analysis it follows that, as we argue, the impact of the post-accession outflow on the Polish labour market is greatly exaggerated. The recent labour market situation is rather an outcome of an interplay between complex set of factors. Within them, migration plays an important, but definitely not decisive, role. Moreover, perhaps the most significant factor is completely absent from most analyses. We argue that the crowding-out phenomenon may be a necessary precondition for newly acceded countries to catch up with the core countries of the EU15. With regard to this hypothesis, the impact of the recent outflow is of extreme importance. Even if it does not directly result in a decrease in unemployment, international migration is bringing about significant changes on the labour market. Notwithstanding it is important to note that although migration had an overall positive impact on the labour market, the changes observed in the latter had much more complex sources.

**Figure 17: Work permits for foreigners, by skill structure and region of origin, 2003 and 2006**

![Graph showing work permits for foreigners, by skill structure and region of origin, 2003 and 2006.](image)

Source: Kaczmarczyk, 2008b.

In the public debate on the current situation on the Polish labour market the immigration of labour slowly becomes a very serious issue. Inflow of foreign workers is supposed to be an answer to massive out-migration and severe labour shortages. Against this background it is important to note that Poland is still a country with relatively limited experiences with immigration. According to official sources the scale of the inflow is low (or very low):

- The 2002 National Census indicated as many as 40.6 thousand foreigners.

- Register data indicated e.g. an inflow of 9.5 thousand in 2004 and 9.4 in 2005; the cumulated inflow for years 1990-2005 equaled 116.6 thousand. As for the end of 2006 the stock of foreigners in Poland was as high as 54.9 thousand (0.14% of the total population).

- Similar results reveals Labour Force Survey data: 58.5 thous. foreigners (0.19% of the total) (in 2006).

- In 2006 the stock of temporary foreigners equaled 37.6 thousand (two major groups: Ukrainians – 28%, and Germans – 8%).
On the other hand, however, several statistics suggest that illegal migration may be of some importance. E.g. in 2004 approximately 62 million of visiting foreigners were reported, in 2006 this number was as high as 65.2 million. In 2006 over 1.3 million visas were issued, most of them in Ukraine (over 600 thousand), the Russian Federation and Belarus.

Consequently, the scale of legal employment of foreigners in Poland is very low. The number of individual work permits issued annually oscillates around 10-15 thousand. Additionally, an interesting tendency is visible while analyzing the skill structure and regions of origins of incoming migrants (cfg. Figure 17).

From the above presented data it follows that:

- A majority of legally employed foreigners concentrate in skilled or highly skilled jobs. It refers not only to persons from the EU15 countries but also from post-Soviet countries. This may suggest that data on work permits reveals only a small – and highly specific - fraction of the immigrant labour market.

- A dual structure of the immigrant labour market is more or less clearly visible. Persons coming from the well-developed countries are employed at managerial positions while migrants from Ukraine, Belarusia and Russia are taking up employment also as unskilled or skilled workers.

To assess the scale of demand on foreign labour in Poland a nationally representative survey among Polish companies was conducted in the 3rd quarter of 2007 (Grabowska-Lusinska, Zylicz, 2008). The sample comprised as many as 5 thousand Polish companies of all sizes. The main task was to estimate the scale of employment of foreigners in Polish economy (during last 12 months – later referred to as ‘real demand’) and plans regarding future employment which seems particularly interesting in the context of recent situation on the labour market (‘potential demand’).

Table 7: Plans regarding employment of foreign labour in Polish companies

<table>
<thead>
<tr>
<th>Plans regarding employment of foreigners</th>
<th>Share of companies (N=5 000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Already employed (or employed in the last 12 months)</td>
<td>0.99%</td>
</tr>
<tr>
<td>There are plans to employ foreign labour</td>
<td>3.30%</td>
</tr>
<tr>
<td>No plans, but perceived as a reliable option</td>
<td>18.20%</td>
</tr>
<tr>
<td>No plans, not reliable option</td>
<td>78.50%</td>
</tr>
</tbody>
</table>

Source: Kaczmarczyk 2008b

From the data presented in table 7 it follows that – so far – the scale of the phenomenon is extremely low. Merely 1% of surveyed companies have had experiences with employment of foreign labour. Additionally, from the analysis of survey data it follows that the average number of persons employed was very low and varied from 1.6 person (micro companies) to 5.5 persons (medium companies). With regard to the ‘potential’ demand, it seems that plans of Polish employers do not necessarily reflect the situation on the market and media pressure – only 3.3% of surveyed companies were planning to employ foreign labour in the near future.
Figure 18: ‘Real’ and ‘potential’ demand for foreign labour in Polish companies, by size, 4th quarter of 2007

Source: Kaczmarczyk 2008b

Figure 18 shows that there is a clear division between companies of different size regarding demand on foreign labour. Only large companies have already had experiences with immigrant employees – in this case the scale of the phenomenon was relatively high: over 25% of companies of this size have already made experiences with employment of foreigners (mainly at managerial positions). On the other hand, growing interest in employing foreigners is visible particularly in case of micro and small companies.

Last but not least, the survey data revealed that, firstly, pattern of employment (in general) reflects the structure of work permits and, secondly, that Polish employers have experiences predominantly with immigrant labour from neighboring countries with strong political, economic and/or cultural ties to Poland.

5.3 Remittances

There are two main reliable data sources available on the total value of remittances to Poland. According to the estimates of the World Bank, officially recorded remittances amounted to 2.710 million USD in 2004, 3.549 million USD in 2005 and 4.364 million USD in 2006. Estimates presented by the National Bank of Poland were based on two major traceable inflows: private transfers and the compensation of employees. In a recently released data set on remittances to Poland a new approach has been applied, namely given the incompleteness of official data and the dramatic increase in the scale of Polish mobility, both official and survey data sources were used to obtain more reliable data on money transferred from abroad (cfg. Table 8).
Table 8: Remittances sent to Poland according to the most recent estimates of the National Bank of Poland, in millions of PLN

<table>
<thead>
<tr>
<th>Category / year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private transfers</td>
<td>4 074</td>
<td>5 911</td>
<td>9 139</td>
<td>11 776</td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>13 110</td>
<td>15 127</td>
<td>17 130</td>
<td>17 506</td>
</tr>
<tr>
<td>Taxes</td>
<td>-1 849</td>
<td>-2 128</td>
<td>-2 402</td>
<td>-2 458</td>
</tr>
<tr>
<td>Expenses abroad</td>
<td>-4 839</td>
<td>-5 578</td>
<td>-6 308</td>
<td>-6 450</td>
</tr>
<tr>
<td>Remittances total</td>
<td>10 496</td>
<td>13 332</td>
<td>17 559</td>
<td>20 374</td>
</tr>
</tbody>
</table>

Notes: Exchange rate (9th April 2008): 1 EUR = 3.45 PLN. According to the methodology applied, total remittances are the sum of private transfers (money transferred by migrants staying abroad for a year or longer) and the compensation of employees (money transferred by short-term migrants) minus taxes paid by short-term migrants and their spending abroad.

Source: NBP 2008

The data presented above indicates a significant increase in the value of money remitted to Poland. Between 2004 and 2007, private transfers increased by 189%, while the compensation of employees by 34%. The total value of remittances in 2007 was 94% higher than it was at around the time of accession, and this change was mainly attributable to the increase in funds sent by persons staying abroad for twelve months or longer. This data indicates a clear shift with regard to the major countries in which migrants temporarily work and reside. In 2004, most private transfers (35%) were sent from Germany, in 2007 from the United Kingdom (34%) and from Ireland (35%)9.

According to data from the World Bank, in 2004 the total of officially recorded remittances to Eastern Europe and the former Soviet countries amounted to 8% of the global value of remittances and 12% of the total remittances received by developing countries (Mansoor, Quillin, 2006). However, in most cases the relative importance of remittances was rather small10. In Poland’s case, the share of remittances was significantly below 2% and remained more or less stable despite massive post-accession outflow of persons: in 2006, remittances constituted around 1.3% of the Polish GDP. According to the recent, updated estimates of total remittances provided by the National Bank of Poland, this share has risen slightly higher but is still relatively low – in 2007 it amounted to 1.8% of GDP. Similar conclusions can be obtained from a comparison between remitted funds with the total value of exports. In 2007 remittances constituted less than 5% of incomes from exports (4.5%). Thus, in Polish case migration should not be perceived as a substitute for international trade. Remittances can appear slightly more important if compared with incoming foreign direct investment. In 2006 the total value of FDI into Poland amounted to 11 093 million EUR. In the same period, remittances totalled 6 344 million EUR. It can be concluded that – along with the growing intensity of migration after May 2004 – the inflow of remittances to Poland has become increasingly significant (but still small in relative terms).

---

9 Increases of 470% and 769%, respectively.
10 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 GDP ranging from 15 to 25%.
Generally, the macro impact of remittances on Poland is rather limited. The relative importance of money sent from abroad is the outcome of a relatively large and quickly-expanding economy. According to the analysis done by Leon-Ledesma and Piracha (2001) migration influences two major GDP components in a statistically significant way – investment and the private consumption, whereby the elasticity with respect to consumption is estimated to be almost twice that of investment. In a relatively large country – such as Poland – these effects should predominantly be reflected on the regional and local scale.

Conclusions from selected studies on Polish sending communities and regions are quite similar: only in exceptional cases does labour mobility have a significant (positive) impact on the local economy (Jazwinska, Okólski, 2001; Jazwinska et al., 1997). This is due to a few reasons. Firstly, the percentage of households receiving remittances is typically relatively low. Secondly, a majority of households spent money almost exclusively on private consumption, mostly because the totality of remittances was not large enough to be invested (e.g., in production). Additionally, communities may become dependent on the transfers of remittances from abroad. Remittances may also have real effects on local economies, although these are not as significant with regard to generating additional consumption or investment demand. Surveys carried out in various regions (among others in Lower and Upper Silesia, Podlasie and Podhale) showed that localities with higher 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.) or tourist facilities. A positive – although limited - impact on entrepreneurship was also noted (Frejka et al., 1998; Jonczy, 2003; Jaźwinska, Okólski, 2001).

Recently, a detailed analysis of the scale and usage of remittances in the pre- and post-accession period was provided by Kaczmarczyk (2008) and was based on an ethnosurvey completed in 2007 in four Polish regions. The average savings of post-2002 migrants amounted to around 2,900 EUR. Spending abroad constituted on average less than 10% of disposable income. As a consequence, the average sum of money transferred back home ranged from 2,300 EUR to 3,400 EUR. According to econometric analyses, the scale of remittances was strongly dependent on the duration of time spent abroad and the destination country (relatively higher in the UK and Ireland), though it depended to lesser degree on the structure of the household. In those households which received remittances, money sent back from abroad turned to be very important part of households’ budgets: on average, remitted money (by one migrant) constituted over 40% of total annual net income; in the case of migrants staying in the UK or Ireland, this share was even higher (over 52%).

\[\text{In this context, the most striking example of the importance of remittances for local economies was recorded in the Opole region. In 2000 the officially-reported disposable monthly income per capita in the Opole region amounted to 630 PLN, but the value including remittances was estimated at 840 PLN. Due to this adjustment, the position of the Opole region in the ranking of all Polish regions should be modified from 10th (among 16 regions) to 1st.}\]
In all communities being surveyed, the highest share of households used remittances in order to finance current expenses (around 46% of receivers). Quite typically, the share of investment spending was very low (around 3% of households). However, a relatively new tendency to invest in human capital was clearly visible: 13% of respondents declared that they spend remittances on their own education, and an additional 18% financed the education of their children. This data must be re-evaluated if we include information not only on the share of households identifying a particular manner of spending but also the value of expenses. The relative value of remittances used to finance current expenses was relatively low and comparable to education expenses. On the other hand, paradoxically, savings and/or investments were generally much higher than other types of spending.

The analysis of allocation methods of recent migrants reveals a strong duality within Polish migration. On the one hand, a large majority of migrants follow a strategy, which, in many cases, may simply boil down to a ‘survival strategy’. It pertained to individuals in a relatively difficult economic situation, often unemployed in Poland, who predominantly used migration to gain additional disposable income for their household budgets. On the other hand, however, in the post-accession phase other strategies play a relatively more important role. The first one (‘financial independence strategy’) was relatively common among young people, who, thanks to money earned abroad, had a chance to gain financial independence, the second (‘development strategy’) comprised relatively well-off people, in whose case remittances were used to cover costs of housing, investment, and education. Interestingly, the latter strategies are not limited to households that find themselves in a relatively more favourable financial situation. The group spending money on education mainly included individuals from households of relatively unsound financial standing, located in peripheral regions – mostly rural areas or tiny towns. This indicates a strong pressure on the side of the Polish labour market, which compels individuals to improve marketable skills or consider a change of career. In this context, the recent outflow from Poland may not only allow for considerable reforms of the labour market (via the ‘crowding-out’ effect) but may also contribute to structural changes within the labour force (with regard to skill mismatch).

6 Conclusions

Poland is a country with a large demographic potential but also, as suggested in the report, with a relatively large number of people who are redundant in economic terms (with particular reference to the labour market). Additionally, it is a country with a long migration history, including long-lasting patterns of labour mobility (at least since early 1970s). Against this background post-enlargement flows cannot be perceived as completely unexpected phenomenon. Notwithstanding, the scale and dynamics of the post-2004 mobility is spectacular: according to the recent estimates provided by the Polish Central Statistical Office between 2004 and end of 2007 the number of Poles staying temporarily abroad more than doubled. Other sources strongly support this observation.
The analysis of available data leads to a set of conclusions related to the institutional framework, particularly to the introduction of the Transitory Arrangements:

- Those countries who imposed no restrictions noted the highest number (and dynamics) of migrants; it refers mainly to Ireland and the United Kingdom, which in a very short period of time became the main destinations for Polish migrants.

- In case of other countries, even if the scale of migration is on the rise, they are losing their importance in relative terms (with Germany as a perfect example).

- Very important changes with regard to structural features were noted. People choosing countries that did not introduce labour market restrictions are, generally, younger and better educated, and are originating from both small and large cities. Migration to these countries means little effort and little risk, additionally there is a chance to take up a legal employment abroad.

Even if scale of the outflow is massive (as it is in the Polish case), migrants still represent relatively small fraction of the population. Therefore, short- and long-term demographic effects of recent migration are very difficult to assess. Notwithstanding, it is important to note very diverse regional patterns of mobility and net losses of population – these effects may seriously impact Polish regional policy in the near future. With regard to the labour market, migration is typically perceived as a main contributor to recent changes leading from shortage of jobs to shortage of workers (as stated in the recent World Bank report). However, the impact of international mobility on labour market situation is exaggerated. As we argue, not only negative but also positive effects should be considered. Among them the so-called ‘crowding-out’ hypothesis seems to be the most important one and suggests that the recent outflow may have very positive long-term effects for Polish economy and society.

Last but not least, an extremely important issue—both with reference to the scale of mobility and its consequences—is the return migration. Since 2007 this particular topic is winning more and more importance in public (and scientific) debates on migration. However, at this stage it would be extremely difficult to provide an in-depth analysis of the phenomena. On the one hand, taking into consideration the scale and patterns of Polish post-accession mobility, it would be highly reasonable to expect a reverse flow of returnees. The only question is the scale and pace of the process. On the other, our knowledge on the process is so far limited to more or less anecdotal evidence. Scientific analyses available exemplify rather methodological difficulties than provide reliable data. Thus, even if the dynamics of the inflow is slowing down (particularly in 2007) there is still no strong evidence showing a massive wave of Polish return migration.

---

12 As a good example the recent IPPR report may serve (Pollard, Lattore, Sriskandarajah, 2008). Authors provided an estimate of around 50 per cent of Polish migrants who supposedly already leave the UK and come back to Poland. However, this estimation is based on comparison of the data coming from completely different sources (WRS and LFS), both imperfect in assessing the scale of mobility (although for different reasons).
7 References


**CSO. 2008.** Informacja o rozmiarach i kierunkach emigracji z Polski w latach 2004-2007 [Information on the scale and directions of emigration from Poland in 2004-2007], Warsaw: CSO.

**CSO. 2008b.** Informacja o badaniach zasobów imigracyjnych w Polsce w 2008 r. [Information on research on immigrant stock in Poland in 2008], CSO: Warszawa.


**Kaczmarczyk, Paweł.** 2005. Migracje zarobkowe Polakow w dobie przemian [Migration for work in the era of change], Warsaw: WUW.

**Kaczmarczyk, Paweł.** 2008a. Cudzoziemscy pracownicy w Polsce [Foreign labour in Poland]. In: Kaczmarczyk, Paweł and Marek Okólski ed. Polityka migracyjna jako instrument promocji zatrudnienia i ograniczania bezrobocia [Migration policy and labour market change], Warsaw: WNE UW.

**Kaczmarczyk, Paweł, ed.** 2008b. Współczesne migracje Polaków – aspekty regionalne i lokalne [Recent migration of Poles – regional and local aspects], Warsaw: CMR UW.

**Kaczmarczyk, Paweł, and Marek Okólski.** 2008a. Economic impact of migration on Poland ant Baltic states, Oslo: FAFO.

**Kaczmarczyk, Paweł, and Marek Okólski, ed.** (2008b). Polityka migracyjna jako instrument promocji zatrudnienia i ograniczania bezrobocia [Migration policy and labour market change], Warsaw: WNE UW.


Pollard, Naomi, Latorre, Maria, and Jaideep Sriskanradajah. 2008. *Floodgates or turnstiles? Post-EU enlargement migration flows to (and from) the UK*. London: IPPR.


Abstract

This study provides a summary on the extent and structure of Romanian permanent and temporary emigration since 1989, its institutional framework, and its economic consequences in Romania. Romanian out-migration has evolved dramatically in the past fifteen years, starting from low levels and the predominance of permanent migration, to assume diverse forms and targeting new destination countries, particularly Italy and Spain, by the new millennium. The stocks of Romanian nationals in these countries increased considerably between 2001 and 2003 in particular. The characteristics of the migrants have also changed, nowadays females provide almost two thirds and prime age individuals provide for half of all permanent migrants, against a higher share of both dependent minors and elders in the early 1990s. Existing evidence suggests the over-proportional participation of the better skilled in migration, pointing at the risk of brain drain. Other effects on the Romanian economy include the emergence of labour and skill shortages that may necessitate higher levels of immigration to Romania, as well as the inflow of large amounts of remittances, that are rarely used for investment though. Based on the existing characteristics of Romanian international out-migration, we do not expect a substantial decrease of migration outflows in the short run.
Contents

1 Introduction ................................................................................................................................. 1
  1.1 Overview of the economic situation and the labour market in Romania ...................... 1
  1.2 Institutions affecting migration in receiving countries and Romania .................. 2

2 Patterns of migration from Romania .......................................................................................... 4
  2.1 Introduction ......................................................................................................................... 4
  2.2 Migration flows from Romania .......................................................................................... 5
  2.3 Stocks of migrants from Romania abroad ........................................................................ 8
  2.4 Short term and irregular migration from Romania ......................................................... 10
  2.5 Characteristics of Romanian migrants ............................................................................. 11

3 Effects of migration on the Romanian labour market and economy ...................................... 16

4 Conclusion ................................................................................................................................ 20

5 References .................................................................................................................................. 24

6 Appendix .................................................................................................................................. 27
1 Introduction

1.1 Overview of the economic situation and the labour market in Romania

After a hesitant start and uneven reform progress all through the 1990s, Romania speeded up its reform efforts after 2000. Getting anchored in the EU enlargement process in 2004 had a mobilizing effect and the country could join the EU at the beginning of 2007. Improvements of economic conditions reduced trade and investment risks and, as a result, credit ratings improved and foreign capital started to flow in massively. Economic growth over the past five years has fluctuated between 8 per cent in 2004 and 4 per cent in 2005 due to heavy dependence on agriculture and the vulnerability of the export structure. In 2007 the growth was 6 per cent and even more is expected for 2008. Growth has been driven primarily by private consumption and fixed capital formation.

The medium-term prospects of the Romanian economy depend on two main factors: restructuring and improving international competitiveness on the one hand, and the capacity to absorb EU funds after accession. If progress is slow in both respects, economic growth will be 4-5 per cent annually, while under favourable conditions it may climb to 6-7 per cent. The current overheated growth rate cannot be maintained for long. Romanian authorities are committed to joining the euro zone in 2014. Especially the inflation target will be hard to be achieved.

Romania has below-replacement fertility, unemployment is low, and at least one million persons of the 12 million labour force work abroad. In late 2007 the activity rate was 62 per cent of the working age population slightly increasing (Institutul National de Statistică, 2008b). It is higher in rural areas than in urban areas because of widespread agricultural self-employment of the population. In recent years unemployment declined from 8.0 per cent in 2004 to 6.4 per cent in 2007 (LFS data, registration is much lower, 6.3 and 4.1 per cent respectively). Also the unemployment rate is higher in urban than in rural areas except for the capital. The vacancy rate increased from 1.75 per cent in the first quarter of 2005 to 2.2 per cent in the first quarter of 2008 higher for high-skill jobs and in the capital (Institutul National de Statistică, 2008a). Labour shortages appeared in several sectors of the economy. Shortages go across all skills and occupation groups with the exception of trade. Most in demand are high skilled technical experts. The labour market is rigid, as despite strong demand, inactivity does not decline as there is a basic lack of skills and an educational deficiency in the rural areas. Migrants (estimated to about one tenth of the population) do not return home as foreign wages are still substantially higher than rapidly rising domestic wages.

Further economic growth is hampered by labour shortages as described above. Construction could reportedly employ an additional 300,000 people. Tight labour markets

---

1 Section 1.1 has been kindly contributed by Gábor Hunya, wiw.
are among the driving forces of wages and the wage drift is driving inflation. In April 2008 the average net real wage was 14.9 per cent higher than a year earlier (RON 1,282 or EUR 350) but unequally distributed among industries. Wage hikes were meagre in the automotive industry and in metallurgy thus export competitiveness could be maintained at least until recent strikes enforced some adjustment. Highest wage growth was in the banking sector, in construction, and in trade, sectors that are booming based on domestic consumption. In the coming years when economic growth may slow down a bit and the currency may again start appreciating, wage growth in euro terms can continue. This could be a higher stimulus for seeking a job at home and not abroad.

Aside from wage levels, opportunities of employment are an important dimension of the decision to migrate for work abroad or not. This dimension relates to the issue of labour market flexibility and the labour market institutions shaping the adjustment capability of labour markets. On this topic, Kotzeva (2008) provides a thorough analysis covering the past decade in Romania. She documents improved labour market flexibility in the 2000s that added to a better functioning of the labour market, among others due to a new labour code adopted in 2003 and changes in the tax and benefit systems offering higher incentives for activity. Nevertheless, she highlights that policy challenges remain in the area of increasing activity, reducing informal work and fostering non-standard forms of employment.

### 1.2 Institutions affecting migration in receiving countries and Romania

Romanian migration has been shaped – both in supporting and constraining ways – by various institutional arrangements on behalf of the receiving countries as well as Romania.²

As concerns long-term migration from Romania into the countries of the European Union, ethnic migration into Germany and Hungary constituted the largest flows over the 1990s. The out-migration of the Romanian citizens of German ethnic origin was generously supported by the repatriation policies of Germany. These policies had been pursued in the years of socialist Romania already, and were continued after 1989. However, conditions of eligibility and procedures of application and admission of the re-settlers were successively tightened in the 1990s (Locher, 2001; Schneider, 2005). Besides, since 1993, eligibility is conditional upon the proof of ethnic discrimination in the sending country, which is reflected in the sharp decline of permanent immigration to Germany in that year (see table 2). In contrast to Germany, as the country with the most numerous ethnic minority population in Romania, Hungary has not fostered the repatriation of its kin population either under socialism or thereafter.

The second half of the 1990s saw the substantial rise of flows of temporary work migration from Romania (see section 2.4). In this respect, the following regulations and institutions were relevant (see Stan, 2006). Until 1 January 2002, the Schengen
countries required Romanian citizens a visa for entry. This made travel for the search of work in the Western economies more difficult and expensive, and allowed easier control of overstays. Interested in preventing nuisance from illegal travel and work of Romanian nationals in the EU, Romania also installed measures to punish visa over-stayers in the late 1990s. Besides, in October 2001, the Romanian authorities introduced exit conditions on foreign travel in order to counter the destination countries’ concerns about inflows of Romanian citizens to become involved in illegal work, begging and criminal activities and thus support the abolition of the Schengen visa requirement.

With the EU entry of Romania on 1 January 2007, its citizens enjoy the right to free labour mobility in the European Union, by 2014 at latest. At the time of accession a number of incumbent EU members still made use of their right to apply transitional restrictions to labour mobility from Romania (as well as Bulgaria): in particular, Austria, Germany, Greece, Ireland, the Netherlands, Portugal and Spain maintained the pre-accession regulations on Romanian labour migration, while Belgium, France, Hungary, Italy and the United Kingdom admitted Romanian workers for specific sectors only, and Denmark, Finland, Sweden and the other new EU members of 2004 basically liberalised the entry to their labour markets of Romanian citizens. As of 1 January 2009 Greece, Spain, Hungary and Portugal have lifted restrictions on the access to their labour markets for both Romanian and Bulgarian workers, while restrictions remain in eleven member states. Denmark, which currently imposes some restrictions, has announced that it will open its labour market for Romanian and Bulgarian nationals together with those from the NMS-8 from 1 May 2009.³

As from the side of the sending country, the Romanian state has increasingly sought to support legal work migration abroad. Among others, in 2000 a law was adopted that stipulates measures to protect citizens working abroad. In 2001, the National Office for Labour Recruitment and Labour Placement Abroad was established to implement bilateral agreements of work migration. In 2000 this institution was transformed into the Office of Labour Migration, while in 2007 its tasks were taken over by the National Agency for Employment (AgenŃia NaŃionala pentru Ocuparea ForŃei de Muncă, ANOFM)(Evenimentul, 2007). The agency is presently maintaining directorates for the implementation of bilateral agreements and for the protection of rights of Romanian citizens working abroad. In 2007 it provided for the placement of 37,639 workers in the context of bilateral agreements, mainly for short term agricultural employment (96 per cent) and overwhelmingly to Germany (74 per cent) and Spain (24 per cent)(Ministerul muncii, familiei şi egalitãŃii de şanse, 2008c). The ministry of labour is maintaining structures to cover policies related to migrant workers. Briefly reviewing the public institutions to support migrant labour, Stan (2006) concludes that the grounds of stimulating legal and preventing irregular forms of work migration have been laid by them, but in practice the respective policies are still in their infancy.

2 For an inventory of the source country institutions shaping Romanian migration abroad, refer to Serban and Stoica (2007).
3 For further details, see http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=442
As a very recent phenomenon, the Romanian ministry of labour has engaged in fostering return migration by organising fairs in Spain and Italy with firms from Romania to lure workers back home, but also offering information on the institutions supporting the labour market and social re-integration of the potential returnees (pension rights, framework and support to establish SMEs, etc.) and surveying the characteristics and expectations of the participants (Ministerul muncii, familiei şi egalităţii de şanse, 2008a, ibid., 2008b). The success of these initiatives remains to be seen.

2 Patterns of migration from Romania

2.1 Introduction

In communist Romania, as any form of foreign travel, out-migration was heavily restricted. Citizens had to request passports from the authorities for each travel abroad. According to Romanian national statistics, 362,464 individuals have emigrated from Romania between 1975 and 1989. Emigration picked up from some 10,000 in the mid-1970s to 32,000 on average p.a. in the last five years of the rule of Ceausescu. Minority groups of citizens, namely those of German, Jewish and Hungarian ethnic origin, had privileged access to emigration. The German and Jewish migrants were heavily over-represented in the outflows in particular, and the Hungarians to a lesser extent (see table 1).

Before the collapse of communism, the citizens of Eastern European countries used to be easily acknowledged as refugees by the Western receiving countries, while their migration was constrained by the source countries. After 1989, the source country restrictions were replaced by tightening legal constraints on long-term immigration on the side of the host countries. At the same time, increased facilities of temporary migration were bilaterally fostered and created by the host countries for specific types of migrants, such and seasonal workers (Baldwin-Edwards, 2005). Post-1989 Romania has experienced substantial migration of its population abroad, permanent, temporary, and circular. Due to the limited coverage of available data, it is difficult to quantify the magnitude of these migrations.

---

4 Considerable populations of German, Hungarian and Jewish ethnic origin historically settled on the post-war Romanian territory and were thus citizens of the Socialist Republic of Romania. The census of 1977 reports the following information on the ethnic composition of the population: Romanians – 87 per cent; Hungarians – 7.9 per cent; Germans – 1.6 per cent; Jews – 0.1 per cent; others – 3.3 per cent. On average over 1975 to 1989, the ethnic composition of Romanian emigration was as follows: Romanians – 35 per cent; Hungarians – 13 per cent; Germans – 44 per cent; Jews – 5 per cent; others – 2 per cent. The emigration of the citizens of German and Jewish origins, as well as their integration into the receiving countries, was strongly supported by Germany and Israel respectively. As a consequence of selective emigration inter alia, according to the census of 2002, only 0.3 per cent of the population of Romania were ethnic Germans, while the percentage of Hungarians fell to 6.6 per cent, and the number of Jews to below 6,000 persons.

5 Other than during communist rule in Eastern Europe, under unconstrained possibilities of return or repeated emigration, any migration decision can be revised so that permanent migration can be established as such only ex post. In this perspective, temporary migration is the norm rather than the exception, while permanent migration is in fact censored temporary migration where the optimum duration of stay exceeds the individual's
Excluding short term and illegal migrations, the following data sets are available on migration flows originating from Romania and stocks of migrants from Romania abroad: (1) the figures published by the national statistical institute of Romania, Institutul National de Statistică (INSSE), on the citizens who settled their permanent residence abroad; (2) the SOPEMI data of the Organisation for Economic Co-operation and Development (OECD) on the numbers of permanent migrants based on population registers, residence permit data, and other national sources of the host countries, and (3) the DIOC data of the OECD that compile census data of individuals aged 15 and older in the OECD members around the year 2000. Below, we report information from these above data sources on post-communist migration flows of Romanian nationals using INSSE and SOPEMI data (section 2.2), and on the respective stocks in the most important receiving countries, using the SOPEMI and the DIOC datasets (section 2.3). Discussing these items, we also highlight the specific limitations of the respective datasets below.

The SOPEMI datasets further contain data on migrant labour stocks in some OECD countries. For the sake of completeness, we show the respective figures in table 6 in the appendix. We disregard of discussing these data in the present paper however, since it is very difficult to compare them across countries and with the other datasets dealt with below, so that very little further insight is provided by them on our topic.

Short term and irregular migration flows have increasingly gained importance in post-communist Romania. As with such flows in general, no comprehensive data exist to allow for their quantification. We will also report existing survey evidence on the extent and nature of such migration (section 2.4). Finally, we will discuss existing knowledge on the characteristics of migrants of the aforementioned types (section 2.5).

### 2.2 Migration flows from Romania

The only comprehensive dataset on the emigration of Romanian citizens in the sense of consistency and coverage of any destination country is the data from INSSE. As these data build on acts of de-registration, however, they can measure migration only to the extent to which migrants terminate their residence status in Romania. The INSSE data are useful to give a lower bound of out-migration that is targeted to be of longer duration or permanent, and they offer insights on the shares to different destination countries in such migration outflows. The limitations of the INSSE data will become clear however when contrasted with other datasets. We will address these limitations below.

According to the INSSE data, emigration from Romania has more than doubled in 1990 against the previous years, to around 100,000 (see table 2). In the years to follow,
migration recorded by the Romanian authorities substantially declined. After a much smaller peak of 25,000 in 1995, annual net migration outflows constantly diminished to just 8,000 in 2002. The most recent years showed a slight increase in the number of individuals who settled abroad to around 9,000-13,000.

The INSSE data reflect a change in the preferred destination countries of permanent Romanian out-migration in 1990 to 2007. The first half of the 1990s was dominated by the exile of citizens of minority ethnic origin (German, Hungarian) to the countries of the respective nation. In this phase, in each year migration to Germany and Hungary made up at least half of the INSSE total. Since the mid-1990s, flows to Canada and the United States increasingly gained importance: in all the years since 1995, migration to these two countries accounted for around one quarter to one third of migration outflows recorded in the INSSE data (in 2001 even more, 44 per cent). Besides, this second period also saw a de-concentration of migrants by destination countries. Finally, since 2000, Italy has been added to the most important host countries of permanent Romanian migration outflows. In the new millennium, Italy had become the most important target country of permanent Romanian migration, accounting for more than 20 per cent of the migration outflows 2002 to 2007. Germany still came very close, providing for just about 20 per cent of the outflows. In the same period, Canada and the United States accounted together for 30 per cent, while nine per cent of permanent Romanian migration was directed to Hungary and the remainder of 21 per cent to various other destinations.

The SOPEMI data collection shows Romanian migration inflows from the point of view of the receiving countries. We report the numbers of inflows from Romania to the OECD countries where such data are available between 1996 and 2006 in table 3.

Although the main receiving countries of Romanian migration are all members of the OECD, these data document the extent of Romanian migration only partially: figures on Romanian immigration are only published for those countries where inflows of Romanians are among the most extensive in relative terms. From among the most important countries of Romanian outflows as suggested by the INSSE data, inflows to the United States are not reported. Besides, the cross-country comparability of the SOPEMI data is impeded by the fact that this dataset is a compilation from national sources, the data definitions of which are not fully consistent across countries. E.g., the immigration flows to the Czech Republic refer only to the population holding permanent or long-term residence permits, while the Italian data also include short-term permits (OECD, 2007).

According to the data presented in table 3, the inflow of Romanian nationals to the countries covered amounted to around 80,000 in 2000, this figure rose to 192,000 in 2006.

---

6 Once the Romanian authorities lifted the barriers to emigration, members of the German minority in Romania relocated to Germany as so-called Aussiedler – that can be translated as resettlers – in large numbers. In 1990, according to German data, some 100,000 Romanian citizens migrated there (of which 60,000 are recorded by the Romanian statistics). In the next decade, another 75,000 persons followed. German migration from Romania phased out by the end of the 1990s (Locher, 2001).

7 These do not include seasonal workers, though.
2006. According to the OECD (2008: 41), the total sum of inflows of Romanians to all OECD countries amounted to 89,000 and 205,000 respectively in these years, which is eleven and five per cent respectively in addition to the totals of table 3 relating to countries such as the US and Germany. The sum of the inflows of table 3 increased especially sharply in 2002 against the previous year, by 63 per cent to 149,000. The annual inflows of Romanian nationals to the OECD countries peaked in 2004 at 202,000, thereafter it diminished slightly.

Within the limits to cross-country consistency mentioned above, the SOPEMI data also show for which OECD countries Romanian immigration was important relative to other inflows, and to what extent. As shown in the bottom part of table 3, Romanian immigration accounted to 2 to 5 per cent of total immigration in Austria, Belgium, Canada, the Czech Republic, Germany, Greece, and Portugal, while it rose to double-digit shares in Italy and Spain in the early 2000s – accounting for around one fifth of the inflows to Italy in 2004 –, and it increased from 30 to 55 per cent over 1996 to 2005 in Hungary (to drop to around one third in 2006). Romanian immigration had a tendency to over-proportionally increase in all countries where these data are available except the Czech Republic, Portugal and Canada. The increase was particularly rapid both in absolute and relative terms in Italy, where Romanian immigration inflows exceeded 50,000 and 60,000 respectively in 2002 and 2004. In the two years to follow, Romanian immigration to Italy abated somewhat, to around 35,000 p.a.

Comparing the SOPEMI and the INSSE data for those countries and years that are covered by both, on average, the INSSE outflows amount to 15 per cent of the SOPEMI inflows. There are, however, large variations, both across countries – between 43 per cent for France and 8 per cent for Italy – and across years for a single country. These differences relate to the fact that migrants may either de-register in Romania with delay after relocating to another country, or that they do not de-register at all but maintain legal residence in their country of origin, be it because this can be done at not cost, or because their migration is intended to be temporary. In any case, the INSSE data should be regarded as the lower bound of Romanian permanent or long-term migration, while the SOPEMI data show the legal inflows above the minimum duration for registration.

The SOPEMI data offer some further interesting facts to note. In the period considered, inflows of Romanian nationals steadily increased for almost all countries where time series are available. The increase was particularly strong in Spain and Italy. This contrasts with declining migration until 2002 as shown by the INSSE data. This may reflect that non-permanent but still longer-term forms of migration gained in importance, such as stays for the purpose of study, or that the migrants increasingly tend not to consider their migration definitive and

8 Inflow data are missing for Italy for the years 2003 and 2005. However, stocks of Romanian migrants in Italy increased extremely sharply in 2003 in particular (see section 2.1.3). The increases in 2004 and 2005 were again less dramatic (see table 4).

9 This may be a matter of choice of the migrants but may reflect increasing difficulties to obtain permanent residence status in the host countries as well.
therefore keep their legal residence Romania. Besides, by the SOPEMI data, Spain emerged as the most important destination country of Romanian migration since 2003.\(^{10}\) However, migrants to Spain apparently tend to keep their Romanian residence status in particularly high numbers, as Spain did not show up as an important destination country of Romanian migration in the INSSE data at all. For those countries that where both sets are available (Austria, Canada, Germany, Italy, Hungary), the comparison of the SOPEMI and INSSE data further shows that flows to Italy are much stronger in relative terms according to the former than to the latter data, while the reverse is true for Canada. This obviously implies that Romanian migrants to Canada rather tend to consider their step as definite and therefore terminate their legal status in Romania, while many Italian migrants maintain the perspective of return or may find it hard to develop a permanent perspective to stay in Italy, and therefore keep their legal status of residence in Romania.

### 2.3 Stocks of migrants from Romania abroad

Table 4 shows the available SOPEMI data on the stocks of migrants from Romania (both in terms of country of birth and nationality where available) from 1996 to 2006. These data are based on residence permits and population registers, and are in the SOPEMI dataset available for those countries where such stocks are relatively numerous. Again, the caveat applies that data on important destination countries from the Romanian perspective: the United States and Germany\(^{11}\) in particular, are not reported. These data show the following. Between 2000 and 2006, the number of Romanian populations at least doubled, both by the standards of nationality and place of birth, but increased in some countries by much more. The increase was particularly strong in Spain, where the stock of Romanian nationals rose from around 31,000 to 507,000. In the countries with time series on Romanian nationals,\(^{12}\) the stocks increased most strongly between 2001 and 2003. The most affected countries were Italy and Spain, the new countries of Romanian immigration. The stock of Romanian nationals in Italy increased from 95,000 in 2002 to 245,000 in 2003, against the background of a large-scale regularisation programme in 2002. Spain also saw a surge of its Romanian population in the early 2000s that surpassed 10,000 in 1999 and amounted to 192,000 in 2005, and again a dramatic increase by 2007.\(^{13}\) In 2006, the countries covered in table 4 together hosted 970,000 Romanian nationals. Note, however, for comparison that the stock of Romanian nationals in the EU-15 reported in Deliverable 2 (table 6a) amounts to 1.1 million persons for that year. According to the data summarised in table 6a of Deliverable 2, in

\(^{10}\) Note that, although the figures on inflows of Romanians to the United States are not available, the reporting thresholds imply that inflows of Romanians to the United States could not exceed the flows from the Russian Federation, which fluctuated between around 10,000 to 20,000 in the decade considered, and were thus well below the inflows of Romanian nationals to Spain.

\(^{11}\) Germany only reports data on stocks of foreigners by nationality instead of country of birth. However, the group of Romanian nationals in Germany is not among the first 15 largest groups of foreign nationals, since the ethnic Germans from Romania and their relatives where privileged in obtaining German citizenship.

\(^{12}\) Namely: Belgium, the Czech Republic, Greece, Hungary, Italy, Portugal, and Spain.

\(^{13}\) The Spanish data exclude stays of less than six months. Spain carried out regularisation programmes in 2000, 2001 and 2005 (Sunderhaus, 2006).
2007 the stock of migrants from Romania in the EU-15 has sharply increased against the previous year to about 1.6 million people. The two datasets are not fully comparable, though, among others due to the different coverage of destination countries considered. In 2000, the SOPEMI figures on the stocks of Romanian nationals in those EU-15 countries for which time series are provided by this dataset (Belgium, Greece, Italy, Spain, Portugal) amounted to 50 per cent of the totals of Romanian nationals in the EU-15 reported in table 6a of Deliverable 2, while this share rose to 83 per cent in 2006, most likely because of the huge increase of the immigrants in Italy and Spain. In the absence of a country breakdown of the figures from the latter, detailed comparisons between the two datasets cannot be done.

The data of table 4 further show that Hungary and Austria are hosts to relatively large numbers of naturalised Romanian-born citizens. In Hungary, some 170,000 Romanian born persons lived in 2006, but only 67,000 were Romanian nationals, reflecting the migration of ethnic Hungarians from Romania.

A more complete picture of the stock of migrants from Romania in OECD countries can be obtained from the DIOC database of the OECD. Table 5 shows the magnitude of Romanian born populations aged 15 and above in the OECD countries at the time of the census round of 2000. The figures relate to populations of those born in Romania, so that naturalised persons are included. Therefore, its coverage is broader than that of the SOPEMI data discussed above on Romanian nationals. One important limitation of this dataset is that information for Germany and the Netherlands is missing.\(^{14}\) Another limitation to its usefulness is that it is somewhat outdated, given that Romanian immigration into some countries evolved very dynamically in the new millennium.\(^{15}\)

According to the DIOC data, the EU-15 countries other than Germany and the Netherlands hosted around 0.25 million Romanian born persons aged 15 and older around the year 2000. Already in that year, Italy and Spain together provided for 50 per cent of these Romanian born in the above EU-15 countries. The next important hosts were Austria (15 per cent), Greece (10 per cent) and France (9 per cent). The data further show that, in addition to the Romanian born population of Hungary of some 135,000 persons (that is mainly composed of ethnic Hungarians) there were some 20,000 Romanian born persons in the other three Visegrád countries as well. Finally, another 220,000 Romanian born persons were found in the rest of the OECD, most importantly in the United States (124,000) and Canada (55,000).

\(^{14}\) According to national statistical sources, in 2000, the populations of Germany and the Netherlands contained 90,094 and 1,397 Romanian nationals respectively. These data are not comparable to the DIOC data though, since they are excluding the naturalised migrants.

\(^{15}\) An important advantage of the DIOC data is that they contain information on the education levels of the foreign population. We will come back to this issue in section 2.5.
2.4 Short term and irregular migration from Romania

The data discussed above refer to longer term migration of Romanian nationals abroad. Romanians nationals have been increasingly involved into moves that are not captured by the above data. In particular, these data typically do not cover short term migrants, tend to exclude seasonal workers, are inconsistent with regard to the coverage of certain categories such as students, and naturally fail to register illegal migration moves. It is commonly held that Romanian nationals participated in such forms of migrations in large numbers as well. We resort to survey findings to gain insights on these topics.

Sandu et al. (2006) is a recent study of temporary migration from Romania. Based on a national survey of 1,400 people, the authors find that ten per cent of the households with at least two members had at least one migrant gone for work abroad at the time of the survey in 2006, with the average number of migrants being 1.34. The authors extrapolate that these figures imply around 777,200 migrant workers for such households on the national level. According to the census of 2002, such households covered only 81 per cent of the population. The above average on migrant household members refers to a point of time instead of giving an average of absent household members during a period of time. In addition to the fact that migrant members of one-person households are necessarily excluded, the participation of the population of Romania in temporary migration abroad measured over, say, the period of one year is likely to be higher.

Horváth (2007) quotes a considerably higher estimate of Romanian nationals working abroad, namely 3.4 million for mid-2007, of which around 1.2 million are held to do so legally. Roughly comparing this number to the estimate of Sandu et al. (2006), such a figure would imply that around four fifth of the population living in one person households were migrants working abroad. Therefore, we consider that the figure of Horváth (2007) is at the higher end of the likely magnitude of Romanian temporary migration.

Sandu et al. (2006) also derive conclusions on the dynamics of temporary migrations and their changing geographical patterns between 1990 and 2005. They first note that the intensity of departures for temporary migration has doubled in the second half of the 1990s as compared to the earlier five years, and again tripled since 2001. Different destination countries dominated these periods respectively: while in the early 1990s, Turkey and Israel were main destinations along with secondary destinations in Italy, Germany and Hungary, flows in the second half of the 1990s increasingly turned to Italy. In the new millennium, around half of the departures from the households sampled turned towards Italy, and another 25 per cent were directed to Spain. As a new tendency

\[\text{...}\]

\[\text{...}\]

\[\text{...}\]

\[\text{...}\]

\[\text{...}\]
in geographical patterns, recent field research in 2005 has found a new shift in destination countries from Italy to Ireland, motivated by labour market discrimination in the former and higher wages in the latter (Stan, 2006).

As said above, Romanian travellers to the Schengen territory were required an entry visa until end-2001. After the lifting of the visa requirement, the Romanian authorities introduced severe exit conditions (see section 1.2). In 2007, the EU entry of Romania has allowed for free travel and stay across the European Union, but stays exceeding three months still may be subject to the proof of subsistence. Finally, several members of the enlarged EU allow for the access of Romanian nationals to their labour markets only within strict limits. In sum, there are several legal constraints to Romanian nationals’ travel and work abroad: attempts to circumvent these constraints produce irregular migrants of various sorts. Naturally, the major share of irregular migrations of any types is not recorded at all (Koser, 2005), which makes it very difficult to quantitatively assess such migrations. From the individual points of view of the migrants, irregularity is often found to be a stage in the migration process: migrants may shift in and out of irregularity during their migration spell(s) (Stan, 2006).

Stan (2006) reviews both the legal constraints constituting irregularity of migration in the Romanian context, the practices prompted to circumvent them, and indicators of the efficiency of the constraints such as numbers of refused exit or of disclosed smuggling networks. He concludes that repressive migration policies do in fact foster irregular migration practices as well as permanent forms of migration, while the release of restrictions supports return migration inter alia. As on the extent of irregular migration in Romania, Stan (2006) quotes an IOM survey of 2005 finding that just 53 per cent of the migrant workers interviewed performed labour abroad under legal contracts. The author conjectures that the true percentage of legal work abroad may be even lower.

### 2.5 Characteristics of Romanian migrants

To evaluate the characteristics of Romanian migrants abroad, we can resort to the above INSSE and DIOC datasets that offer breakdowns by age and education levels respectively, and to different survey studies on the topic, including the results of the Eurobarometer survey of 2002 on the willingness to migrate to the EU evaluated by Krieger (2004). As concerns the INSSE and DIOC datasets, we have

---

19 On the notion of irregularity in the context of migration and the related difficulties, see Koser (2005).

20 Briefly reviewing irregular migration strategies, Lazareou et al. (2003: 20f.) mention an interesting new practice established under Romanian migrants to avoid punishment from overstaying, which consists in sharing long term jobs by several migrants who replace each other in turns of three months.

21 As a survey-based assessment, Krieger (2004) evaluates information on the intentions to migrate to the EU-15 from the Candidate Countries Eurobarometer dataset of April 2002. The study distinguishes three levels of intentions to migrate to the EU: a general interest in living in the EU in the next five years, a basic intention as a choice between target areas for migration (local, regional, international), and a firm intention that is cross-checked with the willingness to live in a country with a foreign language. Results are provided for groups of countries only. The study finds that 5 per cent of the Romanian and Bulgarian citizens have a ‘general inclination’ to migrate to an EU country, while 3.2 per cent show a ‘basic intention’, and again a considerably lower share, 2 per cent, show a ‘firm intention’ to do so. These migration intention rates are considerably
discussed their specific limitations above; the respective caveats apply below as well. On the results of Krieger (2004), note that this study portrays covariates of migration intentions at the specific time of the survey. It is unclear to what extent these characteristics are stable over time and to what extent migration intentions translate into acts of migration. A further shortcoming of the Krieger (2004) study in the present context is that only joint results are reported for Bulgaria and Romania, so that we can only resort to averages\textsuperscript{22} across these countries. Below, we review the characteristics of Romanian migrants looking at their age and gender, education and selectivity in this respect in particular, the labour market status of migrants before their move, the motives for seeking work and a living abroad, the spatial pattern of linkages between source and destination locations, and the migration of ethnic minorities from Romania. We complement the findings from these sources by other survey results were appropriate.

**Age and gender:** Looking at the age structure of migrants, the INSSE data show that the group of those aged between 26 and 40 has been most active to engage in permanent migration. This group provided for around 30 per cent of the “permanent” migrants from Romania in the 1990s, while it sharply increased to well above 50 per cent since 2001. The INSSE data also contain relatively large numbers of dependent minors, around a quarter of the flows in the 1990s, suggesting that those years saw the permanent migration of families with children from Romania. The share of minors dropped to around nine per cent most recently, while the share of those aged 51 and higher similarly dropped from around 22 per cent in 1990\textsuperscript{23} and 15 per cent in the next five years on average to around 9 per cent after 2000: this again is likely to reflect the tightening of the conditions for the permanent migration of families.

In table 5, we report the distribution of the stocks of Romanian born populations aged 15 and more across age groups in the main destination countries except Germany from the DIOC dataset. Note that these data do not imply information on characteristics of migrants at the time of the move, but rather suggest implications on the presence of the diaspora groups in the respective countries. The relatively high percentages of those aged 65 and more in Austria, France and the United Kingdom thus suggest that these migrant stocks have originated from earlier flows, while the fact that flows to Spain and Italy are a more recent phenomenon is documented in the share of Romanian born populations aged between 25 and 64 of between 75 and 80 per cent.

The above patterns suggest that the migration of older citizens was characteristic of the earlier years of transition, when the lifting of very strict previous migration barriers

\textsuperscript{22} Note that Eurobarometer surveys typically have comparable sample sizes across countries, and Krieger’s results are not weighted e.g. by country population size.

\textsuperscript{23} The relatively high share of the elderly in Romanian emigration in the early 1990s is evidently related to ethnic migration and is likely to be supported by the generous pension provision rules to the Aussiedler migrants by Germany.
coincided with relative generous provisions for integration at least in the case of Germany, and with poor and uncertain economic conditions in Romania. Under present the conditions of relatively strict legal barriers to permanent migration but wide de facto possibilities of temporary labour mobility, mobility primarily concerns the younger generations. This has also been confirmed by Krieger (2004) who found that the general inclination to move is highest among people aged 15-24 and is sharply decreasing in the older cohorts. For Romanians and Bulgarians, this pattern is even more pronounced than among NMS citizens.

On the gender structure of Romanian migration, one can note the following. The INSSE data reported in table 7 shows that in longer term migration flows since 1990, females have been slightly dominating, in particular towards the end of the period considered, where the share of males declined to just above one third. This may reflect the increasing importance of family reunion as an entry mode of immigration under conditions of tightening immigration constraints on behalf of the host countries. On the gender structure of temporary work migration, Sandu et al. (2006) have found that almost nine in ten working migrants of the first stage of such migrations were males, while after 2001, the share of females improved to 45 per cent.

**Education:** The DIOC data presented in table 5 show that around the year 2000, the stock of Romanian born populations aged 15 and more in the main destination countries except Germany had the following composition by education: low levels (ISCED 0 to 2): 34 per cent; medium levels (ISCED 3 and 4): 40 per cent; high levels (ISCED 5 and 6): 25 per cent. There are considerable differences across destination countries, though, reflecting immigration policies of the hosts among others. Most visibly, there is a difference between the EU (plus Turkey) and overseas destinations (plus Switzerland) insofar as the former host larger populations with medium and lower levels of education, while the Romanian born populations of the latter have considerably higher shares of individuals with higher education. But there are considerable differences across Romanian born populations in European countries as well. For example, Austria and France host such populations with comparable age structures, but with very different education levels: in the former, average education levels are considerably below those in the latter.

The DIOC data on education levels are particularly interesting when compared with the distribution of the population aged 15 and more at the time of the census round in Romania. In 2002, 49.1 per cent of the respective Romanian population had up to lower secondary education, 43.1 per cent had upper secondary and post-secondary (non-tertiary) education, while 7.7 per cent possessed tertiary education. In this perspective, one can see that the percentage of those with tertiary education is higher in the stocks of Romanian born populations in any of the destination countries of Romanian migration. This cannot be attributed to brain drain to the full extent, because some human capital investment of the migrants is likely to have taken place in the destination country, and the propensity to do so may have been different in the source and host country Romanian born populations. Further, a simple comparison of education levels in the different populations fails to account for the differences in the age structure of these populations.
and the fact of increasing average education in the younger generations. Still, it can be seen that the average education level of the stocks of Romanian born persons abroad is considerably higher than that of the population in the source country. The difference is not so large between the education levels of the source country population and that with rather recent Romanian immigration, such as Italy. Still, the data indicate that some brain drain may be taking place from Romania.

The presumption of brain drain is also strengthened by the findings of Krieger (2004). Evaluating the Eurobarometer data of 2002, this study finds the following distribution of education levels among those Romanians and Bulgarians with a general inclination to move: 37 per cent possess secondary education, 14 per cent have completed tertiary education, 31 per cent are still studying, and 19 per cent have only primary education. Among those with a firm intention to migrate, the better educated are more strongly represented than among those with a general inclination. Although the distribution of education levels among the potential migrants surveyed in the Krieger (2004) context is not fully comparable with the distribution in the stocks of Romanian-born populations as reported in the DIOC dataset (since in the latter, there is no category for ongoing education), it appears that there is a tendency towards increased migration of the better skilled relative to the stocks of migrants already residing in the EU-15 countries.

Focusing on longer term migration from Romania, Radu (2004) offers an interesting econometric assessment of the issue of selectivity with respect to education, with a somewhat different conclusion than the above. Based on the INSSE data and arguing that permanent migration as captured by these data is most relevant with respect to the problem of brain drain and using matched source and host country datasets, he confirms both the higher skill content of Romanians’ migrations to overseas as against EU destinations, and the trend towards increasing shares of higher education in Romanian migration. Besides, the author shows that migrant outflows from Romania are polarised towards the upper or lower end of the human capital distribution. Finally, the econometric results of Radu (2004) confirm the hypothesis that Romanian permanent migration shows positive selectivity in the second half of the 1990s, based on both observable and unobservable characteristics.

**Labour market status:** A matter of high relevance to evaluate the economic effects of migration in both the source and host countries is the labour market status of the migrants prior to the move. On this issue, only survey information is available. Still with the data of 2002 and in combination with Bulgarian data, Krieger (2004) has found that about one third of those with a general inclination to move are employed and students each. Even though the share of students among those with firm migration intentions is

---

24 This latter figure is considerably higher than the percentage of the low-skilled would-be migrants from the NMS of 2004 reported in Krieger (2004), 5 per cent.

25 Still, Krieger (2004) finds a considerable negative gap in terms of education levels of the potential migrants in the accession countries of 2007 against those of the NMS of 2004, which leads him to conclude that the labour market integration of migrants from Romania and Bulgaria may be more difficult than of those from the earlier new EU members.
much lower, the latter draws the attention to the potential risk of youth/brain drain. In addition, a particularly high number of the non-studying inactive (13 per cent) express their general interest to migrate to the EU according to Krieger (2004). These could be discouraged unemployed who have temporarily withdrawn from the national labour market but would seek re-entry abroad. Data on firm intentions to move suggest that a major part of the migrants are likely to be students and persons seeking escape from unemployment. Recent investigations also confirm the tendency that labour migration abroad is an option particularly for those with relatively weak labour market attachment in Romania. Horváth (2008) highlights the widespread inclination towards temporary labour migration among the rural youth, for which this possibility has become a mode of choice for the transition to adulthood. From a nationally representative survey among Romanian households in 2007, Pirciog et al. (2008a) summarize that the willingness to undertake work migration is comparatively high among housewives, unpaid family workers, long term unemployed, self employed and undeclared workers, as well as young people with lack of domestic career development perspectives (see also ibids., 2008b).

**Motives for migration:** Krieger (2004) further offers interesting insights on the motives of those who considered migrate abroad for doing so at the time of the survey, 2002. For Romania, the data show that the predominant motivation for a move were bad economic conditions. In particular, financial reasons were the predominant motive for 54 per cent of the Romanians and Bulgarians with a general inclination to migrate.\(^{26}\) For the new EU members of 2004, the share of those intending to move for financial reasons was considerably lower, at 24 per cent: the importance of the economic motive thus decreased with increasing country wealth. The more recent survey evaluation of Pirciog et al. (2008b) confirms that insufficient income and the lack of appropriate jobs constitute the most important motives for international mobility in the Romanian population.

**Regionalised migration patterns:** As another characteristic of Romanian temporary migration abroad, it has been found that migration flows are very much tied by settlements and regions. More specifically, migrants from one village tend to migrate to the same settlement, and the importance of the destination countries varies across regions of Romania. Sandu et al. (2006) find that flows to Italy were particularly strong from the north-western region of Moldova,\(^{27}\) while Transsilvania in the west of the country showed higher shares of flows to Hungary\(^{28}\), south-eastern Oltenia was dominated by flows towards Canada, south-western Muntenians revealed stronger preferences for Turkey, and migrants from Bucharest tended to predominantly choose Greece. These spatial patterns of migration are related to distance among others (Hungary vs. Greece), but first and foremost they appear to support the hypothesis that

---

\(^{26}\) The other reasons offered in the survey were: dissatisfaction with housing conditions, dissatisfaction with the local community, work-related reasons, and family and other private reasons.

\(^{27}\) Lazaroiu et al. (2003) attribute this to the presence of Italian investors in this part of the country after 1990.

\(^{28}\) This is not surprising insofar as the settlements of the Hungarian minority in Romania are in Transsilvania and other western regions of the country (Banat, Crisana).
social networks play an eminent role to shape migration flows by providing access to information, funds to finance the move, etc.

**Ethnic/national background:** One important dimension of Romanian migration abroad has been its ethnic and nationality structure respectively. We have highlighted above that permanent migration in the first period after 1989 was driven by the exodus of the ethnic minorities from the country. In the latter years, the migration of two distinct groups deserves attention: the Romanian citizens of Roma ethnic origin, and Moldavian citizens who acquired Romanian citizenship after 1989.

There is very little research information on both groups as concerns their migration to the old EU member states. ICMPD (2001) quotes from reliable estimates the figures of 1.8 and 2.5 million as the lower and upper bound of the Roma population in Romania. It is not known whether this population has participated in international migration above or below average. In its account of the Roma migration in the late 1990s, ICMPD (2001) underlines the attempts of Roma migrants of entry into the asylum systems of the EU member states. At present, Roma migration from Romania to Italy in particular is associated with problems of irregularity, lack of labour market and social integration, and perceptions of criminal activities being countered by xenophobia culminating in violence.29

Turning to the issue of Moldavian migration, this is relevant in the context of Romanian migration because of the possibility for the Moldavians to obtain Romanian citizenship that considerably facilitates their travel and stay in the EU.30 In fact, from 1991, Romania offered easy access to Moldavians to Romanian citizenship as a form of repatriation. The extent of Moldavian migration (irrespective of dual citizenships) is estimated between 260,000 and 570,000, but unofficial sources put this number even higher. Around 32 per cent of the migrants are held to be in the countries of the EU (Guțu, 2006). According to Horváth (2007) some 250,000 Moldavian citizens have obtained Romanian citizenship in the 1990s. As Guțu (2006) notes, under the conditions of mass migration of Moldavians with double citizenship, one cannot distinguish between Romanians on one side of the river Prut31 and the other.

### 3 Effects of migration on the Romanian labour market and economy

In the following, we will review the effects of migration on the Romanian economy along some important lines, namely as concerns the under-supply of labour, remittances sent from migrants abroad, potential immigrant labour to Romania, effects of migration on the

---

29 In early November 2007, harsh measures of the Italian authorities against illegal migrants followed a rape and murder committed by a Roma illegal immigrant from Romania. These measures, that included the possibility of expulsion of EU citizens, were held to be tailored against the Roma migrant community from Romania.

30 Note that a part of today’s Moldavia has historically been part of the principality of Moldova that was a predecessor of today’s Romania, and that the difference between the two languages is small, which facilitates flows of information and helps the Moldavians integrate in Romania.

31 The river Prut separates Romania and Moldavia from each other.
formation of human capital, and macroeconomic effects, based on existing data and evidence.

**Labour and skill shortages:** Recently, the new EU member states have seen increased employment, declining unemployment and increased job vacancy rates, which gave rise to worries about labour and skill shortages (Rutkowski, 2007). Romania is no exception in this respect: from 2005 to 2007, the employment rate increased by 0.8 percentage points to 58.4 per cent, while unemployment fell from 7.5 to 6.8 per cent, and the job vacancy rate rose from 1.7 to 2.1 per cent. However, with these values, the Romanian labour market still under-performs in comparison to the average of the EU-27 (Iara et al., 2008). Nevertheless, in Romania too, increasing concerns about labour shortages were voiced in the public (Ciutacu, 2007, Eghbal, 2007, Tanasescu, 2007). Together with the general worry about the undersupply of labour, concerns are expressed in particular about the shortage of specific skills and highly skilled workers. From a recent nationally representative survey, Serban and Toth (2007) have confirmed difficulties of hiring personnel in the construction, textiles and catering and hotel sectors. According to a recent international employer survey, Romania is the country where employers have the most difficulty finding the right people to fill jobs world-wide, with 73 per cent of the employers interviewed reporting such difficulties (Manpower, 2008).

Indeed, among the new EU member states, according to official data, Romania is most affected by migration, in particular of the younger cohorts (Iara et al., 2008). In addition, as discussed in section 2.5, the available evidence suggests that Romanian migration is polarised towards the ends of the distribution of human capital. Yet, labour and skill shortages should not be interpreted as being exclusively caused by international migration. Other factors contributing to difficulties of firms with filling jobs may be business cycle effects, longer years of education, insufficient inter-regional mobility within the country, demographic patterns of ageing populations, and skill biased technological change (Iara et al., 2008). In the framework of the present project, the simulation of the macroeconomic effects of emigration of around 3.2 per cent of the labour force from Romania has resulted in the decrease of the unemployment rate by 0.4 percentage points in the short run and 0.1 percentage point in the long run (Brücker et al., 2008, Table 5.5).

---

32 In the case of Romania, the demographic patterns will be specifically relevant in the medium term. In the years to follow, the generations born immediately after the end of communism are about to enter the labour market. In Romania, the contraction of the generation born after 1989 in comparison with those of the previous years was especially sharp however, against the background of the hardships of transition as well as the cessation of the pro-natalist policies pursued under Ceausescu. In 1989, the rate of live births per inhabitant was at 16.0 per thousand. This rate fell to 11.9 per thousand in 1991 and further declined since to below 10 per thousand in the early 2000s (data from INSSE). Note for comparison that in Hungary this rate declined from 12.1 per thousand in 1985s to 11.0 in 1995 (data from the Central Statistical Office of Hungary). Romania has recorded negative population growth since 1992. As Serban and Toth (2007) argue, the entry of these reduced cohorts into the labour force coincides with the retirement of relatively small cohorts of those born before and after WWII. However, more sudden supply shifts are to be expected when the relatively large cohorts of those born around 1967-68, the time of the introduction of some sharp demographic policy measures, will retire.
Remittances: Among the source country effects of work migration, most important are economic effects channelled via migrants’ remittances. According to the IMF balance of payments statistics, in 2006, remittances received by Romania amounted to 7 per cent of the country’s GDP. In the whole region of the new EU member states and the Western Balkans, this share is only exceeded by remittance receipts in Albania and Bosnia and Herzegovina. The importance of remittances in Romania is put into perspective when compared with FDI inflows: in 2006, these amounted to 9.3 per cent of the GDP.\footnote{Data from the \textit{wiiw} Annual database.} Considering that official figures can only comprise remittances sent via official channels, the total volume of remittances is likely to have exceeded that of FDI inflows.\footnote{For a comparative perspective, see the section on remittances as part of the draft report on the impact of labour mobility on public finances and social cohesion, Workpackage 5.}

Data from the National Bank of Romania offer a breakdown of remittance inflows by source countries for the period of 2005 to 2007.\footnote{The data have been used for empirical analysis by de Sousa et al., 2008. The author thanks José de Sousa and his research team to have obtained insight into the dataset. It is not available for public dissemination, though.} This source of information documents some very interesting features of remittance inflows to Romania. First, it underlines the economic importance of Italy for Romanian work migration, as 38 per cent of the inflows in the period considered stem from this country. Next is Spain, with 23 per cent of the remittances on average. The share of remittances from the United States has increased from 10 per cent in 2005 to 20 per cent in 2007. Remarkably, remittances from Germany accounted for just 7.6 per cent in 2005, and their share dropped to 4 per cent in the next years. In absolute terms, the remittance receipts have increased from all countries with very few exceptions\footnote{In particular, Germany in 2006, and Canada, the Czech Republic and Israel in 2007 against the previous year, respectively.} in the period considered, by an average of 45 and 59 per cent against the previous year respectively in 2006 and 2007.\footnote{Certainly, these data do not give a full picture of remittances as they still exclude exchange and goods brought by the migrants themselves or sent via informal channels. Besides, there may be a certain bias in the economic importance of the originating countries of the remittances insofar as the above data may not consider flows related to the compensation of employees abroad that are not statistically counted as migrants, such as seasonal workers. This form of temporary work abroad may be more common in Germany and Spain.}

Kallai and Maniu (2007) offer a survey based analysis of both the individual characteristics of the remitting migrants, and the use of the remittances in Romania. This study finds that the propensity to remit is negatively related to education, but point at strong country differences in this respect. Besides it is found that around 80 per cent of the remittances from Spain and Italy are predominantly used for consumption purposes. Remittances from Germany are found to be less used for consumption, at 73 per cent, while 27 per cent are channelled into investment. Lazaroiu et al. (2003) similarly state that migrant remittances are predominantly used for long term and everyday consumption goods, arguing that migrants give up ideas of entrepreneurship due to the lack of incentives offered by the Romanian authorities.
**Immigration:** Labour and skill shortages are likely to constrain the growth potential of the Romanian economy in the next years as pointed out above. Migration is one among several causal factors of such shortages. In the light of probably sustained work migration abroad, similar problems of an ageing population as the Western European countries, and improving standards of living, immigration appears inevitable for Romania. At present, the prospect of Romania becoming a host country to labour migration is at its very beginning. For 2005, the INSSE data show only 3704 immigrants, of which almost 2,000 were from Moldavia. In 2002, the census has found a stock of foreigners in Romania including around 28,000 individuals, which is around 0.1 per thousand of the total population. Around a quarter of these immigrants were found to stay less than one year within the country. So far, longer-term immigration into Romania has focused on small-scale entrepreneurship, and, in the case of Moldavian citizens, on study and seasonal work (Lazaroiu et al., 2003). The professional and public discourse on the need for labour immigration, as well as the creation of the respective institutions, has recently commenced and is still in its infancy.\(^\text{38}\)

**Human capital formation, children left behind:** In the context of international work migration, an important issue is how such migration affects the human capital levels in the source country.\(^\text{39}\) The famous brain gain hypothesis stipulates that the opportunity to obtain higher returns to education by migration increases human capital investment in sending countries so that a surplus of better educated remains even in spite of the out-migration of the higher skilled (Mountford, 1997, Docquier and Rapoport, 2007). Empirical evidence on the effect of migration on children left behind shows the complex relationship between migration and human capital formation, and also bears some implications as concerns the brain gain hypothesis (Toth et al., 2007).\(^\text{40}\) It is found that the inability of a working migrant to fulfil his or her parental role reduces school performance of the child. In addition, according to this study, children of migrants indeed tend to value education higher because of the widening of their horizons by the migration experience of the parents, but a countervailing effect is that many of them wish follow the parents to assume low skilled jobs abroad soon instead of continuing their education. On the other hand, examining the Romanian trend of increasing participation in higher education in the presence of continued mass migration, Baldwin-Edwards (2005) argues that Romania appears to show just the sort of link between education and migration that is posited by theory deriving a beneficial brain gain from migration.

---

\(^{38}\) For a recent study on the need for immigrant labour to counter the labour shortages expected to become more severe, see Serban and Toth, 2007. Romania has established an Office for Immigration in June 2007 (Oficiul Român pentru Imigrări, see http://aps.mai.gov.ro / (20.09.2008) and OECD (2008)).

\(^{39}\) Another important dimension of the source country effects concerns the well-being of minors. This latter aspect has received increased public attention in Romania recently, following a case of a child’s suicide obviously related to the psychological effect of abandonment by the migrating parent.

\(^{40}\) Toth et al. (2007) have discovered that at least one parent of up to 18 per cent of the schoolchildren aged 11 o 14 is working abroad. In one fifth of the cases, both parents are working migrants who leave their children to relatives. Toth et al. (2007) also find positive effects of parents abroad on the well-being of the children in particular in terms of material wealth. Besides, it is found that the negative effects of the absence of a parent are not different from the lack of a parent due to other circumstances such as divorce.
**Macroeconomic effects:** The overall macroeconomic effects of the emigration of labour in the case of Romania are widely under-explored. The simulations of the macroeconomic effects of east to west European migration and the transitional arrangements on the European economies carried out in the framework of the present project contain specific results for Romania as well (Brücker et al., 2008). In particular, the effects of the migration of around 3.2 per cent of the labour force in the period from 2004 to 2007 on GDP, natives’ factor income, unemployment and wages are explored in the short run – assuming only partial adjustments of the capital stock to the change in labour supply – and the long run – that allows for the full adjustment of the capital stock. Factor incomes to natives are calculated under the assumption that migrants do not take capital abroad. The results as concerns unemployment are referred to above. As concerns the other macroeconomic aggregates, the negative labour supply shock is simulated to reduce GDP by 2.5 per cent in the short run. The long run response is even stronger, 3.3 per cent. In per capita terms, GDP is expected to increase first (by 0.8 per cent) but decline slightly once the capital stock adjusts (0.1 per cent). The factor income accruing to the resident natives is simulated to change at the same magnitude as GDP per capita. Finally, the country is to expect a wage increase of 0.6 per cent in the short run, but wages will return to their levels before the negative labour supply shock in the long run.

The simulation exercise of Brücker et al. (2008) considers as well a situation where the transitional restrictions would be maintained as long as possible. Once the restrictions were lifted – in the case of Romania, this is scheduled at 2014 at latest –, the following macroeconomic effects are simulated to be observed: the labour force would decline by 0.4 per cent, resulting in a decline of GDP by 0.3 per cent but a very moderate increase of GDP per capita and natives’ factor income (0.1 per cent). Unemployment is expected to decline by 0.05 percentage points, while wages will rise by 0.06 per cent. All in all, both the expected migration upon liberalisation of the labour market and its macroeconomic effects are small.

### 4 Conclusion

Romanian migration has commenced in more substantial numbers only after 1989. Since then, large numbers of Romanian nationals have sought a living abroad. Permanent migration was particularly high in the first years of transition and rapidly decreased thereafter, due to constrained possibilities of obtaining long term residence and work status in the host countries. In contrast, temporary migration has been found to evolve very dynamically, with shifting countries of destination. Romanian citizens still participate in temporary work migration in very high numbers, and other than in some new EU member states, there is no evidence that such migration has reached its climax.

What can be expected about Romanian migration in the future? Will the migration flows continue at their present pace? Will return migration intensify? Will new spatial patterns establish? What implications are to be expected for the Romanian economy? Existing survey and anecdotal evidence suggests that, irrespective of the legal constraints, large numbers of Romanian citizens already take the chance of labour migration at present,
and be it only under the premises of irregularity. Therefore, we do not expect that the level of participation in labour migration among the Romanian households will substantially increase. Turning now the factors that may decrease Romanian migration flows abroad, the Romanian economy is presently witnessing a period of rapid growth. Still, wages in Romania are well below the earnings available from unskilled work in Western Europe. Wage increases in the near future will not be able to reduce the earnings gap enough to substantially reduce temporary migration, although they can be expected to have some mitigating effect on migration outflows. However, as existing evidence suggests, those who are most likely to engage in temporary work migration are those with rather weak domestic labour market attachment. Romania has still a long way to go to increase domestic labour force participation to European averages, let alone to Lisbon targets. Although skill shortages exist, the education and vocational training systems have so far proven insufficient to foster a better match of supply and demand. The correction of these structural issues cannot be expected overnight, so that young labour market entrants in particular are still likely to encounter difficulties in their career development, which may sustain flows of temporary migration abroad. Besides, in the Romanian society there exist widespread experiences with work migration, which may encourage potential migrants to explore new destinations. There is one factor, however, that can be expected to mitigate labour outflows from Romania: the fact that the numbers of newborns per year have massively declined after 1989. This will lead to declined supply of potential migrants, bearing in mind that it is predominantly the younger cohorts who are inclined to migrate. All in all, improving economic conditions and demographic factors can be expected to contribute to some moderation in the numbers of potential migrants. We do not, however, expect a substantial decline of Romanian migration soon, as the Romanian economy will still fail to provide sufficiently attractive employment and earnings perspectives for considerable parts of the population and of those living in the countryside and the youth in particular.

As concerns the receiving countries of Romanian migration, there have recently been changes in the situation in the two most important destinations. In Italy, xenophobia against Romanian migrants has increased. Although it is mainly targeted at migrants of Roma ethnic origin, it may have some deterring effect to other migration from Romania as well. The other important receiving country of Romanian labour migration, Spain, is experiencing an economic downturn at present, where the construction industry is particularly affected. Therefore, we can expect decreasing demand for temporary migrant labour in Spain. As other potential receiving countries of Romanian migration, most EU member states have not yet opened up their labour markets to the EU entrants of 2007. Anecdotal evidence from the United Kingdom reports decreasing inflows from and rising return flows to Poland, the most important sending country of labour to date. For the western European receiving countries, opening up the labour markets for Romanian migrants may be an option once the supply from the nearer source countries declines, certainly conditional upon demand for migrant labour. Romanian migration has proven flexibility in terms of exploring new destinations and establishing respective migrant networks. Therefore, depending on the economic and institutional conditions set for
Romanian migrant labour, some shift in its geographical pattern could be expected in response to institutional and economic conditions.

In summary, we expect sustained levels of migration from Romania irrespective of the conditions on the side of the receiving countries’ institutions and the Romanian economy, and perhaps a shift in the destination countries in response to institutional and economic changes. There is one respect by which a change in the regulatory conditions on behalf of the receiving countries could make a substantial difference, through: namely, the length of migration spells. Changing legal conditions may not increase the de facto number of migrants, but they may induce the shift of migrants from irregularity to lawful conditions of work and stay, and family reunifications in the host country. It is known that irregularity represents just one of different modes of more complex individual migration processes. Little is known, to date, about the distribution of Romanian labour migrants across various forms of migration such as one-off temporary migration, repeat and circular migration, return, and permanent migration. We could expect that opening up possibilities of lawful stay and more stable work relationships may increase the number of labour migrants heading for a longer term and perhaps even permanent stay in the host country. This would imply the increase of the stocks of such migrants in the respective receiving country, as witnessed in the wake of the regularisation programmes and relatively liberal admission policies in the southern European hosts of Romanian migration. Certainly, the extent of long term Romanian migration depends on a number of other issues as well, such as linguistic and cultural proximity (here, Spain and Italy have advantages from the Romanian point of view against, say, Nordic countries), the prospects of durable labour market and social integration of migrant labour, the economic conditions and alternatives in the source country, to name a few. Therefore, in the medium term and upon the admission of Romanian nationals to the labour markets of the incumbent EU members, we expect increasing stocks of populations of Romanian origin in the more western European countries. Available information, however, does not enable us to quantify the range of such an increase to date.

As concerns the implications for the Romanian economy, remittances have so far been found to bear little effect on investment and entrepreneurship. Still, large numbers of households could improve their housing and equipment with durable goods among others. Nevertheless, we think that the positive direct effects for the Romanian economy of remittances have been rather small. As concerns labour and skill shortages, the need for migrant labour in Romania seems inevitable, but the legislation and the society in Romania appear insufficiently prepared. Therefore, it appears likely that continued labour shortages are going to constrain the functioning of the Romanian economy to some extent.

41 As another potential positive effect of temporary migration, one could expect that inflows of return migration ‘grease the wheels’ of the source economy just as it has been hypothesised for the host countries by Borjas (1999), i.e. that it contributes to labour market adjustment by improving the spatial allocation of labour. We have doubts, however, that return migration could fulfil its role, since target savings from temporary migration
Drawing up a balance of the effects of migration on the Romanian economy and society would require the consideration of a number of other effects that are difficult to assess, such as the implications of migration on public finances. Drawing up such a balance is beyond the scope of the present report. Having drawn the attention to some of the controversial effects of labour migration on the Romanian economy, we would like to conclude with pointing at an area where positive effects can be expected from migration experiences: namely, the acquisition of new skills and values by returning migrants, and their broadened horizons. It can be hoped that via this channel, that is very hard to assess empirically, large scale migration will make a contribution to the development of the Romanian economy and the development of its social and political institutions.

are often used for the construction of owner-used housing in the sending regions of migration, which obviously contributes to reduced domestic labour mobility.
5 References

Baldwin-Edwards, Martin, 2005, Migration policies for a Romania within the European Union: navigating between Scylla and Charybdis, Mediterranean Migration Observatory working paper no. 7.


Brücker, Herbert et al., 2008, Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements, draft final report, Nuremberg.

Ciutacu, Constantin, 2007, Growing concern over labour shortage due to migration, Dublin: European Foundation for the Improvement of Living and Working Conditions.

Docquier, Frédéric, and Hillel Rapoport, 2007, Skilled migration: the perspective of developing countries, IZA discussion paper no. 2873.


Iara, Anna, Robert Stehrer, and Hermine Vidovic, 2008, Tightening labour markets, in Peter Havlik, Mario Holzner et al., Weathering the global storm, yet rising costs and labour shortages may dampen domestic growth, wiwi Current analyses and forecasts no. 1 – Economic prospects for central, east and south-east Europe, Vienna, pp. 101-115.


ICMPD, 2001, Current Roma migration from the EU candidate states: the scope and features of Roma irregular movements, the reactions of the host countries and the effects on the EU candidate states, a project financed under the EU Odysseus programme, mimeo.


Kotzeva, Mariana, 2008, Adjustment capacity of Romanian labour market to external shocks, paper elaborates in the framework of the project Adjustment capacity to external shocks of EU candidate and potential EU candidate countries of the Western Balkans, with a focus on labour markets commissioned by the European Commission, DG ECFIN, Vienna: wiiw.


Pirciog, Speranta, Ana-Maria Zamfir, and Cristina Mocanu, 2008b, Employment opportunities as a driving force for internal and external migration, National Research Institute for Labour and Social Protection (INCSMPS), Bucharest, mimeo.

Radu, Dr.ogos, 2004, Human capital content and selectivity of Romanian emigration, Hamburg Institute of International Economics (HWWA), mimeo.

Rutkowski, Jan, 2007, From the shortage of jobs to the shortage of skilled workers: labor markets in the EU new member states, IZA discussion paper no. 3202.


### 6 Appendix

#### Table 1: Emigration of Romanian citizens by ethnicity, 1975 to 2007

<table>
<thead>
<tr>
<th>year</th>
<th>total</th>
<th>% Romanian</th>
<th>% German</th>
<th>% Hungarian</th>
<th>% Jewish</th>
<th>% other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>10701</td>
<td>30.60</td>
<td>40.11</td>
<td>6.55</td>
<td>20.33</td>
<td>2.41</td>
</tr>
<tr>
<td>1976</td>
<td>9336</td>
<td>34.29</td>
<td>34.28</td>
<td>8.13</td>
<td>21.41</td>
<td>1.90</td>
</tr>
<tr>
<td>1977</td>
<td>17810</td>
<td>26.83</td>
<td>55.08</td>
<td>7.96</td>
<td>7.88</td>
<td>2.26</td>
</tr>
<tr>
<td>1978</td>
<td>19780</td>
<td>29.61</td>
<td>55.58</td>
<td>6.88</td>
<td>6.07</td>
<td>1.87</td>
</tr>
<tr>
<td>1979</td>
<td>17084</td>
<td>35.90</td>
<td>50.44</td>
<td>6.19</td>
<td>5.72</td>
<td>1.74</td>
</tr>
<tr>
<td>1980</td>
<td>24712</td>
<td>33.49</td>
<td>55.07</td>
<td>5.62</td>
<td>4.40</td>
<td>1.43</td>
</tr>
<tr>
<td>1981</td>
<td>20886</td>
<td>39.55</td>
<td>47.63</td>
<td>6.36</td>
<td>4.83</td>
<td>1.63</td>
</tr>
<tr>
<td>1982</td>
<td>24374</td>
<td>40.00</td>
<td>44.94</td>
<td>7.61</td>
<td>5.75</td>
<td>1.70</td>
</tr>
<tr>
<td>1983</td>
<td>26300</td>
<td>36.47</td>
<td>51.11</td>
<td>6.45</td>
<td>4.51</td>
<td>1.46</td>
</tr>
<tr>
<td>1984</td>
<td>29894</td>
<td>35.68</td>
<td>48.25</td>
<td>8.50</td>
<td>5.78</td>
<td>1.78</td>
</tr>
<tr>
<td>1985</td>
<td>27249</td>
<td>37.70</td>
<td>47.01</td>
<td>8.93</td>
<td>4.25</td>
<td>2.11</td>
</tr>
<tr>
<td>1986</td>
<td>26509</td>
<td>35.50</td>
<td>41.62</td>
<td>15.63</td>
<td>4.10</td>
<td>3.14</td>
</tr>
<tr>
<td>1987</td>
<td>29168</td>
<td>39.35</td>
<td>39.90</td>
<td>13.18</td>
<td>4.37</td>
<td>3.20</td>
</tr>
<tr>
<td>1988</td>
<td>37298</td>
<td>34.53</td>
<td>28.79</td>
<td>31.44</td>
<td>2.81</td>
<td>2.43</td>
</tr>
<tr>
<td>1989</td>
<td>41363</td>
<td>35.65</td>
<td>35.29</td>
<td>24.42</td>
<td>2.44</td>
<td>2.21</td>
</tr>
<tr>
<td>1990</td>
<td>96929</td>
<td>24.64</td>
<td>61.98</td>
<td>11.39</td>
<td>0.77</td>
<td>1.22</td>
</tr>
<tr>
<td>1991</td>
<td>44160</td>
<td>43.72</td>
<td>35.25</td>
<td>16.97</td>
<td>1.17</td>
<td>2.89</td>
</tr>
<tr>
<td>1992</td>
<td>31152</td>
<td>58.12</td>
<td>28.42</td>
<td>11.31</td>
<td>0.72</td>
<td>1.44</td>
</tr>
<tr>
<td>1993</td>
<td>18446</td>
<td>47.78</td>
<td>32.23</td>
<td>17.38</td>
<td>1.20</td>
<td>1.41</td>
</tr>
<tr>
<td>1994</td>
<td>17146</td>
<td>59.17</td>
<td>23.71</td>
<td>14.63</td>
<td>1.03</td>
<td>1.45</td>
</tr>
<tr>
<td>1995</td>
<td>25675</td>
<td>72.86</td>
<td>11.32</td>
<td>14.05</td>
<td>0.51</td>
<td>1.26</td>
</tr>
<tr>
<td>1996</td>
<td>21526</td>
<td>77.89</td>
<td>10.75</td>
<td>9.78</td>
<td>0.89</td>
<td>0.69</td>
</tr>
<tr>
<td>1997</td>
<td>19945</td>
<td>84.65</td>
<td>6.38</td>
<td>7.32</td>
<td>0.68</td>
<td>0.97</td>
</tr>
<tr>
<td>1998</td>
<td>17536</td>
<td>86.69</td>
<td>4.42</td>
<td>6.94</td>
<td>1.13</td>
<td>0.82</td>
</tr>
<tr>
<td>1999</td>
<td>12594</td>
<td>89.59</td>
<td>3.10</td>
<td>5.53</td>
<td>0.88</td>
<td>0.91</td>
</tr>
<tr>
<td>2000</td>
<td>14753</td>
<td>91.09</td>
<td>2.54</td>
<td>5.34</td>
<td>0.45</td>
<td>0.59</td>
</tr>
<tr>
<td>2001</td>
<td>9921</td>
<td>90.95</td>
<td>1.44</td>
<td>6.52</td>
<td>0.73</td>
<td>0.36</td>
</tr>
<tr>
<td>2002</td>
<td>8154</td>
<td>91.55</td>
<td>0.82</td>
<td>6.00</td>
<td>0.34</td>
<td>1.29</td>
</tr>
<tr>
<td>2003</td>
<td>10673</td>
<td>92.63</td>
<td>0.19</td>
<td>6.19</td>
<td>0.22</td>
<td>0.77</td>
</tr>
<tr>
<td>2004</td>
<td>13082</td>
<td>90.89</td>
<td>0.28</td>
<td>8.12</td>
<td>0.28</td>
<td>0.44</td>
</tr>
<tr>
<td>2005</td>
<td>10938</td>
<td>94.18</td>
<td>0.85</td>
<td>4.21</td>
<td>0.44</td>
<td>0.33</td>
</tr>
<tr>
<td>2006</td>
<td>14197</td>
<td>93.65</td>
<td>0.60</td>
<td>4.88</td>
<td>0.38</td>
<td>0.49</td>
</tr>
<tr>
<td>2007</td>
<td>8830</td>
<td>97.27</td>
<td>0.14</td>
<td>1.89</td>
<td>0.24</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Source: Institutul National de Statistică.
Table 2: Emigration of Romanian citizens by country of destination, 1990 to 2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Austria</th>
<th>Canada</th>
<th>France</th>
<th>Germany</th>
<th>Greece</th>
<th>Italy</th>
<th>USA</th>
<th>Hungary</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>3459</td>
<td>1894</td>
<td>576</td>
<td>1130</td>
<td>76</td>
<td>143</td>
<td>4924</td>
<td>10635</td>
<td>6564</td>
<td>96929</td>
</tr>
<tr>
<td>1991</td>
<td>4630</td>
<td>1661</td>
<td>354</td>
<td>1396</td>
<td>528</td>
<td>80</td>
<td>5770</td>
<td>4427</td>
<td>4409</td>
<td>44160</td>
</tr>
<tr>
<td>1992</td>
<td>3282</td>
<td>1591</td>
<td>143</td>
<td>528</td>
<td>528</td>
<td>87</td>
<td>5770</td>
<td>4726</td>
<td>3734</td>
<td>31152</td>
</tr>
<tr>
<td>1993</td>
<td>1296</td>
<td>1523</td>
<td>88</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>1994</td>
<td>1256</td>
<td>2286</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>1995</td>
<td>2276</td>
<td>2123</td>
<td>93</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>1996</td>
<td>915</td>
<td>2331</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>1997</td>
<td>1551</td>
<td>2311</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>1998</td>
<td>941</td>
<td>2311</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>1999</td>
<td>468</td>
<td>2518</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2000</td>
<td>270</td>
<td>2483</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2001</td>
<td>167</td>
<td>1437</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2002</td>
<td>293</td>
<td>1444</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2003</td>
<td>326</td>
<td>1445</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2004</td>
<td>491</td>
<td>1220</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2005</td>
<td>421</td>
<td>1655</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2006</td>
<td>581</td>
<td>1787</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
<tr>
<td>2007</td>
<td>313</td>
<td>1787</td>
<td>87</td>
<td>1580</td>
<td>645</td>
<td>93</td>
<td>4726</td>
<td>3674</td>
<td>453</td>
<td>18446</td>
</tr>
</tbody>
</table>

Destination country's share in total

<table>
<thead>
<tr>
<th>Country</th>
<th>Austria</th>
<th>Canada</th>
<th>France</th>
<th>Germany</th>
<th>Greece</th>
<th>Italy</th>
<th>USA</th>
<th>Hungary</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>3.6</td>
<td>10.5</td>
<td>7.0</td>
<td>7.3</td>
<td>8.9</td>
<td>4.3</td>
<td>7.8</td>
<td>5.4</td>
<td>3.7</td>
<td>100</td>
</tr>
<tr>
<td>Canada</td>
<td>2.0</td>
<td>3.8</td>
<td>5.1</td>
<td>10.4</td>
<td>8.9</td>
<td>9.9</td>
<td>11.7</td>
<td>11.1</td>
<td>12.9</td>
<td>17.1</td>
</tr>
<tr>
<td>France</td>
<td>1.7</td>
<td>3.4</td>
<td>4.0</td>
<td>5.1</td>
<td>4.6</td>
<td>5.6</td>
<td>10.1</td>
<td>5.7</td>
<td>4.8</td>
<td>17.1</td>
</tr>
<tr>
<td>Germany</td>
<td>68.2</td>
<td>45.3</td>
<td>44.3</td>
<td>37.3</td>
<td>40.1</td>
<td>35.1</td>
<td>30.0</td>
<td>29.1</td>
<td>22.2</td>
<td>18.8</td>
</tr>
<tr>
<td>Greece</td>
<td>0.6</td>
<td>0.8</td>
<td>0.5</td>
<td>0.4</td>
<td>0.5</td>
<td>0.8</td>
<td>1.3</td>
<td>1.2</td>
<td>1.8</td>
<td>8.7</td>
</tr>
<tr>
<td>Italy</td>
<td>1.2</td>
<td>3.2</td>
<td>1.7</td>
<td>3.5</td>
<td>9.2</td>
<td>8.5</td>
<td>7.6</td>
<td>8.6</td>
<td>10.7</td>
<td>17.1</td>
</tr>
<tr>
<td>USA</td>
<td>5.1</td>
<td>3.1</td>
<td>6.7</td>
<td>6.7</td>
<td>6.3</td>
<td>8.9</td>
<td>14.8</td>
<td>14.3</td>
<td>16.4</td>
<td>18.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>11.0</td>
<td>10.0</td>
<td>15.2</td>
<td>19.9</td>
<td>10.4</td>
<td>9.8</td>
<td>6.9</td>
<td>6.2</td>
<td>7.4</td>
<td>15.7</td>
</tr>
<tr>
<td>Other</td>
<td>6.8</td>
<td>10.0</td>
<td>12.0</td>
<td>9.6</td>
<td>12.7</td>
<td>13.5</td>
<td>15.1</td>
<td>15.4</td>
<td>20.2</td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Institutul National de Statistică.
### Table 3: Inflows of Romanian population to selected OECD countries, 1996 to 2006

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inflows of Romanian population, thousands</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>1.5</td>
<td>1.8</td>
<td>1.9</td>
<td>2.4</td>
<td>4.2</td>
<td>5.1</td>
<td>5.3</td>
<td>5.3</td>
<td>4.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>0.3</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>3.7</td>
<td>3.9</td>
<td>3.0</td>
<td>3.5</td>
<td>4.4</td>
<td>5.6</td>
<td>5.7</td>
<td>5.5</td>
<td>5.7</td>
<td>5.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.0</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>France</td>
<td>0.6</td>
<td>0.9</td>
<td>0.9</td>
<td>1.2</td>
<td>1.5</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.8</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Germany</td>
<td>17.1</td>
<td>14.2</td>
<td>17.0</td>
<td>18.8</td>
<td>24.2</td>
<td>20.3</td>
<td>24.0</td>
<td>23.8</td>
<td>23.5</td>
<td>23.3</td>
<td>23.7</td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>4.2</td>
<td>4.0</td>
<td>5.5</td>
<td>7.8</td>
<td>8.9</td>
<td>10.6</td>
<td>10.3</td>
<td>9.6</td>
<td>12.1</td>
<td>10.3</td>
<td>6.8</td>
</tr>
<tr>
<td>Italy</td>
<td>5.9</td>
<td>20.9</td>
<td>20.7</td>
<td>18.7</td>
<td>50.2</td>
<td>62.3</td>
<td>37.2</td>
<td>32.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>7.8</td>
<td>3.2</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Spain</td>
<td>0.5</td>
<td>1.8</td>
<td>17.5</td>
<td>23.3</td>
<td>48.3</td>
<td>55.0</td>
<td>89.5</td>
<td>94.0</td>
<td>111.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Share of Romanians in total migrant inflows, per cent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>2.5</td>
<td>2.5</td>
<td>2.9</td>
<td>3.2</td>
<td>4.5</td>
<td>5.2</td>
<td>4.9</td>
<td>5.2</td>
<td>5.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>0.6</td>
<td>0.8</td>
<td>1.0</td>
<td>1.2</td>
<td>1.5</td>
<td>1.4</td>
<td>1.5</td>
<td>1.9</td>
<td>3.0</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>1.6</td>
<td>1.8</td>
<td>1.7</td>
<td>1.8</td>
<td>1.9</td>
<td>2.2</td>
<td>2.5</td>
<td>2.5</td>
<td>2.4</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.7</td>
<td>2.0</td>
<td>2.5</td>
<td>1.5</td>
<td>0.0</td>
<td>1.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>France</td>
<td>0.8</td>
<td>0.8</td>
<td>1.1</td>
<td>1.3</td>
<td>1.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>2.4</td>
<td>2.3</td>
<td>2.8</td>
<td>3.7</td>
<td>3.0</td>
<td>3.6</td>
<td>4.0</td>
<td>3.9</td>
<td>4.0</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>30.7</td>
<td>30.1</td>
<td>34.2</td>
<td>38.6</td>
<td>44.1</td>
<td>52.2</td>
<td>57.2</td>
<td>49.5</td>
<td>54.5</td>
<td>54.8</td>
<td>35.1</td>
</tr>
<tr>
<td>Italy</td>
<td>5.3</td>
<td>7.8</td>
<td>7.6</td>
<td>8.0</td>
<td>12.9</td>
<td>19.5</td>
<td>18.0</td>
<td>17.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>5.2</td>
<td>4.4</td>
<td>2.8</td>
<td>2.3</td>
<td>2.8</td>
<td>4.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0</td>
<td>1.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Spain</td>
<td>0.9</td>
<td>1.8</td>
<td>5.3</td>
<td>5.9</td>
<td>10.9</td>
<td>12.8</td>
<td>13.9</td>
<td>13.8</td>
<td>13.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: OECD.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Romanian-born population and Romanian nationals</strong> respectively, thousands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria¹</td>
<td>40.5</td>
<td>34.0</td>
<td>31.2</td>
<td>36.9</td>
<td>38.0</td>
<td>41.0</td>
<td>42.6</td>
<td>49.4</td>
<td>47.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium²</td>
<td>2.2</td>
<td>2.2</td>
<td>2.1</td>
<td>2.3</td>
<td>2.4</td>
<td>3.3</td>
<td>4.0</td>
<td>4.6</td>
<td>5.6</td>
<td>7.5</td>
<td>10.2</td>
</tr>
<tr>
<td>Czech Republic³</td>
<td>1.8</td>
<td>2.4</td>
<td>2.7</td>
<td>2.6</td>
<td>2.4</td>
<td>2.3</td>
<td>2.3</td>
<td>2.6</td>
<td>2.7</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Greece¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece²</td>
<td>4.3</td>
<td>6.0</td>
<td>5.2</td>
<td>7.2</td>
<td>13.8</td>
<td>14.6</td>
<td>16.2</td>
<td>18.9</td>
<td>18.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary¹</td>
<td>141.5</td>
<td>141.7</td>
<td>142.0</td>
<td>142.3</td>
<td>144.2</td>
<td>145.2</td>
<td>146.5</td>
<td>148.5</td>
<td>152.7</td>
<td>155.4</td>
<td>170.4</td>
</tr>
<tr>
<td>Hungary²</td>
<td>61.6</td>
<td>62.1</td>
<td>57.4</td>
<td>57.3</td>
<td>41.6</td>
<td>45.0</td>
<td>47.3</td>
<td>55.7</td>
<td>67.5</td>
<td>66.2</td>
<td>67.0</td>
</tr>
<tr>
<td>Ireland¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy²</td>
<td>26.9</td>
<td>28.8</td>
<td>33.8</td>
<td>61.2</td>
<td>70.0</td>
<td>83.0</td>
<td>94.8</td>
<td>244.4</td>
<td>248.8</td>
<td>297.6</td>
<td>342.2</td>
</tr>
<tr>
<td>Poland¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal²</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.4</td>
<td>8.4</td>
<td>11.3</td>
<td>12.0</td>
<td>12.5</td>
<td>11.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain¹</td>
<td>3.1</td>
<td>4.0</td>
<td>7.5</td>
<td>33.0</td>
<td>68.6</td>
<td>137.8</td>
<td>206.4</td>
<td>312.1</td>
<td>397.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain²</td>
<td>1.4</td>
<td>2.3</td>
<td>3.2</td>
<td>6.3</td>
<td>31.3</td>
<td>66.2</td>
<td>134.8</td>
<td>203.2</td>
<td>308.9</td>
<td>394.1</td>
<td>507.7</td>
</tr>
</tbody>
</table>

**Share of Romanians in total foreign-born population and foreign nationals respectively**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria¹</td>
<td>4.5</td>
<td>3.9</td>
<td>3.7</td>
<td>4.1</td>
<td>4.4</td>
<td>4.4</td>
<td>4.0</td>
<td>4.5</td>
<td>4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium¹</td>
<td>0.6</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>1.0</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium²</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Czech Republic³</td>
<td>0.9</td>
<td>1.1</td>
<td>1.2</td>
<td>1.1</td>
<td>1.2</td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Greece¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece²</td>
<td>1.5</td>
<td>2.2</td>
<td>1.7</td>
<td>2.0</td>
<td>3.2</td>
<td>3.1</td>
<td>3.0</td>
<td>3.4</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary¹</td>
<td>49.8</td>
<td>49.9</td>
<td>49.6</td>
<td>49.2</td>
<td>48.9</td>
<td>48.4</td>
<td>48.4</td>
<td>48.2</td>
<td>47.9</td>
<td>46.9</td>
<td>49.4</td>
</tr>
<tr>
<td>Hungary²</td>
<td>43.2</td>
<td>41.9</td>
<td>38.2</td>
<td>37.4</td>
<td>37.8</td>
<td>38.7</td>
<td>40.8</td>
<td>42.8</td>
<td>47.5</td>
<td>42.9</td>
<td>40.3</td>
</tr>
<tr>
<td>Ireland¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy²</td>
<td>2.7</td>
<td>2.8</td>
<td>3.1</td>
<td>4.6</td>
<td>5.1</td>
<td>5.7</td>
<td>6.3</td>
<td>11.0</td>
<td>10.4</td>
<td>11.1</td>
<td>11.6</td>
</tr>
<tr>
<td>Poland¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal²</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>2.3</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.6</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Slovak Republic¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain¹</td>
<td>0.3</td>
<td>0.3</td>
<td>0.5</td>
<td>1.7</td>
<td>2.6</td>
<td>4.2</td>
<td>5.6</td>
<td>7.1</td>
<td>8.2</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Spain²</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
<td>2.3</td>
<td>3.3</td>
<td>5.1</td>
<td>6.7</td>
<td>8.3</td>
<td>9.5</td>
<td>11.2</td>
</tr>
</tbody>
</table>

¹ Romanian-born population, ² Romanian nationals.

Source: OECD.
Table 5: Population born in Romania in OECD countries, and Romanian population, aged 15 and more, total, shares of age groups, and of education levels, census data from the 2000 round

<table>
<thead>
<tr>
<th>EU-15 countries</th>
<th>persons</th>
<th>% 15-24</th>
<th>% 25-64</th>
<th>% 65+</th>
<th>% ISCED 0/1/2</th>
<th>% ISCED 3/4</th>
<th>% ISCED 5/6</th>
<th>% Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>36188</td>
<td>12.5</td>
<td>65.1</td>
<td>22.4</td>
<td>38.2</td>
<td>50.7</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>6244</td>
<td>16.3</td>
<td>72.8</td>
<td>11.0</td>
<td>21.2</td>
<td>24.7</td>
<td>36.5</td>
<td>17.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>1859</td>
<td>22.1</td>
<td>71.2</td>
<td>6.8</td>
<td>16.6</td>
<td>37.7</td>
<td>27.1</td>
<td>18.6</td>
</tr>
<tr>
<td>Finland</td>
<td>635</td>
<td>11.8</td>
<td>86.6</td>
<td>1.6</td>
<td>52.0</td>
<td>31.5</td>
<td>16.5</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>21997</td>
<td>14.1</td>
<td>63.0</td>
<td>22.9</td>
<td>24.1</td>
<td>29.1</td>
<td>46.7</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>25348</td>
<td>22.7</td>
<td>72.3</td>
<td>4.9</td>
<td>30.2</td>
<td>54.2</td>
<td>13.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>4377</td>
<td>23.6</td>
<td>76.0</td>
<td>0.3</td>
<td>25.9</td>
<td>33.3</td>
<td>23.4</td>
<td>17.3</td>
</tr>
<tr>
<td>Italy</td>
<td>74103</td>
<td>17.1</td>
<td>78.9</td>
<td>4.0</td>
<td>35.4</td>
<td>54.7</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>419</td>
<td>11.9</td>
<td>80.4</td>
<td>7.6</td>
<td>10.5</td>
<td>43.2</td>
<td>36.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Portugal</td>
<td>2706</td>
<td>25.5</td>
<td>73.9</td>
<td>0.6</td>
<td>43.6</td>
<td>39.0</td>
<td>17.4</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>50660</td>
<td>23.1</td>
<td>76.1</td>
<td>0.8</td>
<td>61.6</td>
<td>24.5</td>
<td>12.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>10900</td>
<td>15.9</td>
<td>77.1</td>
<td>7.0</td>
<td>13.9</td>
<td>48.5</td>
<td>32.9</td>
<td>4.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>6660</td>
<td>16.7</td>
<td>66.4</td>
<td>16.9</td>
<td>17.2</td>
<td>19.2</td>
<td>46.5</td>
<td>17.1</td>
</tr>
<tr>
<td>Sum</td>
<td>242096</td>
<td>18.1</td>
<td>73.4</td>
<td>8.5</td>
<td>37.7</td>
<td>42.6</td>
<td>17.6</td>
<td>2.1</td>
</tr>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>11677</td>
<td>3.5</td>
<td>54.9</td>
<td>41.6</td>
<td>62.1</td>
<td>34.0</td>
<td>3.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>136318</td>
<td>12.3</td>
<td>62.6</td>
<td>25.1</td>
<td>39.2</td>
<td>44.2</td>
<td>16.6</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>3333</td>
<td>1.3</td>
<td>41.7</td>
<td>57.1</td>
<td>52.8</td>
<td>36.6</td>
<td>9.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>3023</td>
<td>8.7</td>
<td>57.2</td>
<td>34.1</td>
<td>46.3</td>
<td>45.5</td>
<td>7.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Sum</td>
<td>154351</td>
<td>11.3</td>
<td>61.5</td>
<td>27.2</td>
<td>41.4</td>
<td>43.3</td>
<td>15.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Other OECD countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>11941</td>
<td>13.2</td>
<td>66.3</td>
<td>20.5</td>
<td>26.1</td>
<td>33.6</td>
<td>24.9</td>
<td>15.4</td>
</tr>
<tr>
<td>Canada</td>
<td>54795</td>
<td>11.7</td>
<td>68.8</td>
<td>19.6</td>
<td>19.0</td>
<td>27.2</td>
<td>53.8</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>964</td>
<td>46.2</td>
<td>52.3</td>
<td>1.6</td>
<td>6.3</td>
<td>41.9</td>
<td>24.3</td>
<td>27.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>232</td>
<td>9.9</td>
<td>59.9</td>
<td>30.2</td>
<td>12.5</td>
<td>22.0</td>
<td>60.8</td>
<td>4.7</td>
</tr>
<tr>
<td>New Zealand</td>
<td>702</td>
<td>8.1</td>
<td>59.8</td>
<td>32.1</td>
<td>9.0</td>
<td>44.9</td>
<td>36.8</td>
<td>9.4</td>
</tr>
<tr>
<td>Norway</td>
<td>1225</td>
<td>21.3</td>
<td>74.6</td>
<td>4.1</td>
<td>2.4</td>
<td>28.6</td>
<td>22.9</td>
<td>46.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6490</td>
<td>11.5</td>
<td>68.0</td>
<td>20.5</td>
<td>13.2</td>
<td>30.0</td>
<td>50.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Turkey</td>
<td>20315</td>
<td>6.9</td>
<td>27.7</td>
<td>65.4</td>
<td>61.2</td>
<td>19.0</td>
<td>6.1</td>
<td>13.8</td>
</tr>
<tr>
<td>United States</td>
<td>123938</td>
<td>12.1</td>
<td>66.2</td>
<td>21.7</td>
<td>22.1</td>
<td>39.4</td>
<td>38.5</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>220602</td>
<td>11.7</td>
<td>63.3</td>
<td>24.9</td>
<td>24.7</td>
<td>33.8</td>
<td>39.8</td>
<td>2.7</td>
</tr>
<tr>
<td>All above countries</td>
<td>517049</td>
<td>14.1</td>
<td>66.8</td>
<td>19.1</td>
<td>34.0</td>
<td>39.5</td>
<td>24.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Romania</td>
<td>17860462</td>
<td>49.1</td>
<td>43.1</td>
<td>7.7</td>
<td>49.1</td>
<td>43.1</td>
<td>7.7</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Source: OECD; Romania: Eurostat.
Table 6: Stocks of Romanian labour in selected OECD countries, thousands, 1996 to 2006

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>9.3</td>
<td>9.1</td>
<td>9.1</td>
<td>9.3</td>
<td>9.7</td>
<td>10.1</td>
<td>10.7</td>
<td>11.0</td>
<td>11.3</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.9</td>
<td>1.2</td>
<td>1.1</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Greece</td>
<td>3.5</td>
<td>4.8</td>
<td>3.8</td>
<td>4.8</td>
<td>10.0</td>
<td>10.7</td>
<td>12.1</td>
<td>13.4</td>
<td>13.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>8.5</td>
<td>9.5</td>
<td>10.6</td>
<td>14.1</td>
<td>17.2</td>
<td>22</td>
<td>25.8</td>
<td>27.6</td>
<td>30.9</td>
<td>29.4</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Italy</td>
<td>17.6</td>
<td>17.8</td>
<td>19.2</td>
<td>41.5</td>
<td>47.0</td>
<td>52.7</td>
<td>56.6</td>
<td>194.4</td>
<td>183.8</td>
<td>186.2</td>
<td>190.9</td>
</tr>
<tr>
<td>Portugal</td>
<td>7.8</td>
<td>10.8</td>
<td>11.1</td>
<td>11.3</td>
<td>9.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>1.1</td>
<td>1.5</td>
<td>2.4</td>
<td>3.0</td>
<td>8.3</td>
<td>18.2</td>
<td>38.2</td>
<td>46.3</td>
<td>60.8</td>
<td>156.0</td>
<td>168.9</td>
</tr>
</tbody>
</table>

Source: OECD.
Table 7: Emigration of Romanian citizens by gender and age groups, 1990 to 2007

<table>
<thead>
<tr>
<th>year</th>
<th>persons</th>
<th>% males</th>
<th>% aged 0-17</th>
<th>% aged 18-25</th>
<th>% aged 26-40</th>
<th>% aged 41-50</th>
<th>% aged 51-60</th>
<th>% aged &gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>96929</td>
<td>47.8</td>
<td>26.1</td>
<td>14.0</td>
<td>26.4</td>
<td>10.1</td>
<td>11.7</td>
<td>11.7</td>
</tr>
<tr>
<td>1991</td>
<td>44160</td>
<td>48.0</td>
<td>33.6</td>
<td>18.0</td>
<td>24.6</td>
<td>8.0</td>
<td>7.6</td>
<td>8.2</td>
</tr>
<tr>
<td>1992</td>
<td>31152</td>
<td>51.6</td>
<td>17.8</td>
<td>25.1</td>
<td>32.7</td>
<td>9.2</td>
<td>7.2</td>
<td>8.0</td>
</tr>
<tr>
<td>1993</td>
<td>18446</td>
<td>47.4</td>
<td>22.3</td>
<td>19.6</td>
<td>30.8</td>
<td>9.9</td>
<td>7.6</td>
<td>9.8</td>
</tr>
<tr>
<td>1994</td>
<td>17146</td>
<td>46.0</td>
<td>26.8</td>
<td>17.7</td>
<td>34.4</td>
<td>9.2</td>
<td>5.6</td>
<td>6.3</td>
</tr>
<tr>
<td>1995</td>
<td>25675</td>
<td>44.7</td>
<td>20.0</td>
<td>16.3</td>
<td>42.4</td>
<td>10.9</td>
<td>4.8</td>
<td>5.6</td>
</tr>
<tr>
<td>1996</td>
<td>21526</td>
<td>46.8</td>
<td>19.5</td>
<td>16.0</td>
<td>38.8</td>
<td>12.5</td>
<td>6.2</td>
<td>7.0</td>
</tr>
<tr>
<td>1997</td>
<td>19945</td>
<td>47.2</td>
<td>20.8</td>
<td>12.8</td>
<td>40.6</td>
<td>12.5</td>
<td>5.7</td>
<td>7.6</td>
</tr>
<tr>
<td>1998</td>
<td>17536</td>
<td>48.2</td>
<td>36.3</td>
<td>10.2</td>
<td>30.7</td>
<td>9.6</td>
<td>4.9</td>
<td>8.2</td>
</tr>
<tr>
<td>1999</td>
<td>12594</td>
<td>46.5</td>
<td>34.1</td>
<td>10.8</td>
<td>33.7</td>
<td>9.8</td>
<td>5.3</td>
<td>6.4</td>
</tr>
<tr>
<td>2000</td>
<td>14753</td>
<td>46.1</td>
<td>29.6</td>
<td>10.3</td>
<td>38.8</td>
<td>10.5</td>
<td>4.5</td>
<td>6.4</td>
</tr>
<tr>
<td>2001</td>
<td>9921</td>
<td>50.5</td>
<td>28.8</td>
<td>9.5</td>
<td>40.5</td>
<td>10.2</td>
<td>4.3</td>
<td>6.7</td>
</tr>
<tr>
<td>2002</td>
<td>8154</td>
<td>45.4</td>
<td>15.1</td>
<td>12.6</td>
<td>48.7</td>
<td>11.2</td>
<td>5.1</td>
<td>7.2</td>
</tr>
<tr>
<td>2003</td>
<td>10673</td>
<td>41.3</td>
<td>15.7</td>
<td>13.4</td>
<td>51.0</td>
<td>10.9</td>
<td>4.2</td>
<td>4.9</td>
</tr>
<tr>
<td>2004</td>
<td>13082</td>
<td>37.7</td>
<td>10.8</td>
<td>14.7</td>
<td>54.8</td>
<td>10.8</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>2005</td>
<td>10938</td>
<td>37.6</td>
<td>7.0</td>
<td>12.9</td>
<td>58.1</td>
<td>12.4</td>
<td>5.0</td>
<td>4.6</td>
</tr>
<tr>
<td>2006</td>
<td>14179</td>
<td>37.7</td>
<td>6.8</td>
<td>12.2</td>
<td>57.8</td>
<td>12.6</td>
<td>5.9</td>
<td>4.9</td>
</tr>
<tr>
<td>2007</td>
<td>8830</td>
<td>35.0</td>
<td>11.4</td>
<td>12.0</td>
<td>56.4</td>
<td>11.1</td>
<td>5.2</td>
<td>3.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>year range</th>
<th>persons</th>
<th>% males</th>
<th>% aged 0-17</th>
<th>% aged 18-25</th>
<th>% aged 26-40</th>
<th>% aged 41-50</th>
<th>% aged 51-60</th>
<th>% aged &gt;60</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-2005</td>
<td>372630</td>
<td>49.1</td>
<td>24.9</td>
<td>16.2</td>
<td>37.8</td>
<td>10.9</td>
<td>7.8</td>
<td>8.6</td>
</tr>
<tr>
<td>1991-1995</td>
<td>136579</td>
<td>47.9</td>
<td>25.1</td>
<td>19.5</td>
<td>31.9</td>
<td>9.2</td>
<td>6.7</td>
<td>7.6</td>
</tr>
<tr>
<td>1996-2000</td>
<td>86354</td>
<td>47.0</td>
<td>27.1</td>
<td>12.4</td>
<td>36.8</td>
<td>11.2</td>
<td>5.4</td>
<td>7.2</td>
</tr>
<tr>
<td>2001-2005</td>
<td>52768</td>
<td>42.0</td>
<td>15.1</td>
<td>12.7</td>
<td>51.1</td>
<td>11.1</td>
<td>4.6</td>
<td>5.4</td>
</tr>
<tr>
<td>2006-2007</td>
<td>23009</td>
<td>36.6</td>
<td>8.5</td>
<td>12.1</td>
<td>57.3</td>
<td>12.0</td>
<td>5.6</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: Institutul National de Statistică.
Abstract

We summarise the available evidence on the extent, composition and effects of migration from the NMS to Sweden after 2004. Sweden was the only EU State which in 2004 introduced the full Community rule on the free movement of labour for NMS nationals with no restrictions regarding access for social benefits. Despite this, the inflows from the NMS to Sweden, while increasing relative to their initial levels, have been lower than to other European countries (the UK, Ireland, and Norway). Most NMS migrants come to Sweden from Poland and the Baltic States. Compared to the pre-transition levels, the share of females in the NMS migrant inflows substantially decreased, reflecting declining importance of the health care sector in NMS migrant employment. There is no evidence that NMS migrants are attracted to Sweden by generous social benefits.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
Contents

1. Macroeconomic and Labour Market Development in 2004-2007 ......................... 1
2. Institutional setting for labour migration from the New Member States ............ 3
3. Migration trends since 2003 ............................................................................. 4
   3.1 Data sources ........................................................................................... 4
   3.2 The extent of Migration .......................................................................... 4
   3.3 Gender and age distributions of the NMS migrants .................................. 9
   3.4 Labour market status and performance of immigrants from the NMS ........ 10
4. Impact of migration from the NMS on the Swedish economy and the welfare state 14
5. Summary ...................................................................................................... 16
6. References .................................................................................................... 17

After a period of relatively low GDP growth in 2001-2003, Swedish economic performance improved considerably in 2004-2006 (Figure 1). To a large extent, this positive development was driven by a high demand for Swedish exports. However, the economy has started to show the signs of a slowdown in 2007, as the rate of export growth went down. It is expected that the economy will decelerate further, reaching GDP growth rates of about 2 per cent in 2008 and 2009 mainly due to the weaker growth of domestic demand and exports.

Figure 1: GDP growth in Sweden, in per cent

![GDP growth in Sweden](image)

* Eurostat forecasts

Source: Statistics Sweden, Eurostat

The economic upswing of 2004-2006 positively affected labour market indicators (Table 1). After a period of stagnation in 2002-2004, total employment resumed a positive growth rate of around 2 per cent in 2006 and 2007. The employment rate also increased from 2005 and reached 74.2 per cent in 2007. The unemployment rate fell from 7.4 per cent in 2005 to 6.1 per cent in 2007. It is expected, however, that the oncoming economic slowdown will decrease the employment rate in Sweden and slightly increase its rate of unemployment (OECD 2008).

The period of high growth of 2004-2006 was accompanied by the increase in the number of job openings relative to the total employment (Table 2). The sectors with the highest relative number of vacancies were transport, storage and communication; construction; and education and health and social work. High rates of unfilled vacancies prevailed in the construction, education and health and social work sectors.
Compared to other EU countries, the Swedish labour market was doing relatively well. During the period of 2000-2007, the employment rate was 8-9 percentage points higher and the unemployment rate 1.5-2 percentage points lower than the EU-15 average. To a large extent, the above-average labour market performance in Sweden can be explained by the high labour force participation rates of individuals aged 55-64 (Table 3.1). Foreigners on the Swedish labour market, however, tend to have lower employment rates and higher unemployment rates than Swedish nationals (Table 3.2).

Table 1: Employment and unemployment indicators in Sweden, 2000-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Total employed, thousands</th>
<th>Employment growth, in %</th>
<th>Employment rate, in %</th>
<th>Unemployment rate, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>4300.9</td>
<td>2.5</td>
<td>73.0</td>
<td>5.6</td>
</tr>
<tr>
<td>2001</td>
<td>4391.3</td>
<td>2.1</td>
<td>74.0</td>
<td>4.9</td>
</tr>
<tr>
<td>2002</td>
<td>4393.3</td>
<td>0.0</td>
<td>73.6</td>
<td>4.9</td>
</tr>
<tr>
<td>2003</td>
<td>4367.9</td>
<td>-0.6</td>
<td>72.9</td>
<td>5.6</td>
</tr>
<tr>
<td>2004</td>
<td>4337.3</td>
<td>-0.7</td>
<td>72.1</td>
<td>6.3</td>
</tr>
<tr>
<td>2005</td>
<td>4348.9</td>
<td>0.3</td>
<td>72.5</td>
<td>7.4</td>
</tr>
<tr>
<td>2006</td>
<td>4421.5</td>
<td>1.7</td>
<td>73.1</td>
<td>7.0</td>
</tr>
<tr>
<td>2007</td>
<td>4521.1</td>
<td>2.3</td>
<td>74.2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: Eurostat

Table 2: Job opening and unfilled vacancies rates, in per cent, 2003-2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total private sector</td>
<td>1.2</td>
<td>1.1</td>
<td>1.2</td>
<td>1.4</td>
<td>1.7</td>
<td>0.5</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Agriculture, hunting, forestry and fishing</td>
<td>2.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>1.8</td>
<td>0.8</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Manufacture</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>1.1</td>
<td>1.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Construction</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
<td>1.7</td>
<td>1.9</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
<td>1.2</td>
<td>1.3</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Transport, storage and communication</td>
<td>1.5</td>
<td>1.7</td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
<td>0.4</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Financial intermediation and real estate, renting and business activities</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>1.1</td>
<td>1.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Education and health and social work</td>
<td>1.4</td>
<td>1.3</td>
<td>1.8</td>
<td>2.2</td>
<td>2.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>2.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
<td>0.6</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Other community, social and personal services activities</td>
<td>2.1</td>
<td>1.9</td>
<td>1.7</td>
<td>1.5</td>
<td>1.4</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: Statistics Sweden
### Table 3.1: Unemployment and labour force participation rates in Sweden, by age group and education level, 2007

<table>
<thead>
<tr>
<th>Age group</th>
<th>Education</th>
<th>Less than upper secondary education</th>
<th>Upper secondary education</th>
<th>Tertiary education</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>Sweden</td>
<td>42.2</td>
<td>53.4</td>
<td>87.6</td>
</tr>
<tr>
<td></td>
<td>Employment rate, in %</td>
<td>86.1</td>
<td>80.6</td>
<td>87.6</td>
</tr>
<tr>
<td>25-54</td>
<td>Economic activity rate, in %</td>
<td>70.0</td>
<td>61.6</td>
<td>90.9</td>
</tr>
<tr>
<td>55-64</td>
<td>EU-15</td>
<td>40.8</td>
<td>51.9</td>
<td>83.8</td>
</tr>
<tr>
<td></td>
<td>Employment rate, in %</td>
<td>79.7</td>
<td>72.3</td>
<td>87.4</td>
</tr>
<tr>
<td></td>
<td>Economic activity rate, in %</td>
<td>46.6</td>
<td>77.5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurostat.

### Table 3.2: Labour market performance of foreigners in Sweden, 2007

<table>
<thead>
<tr>
<th></th>
<th>Economic activity rate, in %</th>
<th>Employment rate, in %</th>
<th>Unemployment rate, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationals</td>
<td>63.8</td>
<td>60.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Total foreigners</td>
<td>63.4</td>
<td>55.2</td>
<td>12.9</td>
</tr>
<tr>
<td>Citizens of countries outside the EU-27</td>
<td>59.4</td>
<td>48.0</td>
<td>19.2</td>
</tr>
</tbody>
</table>

Source: Eurostat

2. **Institutional setting for labour migration from the New Member States**

Sweden was the only country among the EU-15 to fully apply Community rules on free movement of workers from the New Member States and the principle of equal treatment as regards access to social benefits.

Any EU/EEA citizen who is an employee, self-employed person, a provider or recipient of services, a student or a person who has sufficient funds to support himself/herself, has a right to reside in Sweden. As of April 30, 2006, residence permits are no longer necessary for the EU-citizens, but immigrants from the EU countries still have to register with the Swedish Migration Board. On entering Sweden citizens of EU/EEA countries and their family members are entitled to begin working immediately.
3. Migration trends since 2003

3.1 Data sources

The relevant sources of data about migration from the NMS are Statistics Sweden (stocks, flows, demographic characteristics of migrants), with statistics available at http://www.scb.se/default___2154.asp and Migrationsverket - the Swedish Migration Board (reasons for coming to Sweden), http://www.migrationsverket.se/english.html

3.2 The extent of Migration

Tables 4.1 and 4.2 report stocks of foreign citizens and foreign-born in Sweden between 2000 and 2007. It should, however, be noted that both measures may provide biased estimates of the real stock of migrants and the change thereof. On the one hand, the stocks by country of citizenship do take into account those individuals who naturalise and become Swedish citizens. On the other hand, the stocks by country of births may not reveal the true picture of the net migration inflows, e.g. when the natural decrease (deaths) of previous cohorts of migrants from a particular country outweighs the current inflows of the “new” migrants.

In addition, considering both stock (Tables 4.1 and 4.2) and flow (Table 5) figures from official registration sources, one should be aware that not all immigrants in Sweden are registered (Wadensjö 2007). It is also possible that that there are some immigrants that have lived and worked in Sweden for a certain period time unregistered, but who may have registered as a result of the legal change.

Over the period 2003-2007, the number of foreign citizens in the Swedish population increased by 48,412 individuals, raising the stock of foreign citizens to 524,488 (or 5.71 per cent of the total population) in 2007. Over the same time period, the increase in the stock of the foreign born was three times higher (+149,695) and the number of the foreign born reached 1,227,770 (13.37 per cent of the total population) in 2007.¹ The largest migrant groups in Sweden are from Iraq, Denmark, Germany, Turkey, Poland, Norway and the successor states of the former Yugoslavia. These countries, with the exception of Norway, were also the major contributors to the stock of the foreign born in 2003-2007.

Over 2003-2007 the stock of migrants from the NMS (both by country of birth and by country of citizenship) increased by approximately 25,000 individuals. Relative to the initial levels, this represents a substantial increase: in 2003-2007 the stock of the NMS citizens doubled and the stock of the people born in the NMS increased by 16 per cent. The share of

¹ A substantial part of the difference in the increase in stocks by country of citizenship and birth can explained by the naturalisation of the former refugees (e.g. over 2003-2007, the number people born in Iraq increased by 29,868, while the number of Iraqi citizens fell by 1,475 over the same period)
NMS migrants in the total migrant stock was also growing over the same period, reaching 9 per cent (both by country of birth and by country of citizenship) in 2007. However, while increasing, the share of the NMS citizens in the total population of Sweden remains relatively low (0.3-0.5 per cent in 2003-2007).

Table 5 reports the official inflows and outflows of the NMS citizens from 2004 to 2007. Relative to the total net immigration flows to Sweden, the share of the net immigration from the NMS increased from 12 per cent in 2004 to 20 per cent in 2007. The Baltic States, Hungary, and, most importantly, Poland (accounting for more than a half of total inflows from the MNS) were the major sending NMS. The inflows from Romania and Bulgaria also increased sharply in 2007 from relatively low levels in 2004-2006, following the accession of these countries to the EU.

For the period 2003-2007, the proportion of net immigration to total immigrant inflows was around 90 per cent for the Polish, Lithuanian and NMS-2 migrants, and slightly less (70-80 per cent) for the Estonian, Hungarian and Latvian migrants, suggesting that most people coming from the NMS to Sweden stay there. Compared to other countries from which send relatively high numbers of migrants to Sweden, the net immigration/total immigration ratio was 92 per cent for the ex-Yugoslav, 85 per cent for the Turkish, 65 per cent for the German and 51 per cent for the Danish migrants.
Table 4.1: Migrant stocks by country of citizenship

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>1554</td>
<td>1906</td>
<td>2155</td>
<td>2371</td>
<td>2588</td>
<td>2809</td>
<td>+903</td>
</tr>
<tr>
<td>Latvia</td>
<td>694</td>
<td>934</td>
<td>1072</td>
<td>1217</td>
<td>1470</td>
<td>1677</td>
<td>+743</td>
</tr>
<tr>
<td>Lithuania</td>
<td>574</td>
<td>1102</td>
<td>1451</td>
<td>2071</td>
<td>2821</td>
<td>3613</td>
<td>+2511</td>
</tr>
<tr>
<td>Poland</td>
<td>16667</td>
<td>13412</td>
<td>14664</td>
<td>17172</td>
<td>22410</td>
<td>28909</td>
<td>+15497</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>349</td>
<td>415</td>
<td>505</td>
<td>656</td>
<td>781</td>
<td>858</td>
<td>+366</td>
</tr>
<tr>
<td>Slovenia</td>
<td>625</td>
<td>509</td>
<td>520</td>
<td>529</td>
<td>537</td>
<td>574</td>
<td>+48</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>433</td>
<td>566</td>
<td>581</td>
<td>609</td>
<td>715</td>
<td>845</td>
<td>+279</td>
</tr>
<tr>
<td>Hungary</td>
<td>2988</td>
<td>2303</td>
<td>2309</td>
<td>2349</td>
<td>2560</td>
<td>3104</td>
<td>+801</td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1002</td>
<td>805</td>
<td>810</td>
<td>834</td>
<td>828</td>
<td>1838</td>
<td>+1033</td>
</tr>
<tr>
<td>Romania</td>
<td>2949</td>
<td>2343</td>
<td>2360</td>
<td>2371</td>
<td>2252</td>
<td>4442</td>
<td>+2099</td>
</tr>
<tr>
<td>Other countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former Yugoslavia*</td>
<td>131089</td>
<td>138166</td>
<td>140001</td>
<td>141799</td>
<td>145879</td>
<td>147556</td>
<td>+9390</td>
</tr>
<tr>
<td>Turkey</td>
<td>15846</td>
<td>12404</td>
<td>12269</td>
<td>11683</td>
<td>10221</td>
<td>10026</td>
<td>-2378</td>
</tr>
<tr>
<td>Iraq</td>
<td>33116</td>
<td>41516</td>
<td>39772</td>
<td>31892</td>
<td>30257</td>
<td>40041</td>
<td>-1475</td>
</tr>
<tr>
<td>Denmark</td>
<td>25567</td>
<td>29704</td>
<td>31170</td>
<td>32885</td>
<td>35796</td>
<td>38443</td>
<td>+7839</td>
</tr>
<tr>
<td>Norway</td>
<td>31997</td>
<td>35486</td>
<td>35538</td>
<td>35418</td>
<td>35498</td>
<td>35562</td>
<td>+76</td>
</tr>
<tr>
<td>Germany</td>
<td>16357</td>
<td>19071</td>
<td>19938</td>
<td>20969</td>
<td>22494</td>
<td>24709</td>
<td>+5638</td>
</tr>
<tr>
<td>Total Sweden</td>
<td>8882792</td>
<td>8975670</td>
<td>9011392</td>
<td>9047752</td>
<td>9113257</td>
<td>9182927</td>
<td></td>
</tr>
<tr>
<td>Total foreign citizens</td>
<td>477312</td>
<td>476076</td>
<td>481141</td>
<td>478899</td>
<td>491996</td>
<td>524488</td>
<td>+48412</td>
</tr>
<tr>
<td>Foreign citizens as % of total population</td>
<td>5.37%</td>
<td>5.30%</td>
<td>5.34%</td>
<td>5.36%</td>
<td>5.40%</td>
<td>5.71%</td>
<td></td>
</tr>
<tr>
<td>Total citizens of NMS-10</td>
<td>27835</td>
<td>24295</td>
<td>26427</td>
<td>30082</td>
<td>36837</td>
<td>48592</td>
<td>+24297</td>
</tr>
<tr>
<td>NMS-10 citizens as % of total population</td>
<td>0.31%</td>
<td>0.27%</td>
<td>0.29%</td>
<td>0.33%</td>
<td>0.40%</td>
<td>0.53%</td>
<td></td>
</tr>
<tr>
<td>NMS-10 citizens as % of total foreign citizens</td>
<td>5.83%</td>
<td>5.10%</td>
<td>5.49%</td>
<td>6.27%</td>
<td>7.49%</td>
<td>9.26%</td>
<td></td>
</tr>
</tbody>
</table>

* by country of birth, excluding Slovenia

Source: Statistics Sweden
<table>
<thead>
<tr>
<th>Table 4.2: Migrant stocks by country of birth</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>10253</td>
<td>9964</td>
<td>9920</td>
<td>9870</td>
<td>9820</td>
<td>9800</td>
<td>- 164</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>321</td>
<td>522</td>
<td>569</td>
<td>622</td>
<td>736</td>
<td>880</td>
<td>+ 358</td>
</tr>
<tr>
<td>Hungary</td>
<td>14127</td>
<td>13794</td>
<td>13672</td>
<td>13600</td>
<td>13711</td>
<td>14057</td>
<td>+ 263</td>
</tr>
<tr>
<td>Latvia</td>
<td>2305</td>
<td>2482</td>
<td>2581</td>
<td>2715</td>
<td>2954</td>
<td>3122</td>
<td>+ 640</td>
</tr>
<tr>
<td>Lithuania</td>
<td>785</td>
<td>1334</td>
<td>1694</td>
<td>2315</td>
<td>3072</td>
<td>3825</td>
<td>+ 2491</td>
</tr>
<tr>
<td>Poland</td>
<td>40123</td>
<td>41608</td>
<td>43472</td>
<td>46203</td>
<td>51743</td>
<td>58180</td>
<td>+ 16572</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>243</td>
<td>374</td>
<td>463</td>
<td>536</td>
<td>644</td>
<td>767</td>
<td>+ 393</td>
</tr>
<tr>
<td>Slovenia</td>
<td>683</td>
<td>765</td>
<td>792</td>
<td>821</td>
<td>857</td>
<td>895</td>
<td>+ 130</td>
</tr>
<tr>
<td>Other countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former Yugoslavia*</td>
<td>131089</td>
<td>138166</td>
<td>140001</td>
<td>141799</td>
<td>145879</td>
<td>147556</td>
<td>+ 9390</td>
</tr>
<tr>
<td>Turkey</td>
<td>31894</td>
<td>34083</td>
<td>34965</td>
<td>35853</td>
<td>37107</td>
<td>38158</td>
<td>+ 4075</td>
</tr>
<tr>
<td>Denmark</td>
<td>38190</td>
<td>40921</td>
<td>41663</td>
<td>42602</td>
<td>44444</td>
<td>45941</td>
<td>+ 5020</td>
</tr>
<tr>
<td>Germany</td>
<td>38155</td>
<td>40217</td>
<td>40826</td>
<td>41584</td>
<td>43044</td>
<td>45034</td>
<td>+ 4817</td>
</tr>
<tr>
<td>Iraq</td>
<td>49372</td>
<td>67645</td>
<td>70117</td>
<td>72553</td>
<td>82827</td>
<td>97513</td>
<td>+ 29868</td>
</tr>
<tr>
<td>Norway</td>
<td>42464</td>
<td>45087</td>
<td>45000</td>
<td>44773</td>
<td>44727</td>
<td>44590</td>
<td>- 497</td>
</tr>
<tr>
<td>Total Sweden</td>
<td>8882792</td>
<td>8975670</td>
<td>9011392</td>
<td>9047752</td>
<td>9113257</td>
<td>9182927</td>
<td></td>
</tr>
<tr>
<td>Total foreign-born</td>
<td>1003798</td>
<td>1078075</td>
<td>1100262</td>
<td>1125790</td>
<td>1175200</td>
<td>1227770</td>
<td>+ 149695</td>
</tr>
<tr>
<td>Foreign-born as % of total population</td>
<td>11.30%</td>
<td>12.01%</td>
<td>12.21%</td>
<td>12.44%</td>
<td>12.90%</td>
<td>13.37%</td>
<td></td>
</tr>
<tr>
<td>Total born in NMS-10</td>
<td>84124</td>
<td>87011</td>
<td>89600</td>
<td>93392</td>
<td>100468</td>
<td>111721</td>
<td>+ 24710</td>
</tr>
<tr>
<td>Born in NMS-10 as % of total population</td>
<td>0.95%</td>
<td>0.97%</td>
<td>0.99%</td>
<td>1.03%</td>
<td>1.10%</td>
<td>1.22%</td>
<td></td>
</tr>
<tr>
<td>Born in NMS-10 as % of total foreign-born</td>
<td>8.38%</td>
<td>8.07%</td>
<td>8.14%</td>
<td>8.30%</td>
<td>8.55%</td>
<td>9.10%</td>
<td></td>
</tr>
</tbody>
</table>

* excluding Slovenia

Source: Statistics Sweden
Table 5: **Immigrants and emigrants by country of citizenship**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMS-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>88</td>
<td>113</td>
<td>170</td>
<td>207</td>
<td>578</td>
<td>58</td>
<td>56</td>
<td>42</td>
<td>64</td>
<td>220</td>
<td>30</td>
<td>57</td>
<td>128</td>
</tr>
<tr>
<td>Estonia</td>
<td>403</td>
<td>383</td>
<td>422</td>
<td>421</td>
<td>1629</td>
<td>98</td>
<td>107</td>
<td>108</td>
<td>129</td>
<td>442</td>
<td>305</td>
<td>276</td>
<td>314</td>
</tr>
<tr>
<td>Hungary</td>
<td>228</td>
<td>269</td>
<td>462</td>
<td>776</td>
<td>1735</td>
<td>89</td>
<td>80</td>
<td>98</td>
<td>149</td>
<td>416</td>
<td>139</td>
<td>189</td>
<td>364</td>
</tr>
<tr>
<td>Latvia</td>
<td>206</td>
<td>232</td>
<td>359</td>
<td>333</td>
<td>1130</td>
<td>37</td>
<td>36</td>
<td>54</td>
<td>99</td>
<td>226</td>
<td>169</td>
<td>196</td>
<td>305</td>
</tr>
<tr>
<td>Lithuania</td>
<td>438</td>
<td>695</td>
<td>895</td>
<td>918</td>
<td>2946</td>
<td>52</td>
<td>35</td>
<td>87</td>
<td>124</td>
<td>298</td>
<td>386</td>
<td>660</td>
<td>808</td>
</tr>
<tr>
<td>Poland</td>
<td>2458</td>
<td>3420</td>
<td>6347</td>
<td>7525</td>
<td>19750</td>
<td>213</td>
<td>241</td>
<td>362</td>
<td>636</td>
<td>1452</td>
<td>2245</td>
<td>3179</td>
<td>5985</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>105</td>
<td>97</td>
<td>150</td>
<td>173</td>
<td>525</td>
<td>20</td>
<td>20</td>
<td>26</td>
<td>32</td>
<td>98</td>
<td>85</td>
<td>77</td>
<td>124</td>
</tr>
<tr>
<td>Slovenia</td>
<td>34</td>
<td>36</td>
<td>50</td>
<td>63</td>
<td>183</td>
<td>5</td>
<td>12</td>
<td>17</td>
<td>14</td>
<td>48</td>
<td>29</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td>NMS-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>123</td>
<td>100</td>
<td>123</td>
<td>1159</td>
<td>1505</td>
<td>39</td>
<td>9</td>
<td>29</td>
<td>68</td>
<td>145</td>
<td>84</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>Romania</td>
<td>338</td>
<td>352</td>
<td>337</td>
<td>2587</td>
<td>3614</td>
<td>44</td>
<td>42</td>
<td>77</td>
<td>143</td>
<td>306</td>
<td>294</td>
<td>310</td>
<td>260</td>
</tr>
<tr>
<td>Other countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former Yugoslavia*</td>
<td>3011</td>
<td>3121</td>
<td>5771</td>
<td>2934</td>
<td>14837</td>
<td>310</td>
<td>244</td>
<td>369</td>
<td>169</td>
<td>1092</td>
<td>2701</td>
<td>2877</td>
<td>5402</td>
</tr>
<tr>
<td>Turkey</td>
<td>1133</td>
<td>1102</td>
<td>1562</td>
<td>1453</td>
<td>5250</td>
<td>159</td>
<td>130</td>
<td>210</td>
<td>286</td>
<td>785</td>
<td>974</td>
<td>972</td>
<td>1352</td>
</tr>
<tr>
<td>Denmark</td>
<td>3753</td>
<td>4040</td>
<td>5137</td>
<td>5097</td>
<td>18027</td>
<td>1990</td>
<td>2154</td>
<td>2117</td>
<td>2510</td>
<td>8771</td>
<td>1763</td>
<td>1886</td>
<td>3020</td>
</tr>
<tr>
<td>Germany</td>
<td>1832</td>
<td>2064</td>
<td>2883</td>
<td>3614</td>
<td>10345</td>
<td>792</td>
<td>777</td>
<td>961</td>
<td>1099</td>
<td>3629</td>
<td>1040</td>
<td>1239</td>
<td>2515</td>
</tr>
<tr>
<td>Iraq</td>
<td>2824</td>
<td>2942</td>
<td>10850</td>
<td>15200</td>
<td>31816</td>
<td>256</td>
<td>207</td>
<td>216</td>
<td>191</td>
<td>880</td>
<td>2558</td>
<td>2735</td>
<td>10634</td>
</tr>
<tr>
<td>Norway</td>
<td>2625</td>
<td>2417</td>
<td>2492</td>
<td>2395</td>
<td>9929</td>
<td>1927</td>
<td>1922</td>
<td>1821</td>
<td>1770</td>
<td>7440</td>
<td>698</td>
<td>495</td>
<td>671</td>
</tr>
<tr>
<td>Total migration of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>foreign citizens</td>
<td>47580</td>
<td>51297</td>
<td>80398</td>
<td>83536</td>
<td>262811</td>
<td>16021</td>
<td>15852</td>
<td>20033</td>
<td>20428</td>
<td>72334</td>
<td>31559</td>
<td>35445</td>
<td>60365</td>
</tr>
<tr>
<td>Migration of citizens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from NMS-10 NMS-10 as % of migrants</td>
<td>4421</td>
<td>5697</td>
<td>9315</td>
<td>14162</td>
<td>33595</td>
<td>655</td>
<td>638</td>
<td>900</td>
<td>1458</td>
<td>3651</td>
<td>3766</td>
<td>5059</td>
<td>8415</td>
</tr>
</tbody>
</table>

* - excluding Slovenia, ** - the ratio of net immigration over total immigration, *** - by country of birth

Source: Statistics Sweden
3.3 Gender and age distributions of the NMS migrants

While women constituted the majority of migrants from the NMS prior to the 2004 enlargement (more than 70 per cent from the Baltic States and more than 60 per cent from Poland), their relative share fell significantly for most of the NMS after 2004 (Table 6). This shift can be explained by an easier access to sectors employing primarily males (e.g. construction) after the enlargement, making the share of sectors employing primarily women (e.g. health and social care) relatively less important in total migrant flows.

Table 6: Share of females in the net migrant inflows from the NMS, by citizenship, 2000-2007

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>60%</td>
<td>56%</td>
<td>39%</td>
<td>52%</td>
<td>73%</td>
<td>54%</td>
<td>49%</td>
<td>41%</td>
<td>52%</td>
<td>49%</td>
</tr>
<tr>
<td>Estonia</td>
<td>75%</td>
<td>78%</td>
<td>73%</td>
<td>80%</td>
<td>67%</td>
<td>66%</td>
<td>60%</td>
<td>61%</td>
<td>76%</td>
<td>63%</td>
</tr>
<tr>
<td>Hungary</td>
<td>78%</td>
<td>65%</td>
<td>56%</td>
<td>73%</td>
<td>65%</td>
<td>58%</td>
<td>47%</td>
<td>44%</td>
<td>65%</td>
<td>49%</td>
</tr>
<tr>
<td>Latvia</td>
<td>77%</td>
<td>72%</td>
<td>75%</td>
<td>72%</td>
<td>72%</td>
<td>64%</td>
<td>60%</td>
<td>62%</td>
<td>76%</td>
<td>63%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>70%</td>
<td>76%</td>
<td>74%</td>
<td>74%</td>
<td>60%</td>
<td>50%</td>
<td>51%</td>
<td>46%</td>
<td>74%</td>
<td>50%</td>
</tr>
<tr>
<td>Poland</td>
<td>66%</td>
<td>63%</td>
<td>64%</td>
<td>63%</td>
<td>54%</td>
<td>48%</td>
<td>46%</td>
<td>44%</td>
<td>64%</td>
<td>46%</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>58%</td>
<td>44%</td>
<td>55%</td>
<td>73%</td>
<td>67%</td>
<td>62%</td>
<td>62%</td>
<td>39%</td>
<td>57%</td>
<td>56%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>20%</td>
<td>79%</td>
<td>57%</td>
<td>63%</td>
<td>55%</td>
<td>42%</td>
<td>48%</td>
<td>59%</td>
<td>62%</td>
<td>53%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>53%</td>
<td>57%</td>
<td>64%</td>
<td>65%</td>
<td>67%</td>
<td>59%</td>
<td>65%</td>
<td>37%</td>
<td>60%</td>
<td>42%</td>
</tr>
<tr>
<td>Romania</td>
<td>73%</td>
<td>65%</td>
<td>68%</td>
<td>66%</td>
<td>76%</td>
<td>68%</td>
<td>66%</td>
<td>43%</td>
<td>68%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: Statistics Sweden

Figure 2 shows the age distribution of the NMS-10 and Polish (the largest sending NMS) citizen stock in Sweden in 2007. Note that this also takes into account the citizens of the NMS who arrived in Sweden prior to the 2004 enlargement. Overall, migrants from the NMS are relatively young: about half of them are aged 15-34. The 35-54 age group is, however, also relatively important, constituting about 30 per cent of the total migrant stock.
Figure 2: Age distribution of citizen stock from the NMS and Poland, 2007

Source: Statistics Sweden.

3.4 Labour market status and performance of immigrants from the NMS

Table 7 reports the number of residence and work permits issued (up to April 30, 2006, including renewals) and registrations made in accordance with the EU agreement by the Swedish Migration Board (SMB) for citizens of Poland, NMS-8 and Romania and Bulgaria in 2003-2007, by reason for migration. Overall, more than 40,000 migrants from the NMS were registered with the SMB in 2003-2007. More than half (57 per cent) of these migrants were employees. 28 per cent were dependents and family members and 8 per cent students. The
share of employers and providers of services, who may include self-employed people e.g. in
the construction sector, was relatively low (2.7 per cent and 3.2 per cent, respectively).
Poland appears to be the major NMS sending country, with over a half of all NMS migrants in
Sweden coming from there.

Table 7: Immigration from the NMS, the Swedish Migration Board work permits and
registrations data

<table>
<thead>
<tr>
<th></th>
<th>Employees</th>
<th>Providers</th>
<th>Students</th>
<th>Relatives/</th>
<th>Sufficient means for support</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>2003</td>
<td>2134</td>
<td>1</td>
<td>0</td>
<td>320</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>3156</td>
<td>99</td>
<td>141</td>
<td>244</td>
<td>1038</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>2810</td>
<td>251</td>
<td>194</td>
<td>281</td>
<td>1498</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>3927</td>
<td>226</td>
<td>355</td>
<td>265</td>
<td>2159</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>3103</td>
<td>196</td>
<td>87</td>
<td>160</td>
<td>2077</td>
</tr>
<tr>
<td>NMS-8 + Malta</td>
<td>2003</td>
<td>3774</td>
<td>1</td>
<td>0</td>
<td>577</td>
<td>414</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>5151</td>
<td>136</td>
<td>209</td>
<td>750</td>
<td>1694</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>4477</td>
<td>321</td>
<td>408</td>
<td>815</td>
<td>2120</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>5718</td>
<td>275</td>
<td>489</td>
<td>681</td>
<td>2888</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>5317</td>
<td>284</td>
<td>160</td>
<td>531</td>
<td>3041</td>
</tr>
<tr>
<td>Romania + Bulgaria</td>
<td>2003</td>
<td>328</td>
<td>0</td>
<td>0</td>
<td>118</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>531</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>303</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>529</td>
<td>0</td>
<td>0</td>
<td>102</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>557</td>
<td>0</td>
<td>0</td>
<td>70</td>
<td>339</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>1020</td>
<td>52</td>
<td>6</td>
<td>102</td>
<td>418</td>
</tr>
<tr>
<td>NMS-12*</td>
<td>2004 2007</td>
<td>23300</td>
<td>1068</td>
<td>1272</td>
<td>3151</td>
<td>11153</td>
</tr>
<tr>
<td>in % of total</td>
<td>2004 2007</td>
<td>57.80%</td>
<td>2.70%</td>
<td>3.20%</td>
<td>7.80%</td>
<td>27.70%</td>
</tr>
</tbody>
</table>

* NMS-12 includes Cyprus, Malta, Bulgaria and Romania.

Source: Swedish Migration Board

Relative to pre-enlargement levels, immigration flows from the NMS substantially increased.
The number of NMS migrants, however, it is still small compared to the size of the Swedish
labour market. Among possible reasons for this, Wadensjö (2007) mentions a relatively low
rate of job growth and vacancies on the Swedish labour market, as well the diversion of
migration flows to the UK and Ireland due to the easier access to the labour market in those
countries and “not least that English is the language of those two countries”\(^2\). Interestingly,
Denmark, which introduced minor transitional arrangements for labour movement from the
NMS, and, especially, Norway, received higher absolute numbers of immigrants from the
NMS.\(^3\) Dølvik and Eldring (2008) note that “the differences in influx show little correlation
with the presence of transitional arrangements in the Nordic countries (Sweden, Denmark,
Finland, Iceland and Norway)”.

---

\(^2\) See also Legrain (2008), p.13

\(^3\) According to Dølvik and Eldring (2008), in May 2004 – August 2007, Sweden issued 16,900 work permits (+2,550 renewals) to
the NMS migrants, Denmark issued 27,740 residence and work permits (including renewals), and Norway issued 89,430
registrations (+69,200 renewals) to the NMS nationals. The population of Sweden is approximately two times higher than that of
Norway or Denmark.
Studies evaluating the post-enlargement performance of NMS migrants on the Swedish labour market and effects of NMS migration on the Swedish economy are rare. In the following, we summarise the findings of Wadensjö (2007) who analyses the labour market performance of the migrants born in the NMS, drawing on the individual register data from Statistics Sweden and the Swedish Migration Board. The database consists of all individuals who are registered as living in Sweden at the end of 2005. The employment information is available for September or November 2005 (depending on the sector) It must be recalled that the study takes into account all individuals born in the NMS, thus also comprising people who came to Sweden prior to the 2004 enlargement.

Table 8 compares education levels of the migrants born in the NMS and Sweden. The share of individuals with at least 2 years of higher education is higher for those born in the NMS than the Swedish-born (31 per cent vs. 24 per cent). Migrants from the Baltic States tend to have the highest share of individuals with higher education. Note that most of these migrants arrived to Sweden prior to the 2004 enlargement. In addition, for newly arrived migrants much of the information on education is missing (Wadensjö 2007).

Table 8: Education distribution of people born in one of the new member states and in Sweden, 2005, in per cent

<table>
<thead>
<tr>
<th></th>
<th>Czech Republic</th>
<th>Estonia</th>
<th>Hungary</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
<th>Slovakia</th>
<th>Slovenia</th>
<th>NMS-10*</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school - less than 9 years</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Primary school - 9(10) years</td>
<td>3</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>12</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Secondary school</td>
<td>29</td>
<td>30</td>
<td>48</td>
<td>22</td>
<td>18</td>
<td>43</td>
<td>23</td>
<td>50</td>
<td>42</td>
<td>47</td>
</tr>
<tr>
<td>Higher education - less than 2 years</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Higher education - 2 years or more</td>
<td>37</td>
<td>38</td>
<td>27</td>
<td>41</td>
<td>41</td>
<td>30</td>
<td>31</td>
<td>18</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td>Postgraduate education</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Missing information</td>
<td>17</td>
<td>11</td>
<td>3</td>
<td>16</td>
<td>26</td>
<td>7</td>
<td>26</td>
<td>4</td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

* NMS-10 includes Cyprus and Malta.

Source: individual register data from Statistics Sweden and the Swedish Migration Board

Table 9 provides information on the distribution of the migrants born in the NMS and Sweden according to the industry in which they are employed in 2005. Individuals from the major sending NMS (Poland and the Baltic States) are clearly overrepresented in the health care sector, which is consistent with the relatively high share of women in migrant inflows, in particular before 2005 (Table 5), the high share of the individuals with higher education in the stock of migrants from these countries (Table 8), as well as relatively high demand for labour in the sector (Table 2). The Lithuanian- (and, to a lesser extent, the Latvian-) born
are overrepresented in the agricultural sector. The Polish and the Lithuanian-born (the major sending NMS) were more likely to be employed in construction sector than migrants born in other NMS. On average, however, migrants from the NMS in 2005 were underrepresented in the construction sector. But as both the share of males in the NMS migrant inflows and the job openings rate in the construction sector considerably increased after 2004, the importance of the construction sector in NMS migrant employment might have substantially risen since 2005.

Table 9: Distribution of people born in one of the new member states and in Sweden according to industry, 2005, in per cent

<table>
<thead>
<tr>
<th></th>
<th>Czech Republic</th>
<th>Estonia</th>
<th>Hungary</th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
<th>Slovakia</th>
<th>Slovenia</th>
<th>NMS-10*</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, fishing</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Manufacturing, mining</td>
<td>11</td>
<td>11</td>
<td>18</td>
<td>10</td>
<td>12</td>
<td>16</td>
<td>14</td>
<td>31</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Public utilities</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Trade, communication</td>
<td>11</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>14</td>
<td>15</td>
<td>19</td>
<td>17</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Financial services, business services</td>
<td>11</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>14</td>
<td>15</td>
<td>19</td>
<td>17</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Education</td>
<td>18</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>8</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Health care</td>
<td>15</td>
<td>19</td>
<td>19</td>
<td>22</td>
<td>18</td>
<td>23</td>
<td>30</td>
<td>14</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Personal and cultural services</td>
<td>16</td>
<td>10</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>8</td>
<td>12</td>
<td>7</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Public administration</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Not classified</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

* NMS-10 includes Cyprus and Malta.


Table 10 compares monthly wages of individuals born in the NMS-10 and Sweden and reveals a less than 1 per cent difference between the two groups. The average wage for the two major migrant groups (Polish and Lithuanian) is, however, 4 per cent and 8 per cent (respectively) lower than that of the Swedish-born.

Finally, to find whether migrants from the NMS receive a negative wage premium, Wadensjö (2007) estimates Mincer equations for those employed full time in Sweden. Controlling for age, gender and education level, but not the employment sector, the NMS-10 migrants receive about 4 per cent lower wages (3 per cent - women and 5 per cent - men) compared to the Swedish-born. The largest negative wage effects are found for groups with most recent arrivals: Poland (5 per cent), Estonia (6 per cent), Latvia (7 per cent) and Lithuania (16 per cent). On average, the earlier the migrants born in the NMS arrived to Sweden the lower is the wage disadvantage. It is the highest for those arrived in 1990-1999 (-9 per
cent), but then diminishes slightly to 6 per cent for the migrants arrived between 2000 and 2005.

Table 10: Monthly wage among those born in one of the NMS and in Sweden aged 16-64 in September or November 2005, in thousands SEK

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>25.4</td>
<td>21.8</td>
<td>23.5</td>
</tr>
<tr>
<td>Estonia</td>
<td>27.7</td>
<td>21.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>27.2</td>
<td>22.0</td>
<td>24.1</td>
</tr>
<tr>
<td>Latvia</td>
<td>27.8</td>
<td>21.9</td>
<td>23.3</td>
</tr>
<tr>
<td>Lithuania</td>
<td>25.6</td>
<td>19.8</td>
<td>21.4</td>
</tr>
<tr>
<td>Poland</td>
<td>26.7</td>
<td>21.1</td>
<td>22.6</td>
</tr>
<tr>
<td>Slovakia</td>
<td>32.6</td>
<td>23.3</td>
<td>27.1</td>
</tr>
<tr>
<td>Slovenia</td>
<td>25.7</td>
<td>19.6</td>
<td>22.4</td>
</tr>
<tr>
<td>NMS-10*</td>
<td>27.4</td>
<td>21.4</td>
<td>23.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>27.0</td>
<td>20.8</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Note: Only those employed included.
*NMS-10 includes Cyprus and Malta


4. Impact of migration from the NMS on the Swedish economy and the welfare state

Dølvik and Eldring (2008), looking at immigration from the NMS to the Nordic countries (Sweden, Denmark, Norway, Finland, Sweden, and Iceland) after the EU enlargement, conclude that “the increasing labour mobility from Poland and the Baltic states has contributed to higher economic growth and slower increases in prices, costs and interest rates than what otherwise would have been possible in a period of sustained economic boom and increasing scarcity of labour in the Nordic countries. Labour migration has contributed to removing bottlenecks, and no significant imbalances in the Nordic labour markets have been registered.”

So far there has also been no evidence that the fears of the “welfare tourism”, an important focal point of the pre-accession debate in Sweden, were well-founded. Despite the fact that Sweden allowed unrestricted access to its generous welfare system for the NMS migrants, the UK and Ireland (the countries which restricted NMS migrants’ access to their social benefits for the first year), as well as neighbouring Denmark and Norway experienced much higher inflows of labour from the NMS (Legrain 2008, Dølvik and Eldring 2008). Evaluating

---

4 See Appendix A in Doyle et al. (2006).
the NMS migration experience to Nordic countries, including Sweden, Dølvik and Eldring (2008) conclude that “so far, social tourism appears not to have been a problem”.

Table 11 from Wadensjö (2007) shows that the 2003-2004 change in the number of applications for social assistance approved for the NMS migrants was negligible. For example, the stock of Polish migrants increased by at least 1,000 between 2003 and 2004 (Tables 4.1., 4.2., and 5), while the number of applications for social assistance approved for the Polish citizens/the Polish-born actually decreased.

Table 11: Number of applicants for social assistance granted for the NMS migrants aged 16 and older, by country of birth and citizenship, in 2003 and 2004.

<table>
<thead>
<tr>
<th></th>
<th>By country of citizenship</th>
<th>By country of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
<td>2004</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>35</td>
<td>31</td>
</tr>
<tr>
<td>Estonia</td>
<td>125</td>
<td>124</td>
</tr>
<tr>
<td>Hungary</td>
<td>323</td>
<td>328</td>
</tr>
<tr>
<td>Latvia</td>
<td>55</td>
<td>59</td>
</tr>
<tr>
<td>Lithuania</td>
<td>79</td>
<td>91</td>
</tr>
<tr>
<td>Poland</td>
<td>1753</td>
<td>1702</td>
</tr>
<tr>
<td>Slovenia</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>Slovakia</td>
<td>96</td>
<td>112</td>
</tr>
<tr>
<td>Total</td>
<td>2496</td>
<td>2477</td>
</tr>
</tbody>
</table>


Finally, Table 12 shows that the number of the EU-born (excluding Sweden) receiving social assistance in Sweden was decreasing in 2005-2007. Taking into account positive net inflows of the NMS migrants in this period, this once again would not support the “welfare tourism” hypothesis.
Table 12: Recipients of social assistance and introductory benefits, by country of birth, 2005-2007

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>152 498</td>
<td>139 082</td>
<td>128 503</td>
</tr>
<tr>
<td>EU countries excl.</td>
<td>14 659</td>
<td>13 147</td>
<td>11 808</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other countries in</td>
<td>27 424</td>
<td>25 375</td>
<td>25 190</td>
</tr>
<tr>
<td>Europe excl. EU,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway and Island</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rest of the world</td>
<td>91 115</td>
<td>100 321</td>
<td>102 795</td>
</tr>
</tbody>
</table>

Note: EU includes Romania and Bulgaria

Source: The Swedish National Board of Health and Welfare

5. Summary

Despite the full liberalization of the labour market for NMS nationals with no restrictions in access for social benefits, Sweden did not experience massive migration inflows from the NMS after 2004. More than half of the migrants came from Poland, followed by Lithuania. Compared to the pre-transition levels, the share of females in migrant inflows fell considerably, reflecting the declining importance on the health care sector in employment of NMS migrants in Sweden. There is no evidence that immigration from the NMS has led to any imbalances on the Swedish labour market or that migrants from the NMS came massively to Sweden because of the generous welfare system.
6. References


Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements

VC/2007/0293

Deliverable 8
Leverhulme Centre for Research on Globalisation and Economic Policy (GEP)

Country Study: UK

Richard Upward

Abstract
The UK has experienced unprecedented flows of migration from the New Member States since 2004. We survey the available evidence on: the size of these flows (gross and net), the characteristics of the migrants, and the impact that they have had on the UK labour market and on UK public services at a local level. We also show that recent migrants from the NMS are employed overwhelmingly in occupations which are less-skilled, and lower-paid, than equivalently educated UK-born workers.

The views and opinions expressed in this publication are those of the authors and do not necessarily represent those of the European Commission.
## Contents

1 The Institutional Setting ........................................................................................................... 1  
  1.1 The institutional arrangements for recent migration ...................................................... 1  
  1.2 Other aspects of UK labour market institutions ................................................................. 1  
  1.3 The UK Economy 2004–2008 ......................................................................................... 1  
2 Relevant data sources and limitations................................................................................. 3  
  2.1 Labour Force Survey ..................................................................................................... 3  
  2.2 International Passenger Survey .................................................................................... 3  
  2.3 Worker Registration Scheme ......................................................................................... 4  
  2.4 National Insurance Recording System ........................................................................... 4  
3 Patterns of labour mobility into the UK ............................................................................ 4  
  3.1 Stocks and flows of migrants from accession and candidate countries 2000–2008 ................. 4  
  3.2 Return flows of migrants ............................................................................................... 6  
  3.3 Employment patterns ..................................................................................................... 6  
  3.4 Skill structure ............................................................................................................... 7  
  3.5 Regional distribution ..................................................................................................... 8  
  3.6 Other socio-economic patterns ..................................................................................... 9  
  3.7 Illegal immigration ........................................................................................................ 9  
4 Effects of labour mobility on the UK labour market ........................................................ 10  
  4.1 The wage and employment effects on natives ............................................................... 10  
    4.1.1 Pre-2004 evidence .................................................................................................. 10  
    4.1.2 Post-2004 evidence ............................................................................................... 11  
  4.2 Effects on firms .............................................................................................................. 12  
  4.3 Macroeconomic impacts ............................................................................................... 12  
  4.4 Fiscal impacts ............................................................................................................... 13  
  4.5 Effects on public expenditure and public services at the local level .................................. 13  
    4.5.1 Receipt of unemployment benefits ....................................................................... 14  
    4.5.2 Education services ................................................................................................. 14  
    4.5.3 Health services ...................................................................................................... 14  
    4.5.4 Crime .................................................................................................................... 15  
  4.6 Effects on immigrants: brain waste? ............................................................................ 15  
    4.6.1 Do immigrants’ wages reflect their educational qualifications? ...................... 16  
    4.6.2 Are immigrants employed below their skill levels? ............................................ 19  
5 Summary ........................................................................................................................... 21  
6 References ........................................................................................................................... 22
1 The Institutional Setting

1.1 The institutional arrangements for recent migration

The UK agreed to permit free access to the UK labour market for nationals of the NMS-8 countries from 1 May 2004. Nationals of the NMS-8 who wish to take up employment in the UK for at least one month are required to register with the Worker Registration Scheme. Self-employed workers are not required to register. Full worker rights (for example, full access to benefits) are not available until an NMS-8 national has completed 12 months of continuous employment under the Worker Registration Scheme.

A different set of rules apply for Bulgarian or Romanian nationals wishing to work in the UK. Employees from these countries are required to apply for an accession worker card, while self-employed workers require a registration certificate. In most cases, employers of Bulgarian or Romanian nationals are required to apply for work permits, although there are exceptions for certain occupations. Access for low-skilled workers is limited by quota, but workers may also apply under the Highly Skilled Migrant programme, which awards points for relevant qualifications and skills.

1.2 Other aspects of UK labour market institutions

The UK is usually characterized as having a relatively deregulated labour market: it has one of the lowest benefit replacement ratios amongst OECD economics, although these payments have relatively long duration; spending on Active Labour Market Policies is low; union membership density is relatively low with limited co-ordination of wage bargaining; employment protection is lower than in any other EU country.

1.3 The UK Economy 2004–2008

UK labour market performance was strong compared to the average for all EU-15 countries at the time of accession; see Figures 1 and 2. The UK employment rate stood at over 70% compared to the EU-15 average of 65%. The unemployment rate was 4.8%, compared to the EU-15 average of 8%.

---

1 See http://www.ukba.homeoffice.gov.uk/workingintheuk/eea/bulgariaromania/liveworkuk/. Exceptions include teachers on approved exchange schemes, qualified nurses on a period of supervised practice.

2 See Nickell, Nunciata and Ochel (2005) for more detail.
Real GDP growth in the UK from 2005–2007 was greater than the Euro area average (OECD 2007, Annex Table 1). In the period since accession, UK unemployment rates have increased slightly to 5.4%, while the employment rate has remained stable (as of 2007). Another indicator of labour market demand is given by the number of unfilled
vacancies. The ratio of unfilled vacancies to jobs in the UK has actually increased slightly from 2.3% (February 2004) to 2.6% (February 2008).\(^3\) Home Office (2007) also note that vacancies in those sectors where migrants are concentrated (such as hotels and restaurants) remain at historically high levels, and that the magnitude of vacancies in a given month is high even relative to the scale of in-migration.

The outlook for the remainder of 2008 and 2009 is, however, less optimistic. The repercussions of the credit crisis are starting to be felt in the real economy. The unemployment rate has started to rise and the employment rate to fall, while at the same the inflation rate has risen above its target as a result of increases in input prices, in particular food and fuel. Of course, any weakening in the UK labour market will be likely to have effects on in- and out-migration rates.

## 2 Relevant data sources and limitations

As noted by the recent report from the Select Committee on Economic Affairs (House of Lords 2008) the available statistical information on the scale of migration into the UK is rather weak. There are at present four widely-used sources of information from which one can estimate the scale of immigration. These are described in more detail in Salt and Millar (2006).

### 2.1 Labour Force Survey

The Labour Force Survey (LFS) is a sample survey of around 60,000 households living at private addresses in the UK. The survey records information on country and birth and year of arrival in the UK. As of 2007, the LFS includes information on about 10,000 foreign-born individuals, out of a total sample of about 120,000. Of these, 1,200 come from NMS-8 countries and a further 240 from candidate countries. These relatively small numbers mean that further breakdowns by precise country of origin, or by other characteristics, will be difficult. Further more, the LFS almost certainly undersamples migrants (see House of Lords (2008) p.10). The LFS may undercount the actual numbers of foreign-born workers for three reasons. First, it excludes students in halls of residence who do not have a UK resident permit. Second, it excludes people who live in most types of communal housing. Third, it is grossed up to population estimates which include only long-term migrants (those staying more than 12 months).

### 2.2 International Passenger Survey

The International Passenger Survey (IPS) is a survey of a random sample of passengers entering or leaving the UK. Sampling is conducted on all “major routes” into and out of the UK (so some regional airports are not included). Although over 250,000 interviews

---

\(^3\) Source: ONS vacancy survey, series AP2Z.
are conducted, the number of migrants identified by the survey is small (around 3,500) and relies on self-reported status as regards purpose of each visit.

2.3 Worker Registration Scheme

Nationals of NMS-8 who wish to take up residence in the UK for at least one month must usually register with the Worker Registration Scheme (WRS). Self-employed workers are not required to register. However, an individual who leaves employment is not required to de-register, and so the data only provides an indication of gross inflows rather than net migration.\(^4\)

2.4 National Insurance Recording System

National Insurance numbers are allocated by the Department of Work and Pensions to overseas nationals, and details are held on the National Insurance Recording System (NIRS). The NIRS includes information on the date of arrival in the UK as well as date of registration. As with the WRS data, the NIRS does not record outflows or length of stay.

3 Patterns of labour mobility into the UK

3.1 Stocks and flows of migrants from accession and candidate countries 2000–2008

Migrant status can be defined either in terms of a person’s country of birth, or in terms of their nationality. The UK Office for National Statistics has preferred to use country of birth, and therefore, where possible, we use this definition also.

Probably the most reliable estimate of stocks of migrants from accession and candidate countries can be obtained from the Labour Force Survey. However, sampling error means that accurate estimates are not available for smaller countries; see Table 1.

The latest estimates of the total stock (based on our own calculations from the QLFS Q4 2007) are that there are some 650,000 migrants from the NMS8 countries living in the UK. This is consistent with Clancy (2008, Table 3) who also use the QLFS, and reports that there were 615,000 migrants from the NMS8 of working age in the first quarter of 2008. Our estimates for 2005 and 2006 are also similar to those given in Blanchflower et al. (2007) Table D (also based on QLFS), but there appears to have been a very large increase between Q2 2006 and Q2 2007, primarily accounted for by a continued increase in the numbers of Polish migrants.

\[^4\] In addition, as far as we are aware there are no penalties associated with non-compliance, and so the incentives to comply fully with the WRS may be weak.
Table 2 summarises estimates of net flows using three alternative data sources. The QLFS suggests that net flows of migrants from NMS-8 from Q2 2004 to Q4 2007 have been about 525,000. Flows between Q2 2007 and Q4 2007, however, are only 37,000 which suggests that the rate has greatly reduced.

**Table 1: Stocks of migrants in the UK**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
<td>(Jan-Mar)</td>
</tr>
</tbody>
</table>

**NMS-10**
- Czechoslovakia
- Czech Republic
- Slovakia
- Cyprus
- Hungary
- Poland
- Estonia
- Latvia
- Lithuania
- Malta
- Slovenia

**NMS-2**
- Bulgaria
- Romania

**Candidate**
- Yugoslavia
- Montenegro
- Kosovo
- Croatia
- Macedonia
- Bosnia Herzegovina
- Turkey
- Albania

| Total NMS | 209 | 223 | 236 | 241 | 256 | 365 | 506 | 750 | 900 |
| Total candidate | 92 | 110 | 130 | 142 | 138 | 124 | 129 | 140 | 142 |
| Total NMS-10 | 199 | 214 | 219 | 223 | 238 | 332 | 468 | 710 | 832 |
| Total NMS-8 | 99 | 112 | 102 | 128 | 129 | 224 | 365 | 617 | 727 |

**Notes:** • indicates estimate less than 10,000

Source: Quarterly Labour Force Survey, Q2 where available

**Table 2: Comparison of NMS-8 net inflow estimates May 2004-Dec 2007, 000s**

<table>
<thead>
<tr>
<th>Jan 04 - Dec 04</th>
<th>May 04 - Dec 04</th>
<th>May 04 - April 05</th>
<th>May 05 - May 05</th>
<th>May 05 - May 06</th>
<th>May 06 - May 07</th>
<th>Jan 07 - May 07</th>
<th>May 07 - June 08</th>
<th>Total May 04 - Dec 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLFS</td>
<td>194</td>
<td>141</td>
<td>252</td>
<td>37</td>
<td>525</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIMS</td>
<td>61</td>
<td>71</td>
<td>211</td>
<td>84</td>
<td>766</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WRS</td>
<td>205</td>
<td>228</td>
<td>255</td>
<td>807</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIRS</td>
<td>126</td>
<td>63</td>
<td>222</td>
<td>267</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. Own calculation from Quarterly Labour Force Surveys, weighted by population weights.
2. ONS Total International Migration time series, based on the International Passenger Survey (ONS 2007).
3. Worker Registration Scheme, taken from Table 1 of Accession Monitoring Report, June 2008 (Home Office 2008).

How do these estimates compare with other sources of information? The ONS International Migration series (Office for National Statistics 2007), which is derived from the International Passenger Survey, estimates net flows to be only 181,000 for the period 2004–2006. In contrast, more than 765,000 workers registered for employment via the
Workers Registration scheme over period May 2004–December 2007, which is considerably higher than the LFS estimate. This presumably reflects the fact that the WRS series counts inflows only. Finally, National Insurance numbers allocated to workers from NMS-8 over the period May 2004–December 2007 come to 807,000 which is very close to the WRS estimates. Once again, the NIRS data measures only inflows.

We would therefore suggests that the total net inflow of NMS-8 migrants from May 2004 to December 2007 is probably around 525,000, and that current stocks are reasonably estimated by Table 1. The very latest evidence from the first half of 2008 suggests that the arrival rate of new migrants is slowing somewhat. The number of applicants for the Worker Registration Scheme has fallen in each of the last four quarters, from 2007 Q3 to 2008 Q2. Further, the number of applications has also fallen in each of the last three months (April 2008 – June 2008).

3.2 Return flows of migrants

A key problem with the UK data sources which measure inflows of NMS-8 migrants (WRS and NIRS) is that no record is made of return flows. These datasets therefore represent a measure of gross inflows. A comparison of inflow estimates from Table 2 suggests that, since May 2004, approximately 31%-34% of NMS-8 migrants have already left the UK. This is broadly consistent with the findings of Pollard, Latorre and Sriskandarajah (2008). A survey by the University of Surrey (2006) of 500 Polish migrants found that one in five identified themselves as seasonal migrants, while one in three intended to stay for less than two years.

3.3 Employment patterns

Table 3 reports some key features of NMS-8 migrants in terms of their employment patterns. NMS-8 migrants are significantly more likely to be employed than the UK-born, but have almost the same risk of unemployment.

Employment rates of NMS-8 migrants have increased dramatically since accession, indicating that the vast majority of new migrants have arrived in the UK for reasons of employment. In 2005, for example, employment rates were only 57%, rising to 74% in 2007. Clancy (2008, Table 3) confirms this trend. He also shows that employment rates of NMS-8 migrants are also significantly higher than employment rates of migrants from the EU14 and the Rest of the World.

---

5 This estimate is based on the difference between the LFS estimate of flows (which represent a net inflow) and the WRS/NIRS estimates (which represent a gross inflow).
Table 3: Employment patterns, 2007

<table>
<thead>
<tr>
<th></th>
<th>UK-born</th>
<th>NMS-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Proportion employed</td>
<td>67%</td>
<td>74%</td>
</tr>
<tr>
<td>(b) Proportion self-employed</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>(c) Proportion unemployed (ILO)</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>(d) Average hourly wage</td>
<td>£11.89</td>
<td>£7.20</td>
</tr>
<tr>
<td>(e) Industry:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14%</td>
<td>29%</td>
</tr>
<tr>
<td>Trade</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Hotels and catering</td>
<td>4%</td>
<td>13%</td>
</tr>
<tr>
<td>Services</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Health, education, public sector</td>
<td>36%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Notes:
All results weighted by population weights.
Sample includes those of working age (16-64 for men and 16-59 for women)

Table 3 also shows that NMS-8 migrants earn substantially less per hour than UK-born workers, and that they are employed disproportionately in agriculture, manufacturing and hotels and catering.6

3.4 Skill structure

The lower hourly wages of NMS-8 migrants suggests that they are disproportionately employed in low-skilled occupations. Table 4 confirms this: the proportion of NMS-8 migrants working as operative or in elementary occupations is over 60% compared to only 18% for UK-born workers.7

The occupational structure of recent migrants is confirmed by the Worker Registration Scheme Data (Home Office 2008, Table 7). The most common occupations for workers being registered include process operatives, warehouse operatives, packers and kitchen assistants.

In contrast, however, NMS-8 migrants have, on average, 2 years additional education compared to UK-born workers. This will partly reflect the fact that migrants are much younger than UK-born workers (see Table 6 for more on this). Nevertheless, Table 4 is strongly suggestive of the fact that in some senses NMS-8 migrants are “under-employed” relative to their education.

---

6 Portes and French (2005) also note that the concentration of NMS-8 migrants is highest in agriculture.
7 Process, plant or machine operatives plus elementary occupations.
Table 4: Skill structure, 2007

<table>
<thead>
<tr>
<th></th>
<th>UK-born</th>
<th>NMS-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Age completed full-time education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>(b) Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers and professionals</td>
<td>28%</td>
<td>6%</td>
</tr>
<tr>
<td>Associate professional, administrative and skilled trades</td>
<td>37%</td>
<td>20%</td>
</tr>
<tr>
<td>Service occupations</td>
<td>17%</td>
<td>11%</td>
</tr>
<tr>
<td>Operatives and elementary occupations</td>
<td>18%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Notes:
All results weighted by population weights.
Sample includes those of working age (16-64 for men and 16-59 for women).

3.5 Regional distribution

Table 5 compares the regional distribution of NMS-8 migrants with UK-born individuals. At this fairly aggregate level the most distinctive feature is the concentration of migrants in London.

The geographical distribution of recent migrants from the NMS-8 can also be seen from the location of employers of workers registered on the WRS. The Accession Monitoring Report (Home Office 2008, p. 17) shows that Anglia, the Midlands and London were the most common locations. In fact, the proportion of new registrations for London-based employers fell from 20% in 2004 to just 10% by the end of 2007, suggesting that the distribution of NMS-8 migrants in Table 5 partly reflects existing locations of migrants pre-enlargement.

Table 5: Regional distribution, 2007

<table>
<thead>
<tr>
<th></th>
<th>UK-born</th>
<th>NMS-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>North West</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Merseyside</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>Yorks. &amp; Humberside</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>East Midlands</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>West Midlands</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Eastern</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>London</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>South East</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>South West</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Wales</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Scotland</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes:
* Indicates less than 0.5%
All results weighted by population weights.
Sample includes all individuals.
The LFS is not well-suited to an analysis at a finer level of disaggregation because sample sizes become too small. A more detailed breakdown is available from Pollard et al. (2008, Appendix B) using WRS registrations, which shows particularly high concentrations of NMS-8 migrants in certain local authorities in London and Eastern England. Of 434 local authorities, 26 have concentrations of NMS-8 migrants of 2% or above, while 337 local authorities have concentrations of less than 1%. Anecdotal evidence suggests that this concentration of migrants has caused problems in terms of provision of local services such as health and education. We return to this issue in Section 4.3.

3.6 Other socio-economic patterns

There has been considerable debate in the UK regarding pressure of migrants on social services such as education, health and housing (see Section 4.3 for more detail). Table 6 considers some basic socio-economic characteristics of NMS-8 migrants to the UK. NMS-8 migrants are much younger, on average, and are much more likely to be of working age. A crude indication of receipt of education or health services is given by the proportion of migrants who are children or who are older. Table 6 shows that only a small proportion fall into these categories.

Table 6: Socio-economic characteristics, 2007

<table>
<thead>
<tr>
<th></th>
<th>UK-born</th>
<th>NMS-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Average age, years</td>
<td>39 %</td>
<td>30 %</td>
</tr>
<tr>
<td>(b) % working age</td>
<td>58 %</td>
<td>83 %</td>
</tr>
<tr>
<td>(c) % &lt; 16</td>
<td>20 %</td>
<td>11 %</td>
</tr>
<tr>
<td>(d) % &gt; 60</td>
<td>22 %</td>
<td>5 %</td>
</tr>
<tr>
<td>(e) % male</td>
<td>49 %</td>
<td>52 %</td>
</tr>
</tbody>
</table>

Notes:
All results weighted by population weights.
Sample includes all individuals.

3.7 Illegal immigration

All the data sources described in Section 2 are uninformative about the size or effects of illegal immigrants to the UK. Woodbridge (2005) for the Home Office estimates the size of the total illegal migrant stock in the UK for 2001 to be about 430,000, or 0.7% of the UK population. One obvious assumption to make would be that the decision to allow free entry to NMS-8 migrants would reduce any illegal migration from those countries, but as far as we are aware there is no evidence on this issue. Farrant, Grieve and Sriskandarajah (2006) use information on individuals detained under the Immigration Act. The majority come from outside Europe (39% from Africa and 28% from Asia). Of those from Europe, the largest European nationality groups were from Turkey, Serbia, Montenegro and Romania.
4 Effects of labour mobility on the UK labour market

4.1 The wage and employment effects on natives

A large economic literature exists which attempts to determine the effect of migration on natives’ wages and employment. The majority of this evidence comes from the US. Dustmann, Fabbri, Preston and Wadsworth (2003) argue that “The almost universal conclusion of these studies for other countries is that there is no large discernible impact of immigration on wages or employment of existing workers.” In this section we briefly review the recent UK evidence.

4.1.1 Pre-2004 evidence

Dustmann et al. (2003) and Dustmann, Fabbri and Preston (2005) provide perhaps the most systematic evidence on the effects of migration on the UK labour market before the 2004 accession. In these papers the effect of migration is identified by the spatial correlation between immigrant inflows (or immigrant stocks) and labour market outcomes. As is well known, a number of key difficulties arise. In particular, the distribution of migrants across geographical areas is non-random and almost certainly correlated with the outcome of interest. In addition, adjustment of natives’ labour supply, natives’ mobility and capital flows may mitigate the impact of migration. In the UK case, an additional difficulty is the lack of comprehensive data on the number of migrants across narrowly defined geographical areas. Dustmann et al. (2003) conclude that there is “no strong evidence of large adverse effects of immigration on employment or wages of existing workers.” Dustmann et al. (2005) find, if anything, slightly positive wage effects but these are statistically poorly determined.

An alternative approach is taken by Manacorda, Manning and Wadsworth (2006), who estimate a production function which explicitly allows for native and migrants to be imperfect substitutes. They argue that because immigrants to the UK tend to be more educated than natives (see Table 4 for example), increased immigration will reduce the return to education for natives. But because natives and migrants are imperfect substitutes, the size of this effect will be small and “it is not surprising that existing studies have failed to find a significant effect on the labour market outcomes of natives.” In fact, Manacorda et al. find that the main impact of increased migration is to depress the earnings of migrants who are already in the UK.

Dustmann, Frattini and Preston (2007) is the most recent study which looks at pre-accession migration effects on the UK labour market. Their focus is not just on average wages, but also on the impact of migration over the period 1996–2005 on the whole distribution of wages. They find that, on average, increase immigration is associated with

---

8 There also exists a large literature on the earnings and employment outcomes of migrants themselves, which we do not cover here. See Dustmann and Fabri (2005) for a review of this literature.
small positive wage effects, but that these effects differ across the distribution of wages. They find that “wages at the low end of the distribution (including those at points in the distribution close to the minimum wage) were held back by immigration over the period under consideration...the overall magnitude of effect that immigration had on wages at the low end of the distribution is modest, however.”

4.1.2 Post-2004 evidence

The large increase in migration post-2004 provides, in theory, an excellent opportunity to estimate labour market effects more precisely. However, time-lags in producing research and the continuing difficulty of finding accurate measures of migrant stocks mean that the number of published studies is small. To date, only Portes and French (2005), Gilpin, Henty, Lemos, Portes and Bullen (2006), Lemos and Portes (2008) and Reed and Latorre (2009) provide microeconometric estimates which explicitly refer to the post accession period, and these papers mostly concentrate on unemployment effects (rather than wage effects). Estimates of the post-2004 macroeconomic impact are discussed briefly in Section 4.3.

Portes and French (2005) provide some preliminary evidence. They first note that evidence that migrants select into geographical areas on the basis of the economic performance of those areas is actually rather weak (Figure 5.4). The relationship between WRS applications and unemployment in 2003 is, if anything, positive rather than negative. This implies that the endogeneity of post-accession inflows might be less of a problem. Portes and French then regress the change in the unemployment rate of natives on the number of WRS applications at a Local Authority level, and find that “A8 migration has been associated, in local labour markets, with a small but significant increase in native unemployment.” However, they also note that this effect is very small in relation to the increase in employment which occurred over the same time period.

Gilpin et al. (2006) update and extend the initial findings of Portes and French. They show that there is no discernible statistical relationship between migrant inflows and either claimant unemployment or the number of vacancies posted by employers in local labour markets. They also find no evidence of a fall in nominal wage growth since accession. A large number of econometric models are estimated which attempt to deal with the endogeneity problem outlined earlier. The conclusion is that in the great majority of cases the number of NMS-8 migrants has no discernible impact on the numbers of unemployed in a given geographic region.

Lemos and Portes (2008) extend the analysis of Gilpin et al. in several important ways. They extend the length of the period studied; they examine the impact of migration on different occupational groups; they examine the impact at different points in the earnings distribution; and they examine the impact on migration flows within the UK. Despite all these extensions, however, Lemos and Portes also fail to find any significant impact of additional migration on either unemployment rates or wages of natives.
Reed and Latorre (2009) summarise the UK evidence, and conclude that “...the best available UK microeconomic evidence on the effects of migration on employment finds either no affect at all, or very small negative effects.” (p.17). Reed and Latorre (2009) also conduct their own analysis of the relationship between job registrations, wage changes and employment changes. Once again, there is no obvious relationship between the size of the migrant inflow and either wages and employment (if anything, the relationship is positive rather than negative).

Reed and Latorre also use regression analysis to examine the relationship between wage changes and the share of migrants in the workforce. They partition the data into cells based on region and occupation, and find a small negative effect: a 1% increase in the share of migrants in a particular occupation and region decreases wages in that occupation and region by about 0.3%. The result is significant at 10% but not at the 5% level. Interestingly, they find that this negative effect emerges because of the inclusion of more recent data, post 2005.

4.2 Effects on firms

There are at present no academic studies on the effect of increased migration on firms. However, surveys of businesses strongly support the view that migration makes a positive contribution to firms’ profits and productivity. For example, a survey by the Institute of Directors (2007) reports that business leaders regard migration as an important way to alleviate skills shortages and to “widen the labour pool for employers.” This is confirmed by a survey of members of the British Chambers of Commerce (2007). The majority of respondents said that they employed migrant workers because of a shortage of suitable candidates, and also that migrant workers are “more productive” or have a “better work ethic” than UK equivalents.

4.3 Macroeconomic impacts

We have already discussed wage and employment effects in Section 4.1. In this section we discuss macroeconomic effects more generally. Section 1.3 suggested that there have been no great shocks to the main macroeconomic labour market indicators as a result of the greatly increased migration flows. Although the unemployment rate increased marginally after 2004, Riley and Weale (2006) note that “it is difficult to argue that the immigration...has been a prima facie cause of unemployment.” Gilpin et al. (2006) find no evidence of a relationship between migrant inflows and unemployment. Riley and Weale do suggest, however, that the slight rise in unemployment inflows of young workers might reflect the increased competition from large numbers of young migrants.

The consensus view is that recent migration to the UK has had a strong effect on GDP growth. Riley and Weale, for example, calculate that total immigration to the UK contributed about 1% to GDP, and that the inflow from the New Member States accounts for 0.2% of GDP: “Since the actual growth rates in 2004 and 2005 were 3.3% and 1.9% respectively, it is obvious that the effect of immigration on economic growth has been

The most detailed macroeconomic estimates are provided by Barrell, FitzGerald and Riley (2007), using an econometric forecasting model. Their forecasts are based on the assumption that the migrant stock is constant from 2006q3 onwards, which as we have seen, has not proved accurate. Nevertheless, their simulations predict that output in the UK is two-thirds of a percent higher than it would have been in the absence of the NMS migration. During the adjustment period unemployment rises and inflation falls, but these effects do not persist in the long-run.

However, House of Lords (2008) note that “There has been no empirical research that has analysed the impact of immigration on the per capita income of the resident population of the UK.” They argue that what evidence there is suggests that the impact on GDP per head is likely to be minimal. They recommend that “much more empirical work might usefully be done on the labour market and the macroeconomic impacts of immigration in the UK”

### 4.4 Fiscal impacts

Gott and Johnston (2002) analyse the likely fiscal impact of migrants in some detail. The key point they make is that employment and earnings are the key determinants of an individual’s net fiscal impact: “those who are economically active...are likely to be making a net fiscal contribution.” As we have seen in Section 3, there are a number of reasons why new migrants from the NMS-10 countries are likely to have a positive fiscal impact. First, they have high rates of employment. Second, they tend not to have dependents (especially children), and so the cost of education is low. Third, they tend to be young, and so the cost of health and social care is low.

### 4.5 Effects on public expenditure and public services at the local level

In this section we consider the impact of the increased migration flows on public expenditure and the use of public services. Much of this information comes from Institute of Community Cohesion (2007), which collected information from a variety of local authorities. However, most of the information presented in this section is qualitative and it is very difficult to accurately estimate the additional cost of increased migration on local and national services.

In the UK, the majority of local expenditure on services is funded by grants from Central Government which are directly link to population estimates. Large increases in local populations which are not captured by official population estimates therefore place an immediate strain on local government finances.
4.5.1 Receipt of unemployment benefits

Data from National Insurance number allocations (Department for Work and Pensions 2007, p.9) show that the proportion of overseas nationals entering the UK and claiming an out-of-work benefit has fallen dramatically since the turn of the century, from 11% in 2000/01 to only 3% in 2005/06. Home Office (2008) reports that the number of applications by NMS-8 nationals for tax-funded income-related benefits was very small. Between May 2004 and December 2007, there were only 7,765 applications for Income Support, 13,622 for income-based Jobseeker's Allowance and 372 for State Pension Credit. Of these, the majority (78%) were disallowed on the basis of the Right to Reside and the Habitual Residence Test (see Section 1.1). These figures suggest that the rate of benefit receipt amongst NMS8 migrants is extremely low.

4.5.2 Education services

The WRS contains information on the number of dependents of each registered worker. Only a small minority (7%) of registered workers declared that they had dependent children living with them. As a proportion of all registered workers, the total number of dependents aged less than 17 was 4.2% in 2005, 7.2% in 2006 and 8.6% in 2007. This suggests that use of education services in total was rather low (Home Office 2008 Table 5).

The Pupil Level Annual School Census is an annual count of all children at state schools and records first language and ethnicity. There has been an increase in the proportion of pupils whose first language is not English between 2003 and 2006. Of the 10 local authorities where the increase is greatest in pupils whose first language is not English, nine are in London (Institute of Community Cohesion 2007, Table 14). This suggests that this increase in pupil numbers is not purely a result of the NMS8 Accession, since we also observe significant concentrations of NMS8 migrants in Eastern England outside London.

Various local authorities reported additional pressure on schools from increased migrant flows. In particular, it has proved difficult to plan for increased numbers of children as family groups arrive to join migrant workers. Schools have experienced increased “churn” of pupils because their parents often stay in the UK for short periods. The Association of Local Government quantified the additional cost of registering new children at non-standard times as £400 for primary- and £800 for secondary-age children, but this does not include additional costs for extra teaching support such as language services (Institute of Community Cohesion 2007).

4.5.3 Health services

The age distribution of NMS-8 migrants suggests that the use of health services related to illness and old age is likely to be very low. Various local authorities have reported that

9 It should be noted that the Home Office does not verify these responses.
“Migrant workers have had little impact on health services, as they are mainly young and healthy” (Institute of Community Cohesion 2007, p.53).

However, births to mothers who were themselves born outside the UK have increased substantially since 2004. Institute of Community Cohesion (2007, Table 15) shows an increase of 27% in births to non-UK mothers, and an increase in 52% of births to mothers born in Europe. The top 10 authorities for percentage of live births to mothers born outside the UK in 2006 were all London boroughs, with nine exceeding 60%. In 2001 58 authorities had more than 15 per cent of their live births to foreign-born women of which 28 were outside London. In 2006 this had grown to 119 authorities of which 86 were outside London, which points to increasing pressure on healthcare system outside London. Some Local Authorities had a very large percentage of live births given by mothers born outside the UK – the actual percentage ranging from 33% to 53% for the top 10 authorities.

4.5.4 Crime

A recent report by the Association of Chief Police Officers (Maxwell and Fahy 2008) concluded that migrants are no more likely to commit crime than natives. Maxwell and Fahy argue that there is no evidence to support the idea that migration created any kind of large scale “crime wave”. In fact, crime actually fell over the period in question. They do note that cultural differences may exist (such as attitudes to offences like drink driving), but that these can be exaggerated. The main problems associated with the influx of NMS8 migrants has been in terms of “local rumour and misunderstandings fuelling tensions”, and in terms of significant increases in spending on interpreters.

The Institute of Community Cohesion (2007) includes results of surveys aimed at assessing effects of migration on public services from 100 councils, including policing. They find that most of the crimes consist of minor offences such as drink-driving, lack of documentation including tax and insurance, and the non-use of safety belts.

4.6 Effects on immigrants: brain waste?

Dustmann et al. (2007 p.58) show that despite being better educated than natives, new immigrants to the UK (at least in the period 1996–2005) tend to downgrade to less-skilled occupations upon arrival. Drinkwater, Eade and Garapich (2006) confirm this finding. They say that “the majority of post-enlargement migrants from accession countries have found employment in low-paying jobs...it follows that recent Polish migrants typically have lower returns to their education than other recent arrivals.”

In this section we measure the extent to which recent migrants are employed in jobs below their education level. The data are taken from the UK Quarterly Labour Force

---

10 Information on precise country of birth of the mother is not available.
Survey 1993Q4–2007Q4. We are of course particularly interested in the years since the NMS-8 joined the EU that is 2004–2007. Years before 1993Q4 do not contain information on wages.

We use all observations where a respondent’s labour market status is “employee” and where information on hourly wages is available. We drop outliers on hourly pay (top and bottom 1%), and we drop observations with missing information on year of arrival in the UK and years of education. The resulting sample has approximately 750,000 observations on 575,000 individuals (because from 1998 onwards about 175,000 individuals are interviewed twice).

4.6.1 Do immigrants’ wages reflect their educational qualifications?

The basic model we estimate is

\[
\ln w_i = \beta_0 + \beta_F F_i + \beta_{F_l} (F \cdot l)_i + \beta_e e_i + \beta_{F_e} (F \cdot e)_i + \beta_x x_i + \tau_i + \varepsilon_i
\]

The dependent variable is log hourly wages. The vector \( F \) contains a dummy variable for each migrant group. In the simplest case, \( F \) would simply be 1 for a person born outside the UK, and 0 otherwise. In practice we will separate foreign-born into five groups:

1. UK-born
2. Born in NMS, arrived before 2004
3. Born in NMS, arrived after 2004
4. Born in EU17 country\(^{11}\)
5. Born in any other country\(^{12}\)

The variable \( F \cdot l \) measures the number of years since arrival in the UK, and is zero for UK-born workers. The coefficient \( \beta_{F_l} \) therefore provides an estimate of the rate of “catch-up” by migrant workers. If \( \beta_{F_l} > 0 \), then migrant workers’ earnings catch up with natives’ earnings as migrants’ tenure in the UK increases.

The variable \( e \) measures years of education measured as (age left full-time education−5).\(^{13}\) Individuals who are still in education are dropped. So the coefficient \( \beta_e \) can be interpreted as a rate of return to an additional year of education. The interaction term \( F \cdot e \) allows us to see if this rate of return differs between migrants and natives. The

\(^{11}\) EU15 plus Cyprus and Malta.
\(^{12}\) Includes other European countries which are not in the EU.
\(^{13}\) This may be problematic, since children in Eastern Europe typically start their formal education aged seven.
basic hypothesis is that $\beta_{Fe} < 0$ because the returns to education are smaller for foreign-born workers. An additional interaction term of the form $(F \cdot e \cdot l)_i$ would also allow us to see if there was a "catch-up" in terms of returns to education. For example, if migrants initially start in a low-skilled job regardless of their education then $\beta_{Fe} < 0$ when $l$ is low. As the length of stay increases they may find better jobs and $\beta_{Fe}$ might rise.

The vector $x$ contains other characteristics of individuals, in this case, age, sex and region of residence. There are numerous other controls that one could include in a Mincerian wage equation of this sort which would undoubtedly have an effect on wages, such as occupation and industry. But if migrants’ lower returns to human capital are a result of working in low-skilled industries or occupations, then we are in danger of "controlling away" the causes of low returns to education. Finally, $\tau_i$ is a calendar time effect measured by year and quarter dummies. Results are reported in Table 7.
Table 7: Returns to education, natives and migrants

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born in NMS, arrived before 2004 (NMS)</td>
<td>-0.2652***</td>
<td>-0.0264</td>
<td>0.1658*</td>
<td>0.1478*</td>
</tr>
<tr>
<td></td>
<td>(0.0195)</td>
<td>(0.0623)</td>
<td>(0.0838)</td>
<td>(0.0709)</td>
</tr>
<tr>
<td>Born in NMS, arrived after 2004 (new NMS)</td>
<td>-0.4249***</td>
<td>0.3336***</td>
<td>0.1778</td>
<td>0.0269</td>
</tr>
<tr>
<td></td>
<td>(0.0259)</td>
<td>(0.0701)</td>
<td>(0.1211)</td>
<td>(0.1024)</td>
</tr>
<tr>
<td>Born in EU15 (EU15)</td>
<td>0.0229***</td>
<td>0.0997***</td>
<td>0.3122***</td>
<td>0.2540***</td>
</tr>
<tr>
<td></td>
<td>(0.0079)</td>
<td>(0.0203)</td>
<td>(0.0281)</td>
<td>(0.0238)</td>
</tr>
<tr>
<td>Born in rest of world (RoW)</td>
<td>-0.1467***</td>
<td>0.1400***</td>
<td>0.2928***</td>
<td>0.1432***</td>
</tr>
<tr>
<td></td>
<td>(0.0045)</td>
<td>(0.0112)</td>
<td>(0.0169)</td>
<td>(0.0143)</td>
</tr>
<tr>
<td>Length of stay (NMS)</td>
<td>0.0083***</td>
<td>0.0077***</td>
<td>-0.0036</td>
<td>-0.0047</td>
</tr>
<tr>
<td></td>
<td>(0.0009)</td>
<td>(0.0009)</td>
<td>(0.0034)</td>
<td>(0.0029)</td>
</tr>
<tr>
<td>Length of stay (new NMS)</td>
<td>0.0165</td>
<td>0.0170</td>
<td>0.1369</td>
<td>0.1382*</td>
</tr>
<tr>
<td></td>
<td>(0.0163)</td>
<td>(0.0149)</td>
<td>(0.0773)</td>
<td>(0.0654)</td>
</tr>
<tr>
<td>Length of stay (EU15)</td>
<td>-0.0005</td>
<td>0.0032***</td>
<td>-0.0078***</td>
<td>-0.0065***</td>
</tr>
<tr>
<td></td>
<td>(0.0003)</td>
<td>(0.0003)</td>
<td>(0.0010)</td>
<td>(0.0009)</td>
</tr>
<tr>
<td>Length of stay (RoW)</td>
<td>0.0044***</td>
<td>0.0050***</td>
<td>-0.0028***</td>
<td>-0.0031***</td>
</tr>
<tr>
<td></td>
<td>(0.0002)</td>
<td>(0.0002)</td>
<td>(0.0007)</td>
<td>(0.0006)</td>
</tr>
<tr>
<td>Years of education</td>
<td>0.0802***</td>
<td>0.0802***</td>
<td>0.0338***</td>
<td>0.0338***</td>
</tr>
<tr>
<td></td>
<td>(0.0002)</td>
<td>(0.0002)</td>
<td>(0.0002)</td>
<td>(0.0002)</td>
</tr>
<tr>
<td>Years of education (NMS)</td>
<td>-0.0283***</td>
<td>-0.0413***</td>
<td>-0.0234***</td>
<td>-0.0234***</td>
</tr>
<tr>
<td></td>
<td>(0.0037)</td>
<td>(0.0053)</td>
<td>(0.0045)</td>
<td>(0.0045)</td>
</tr>
<tr>
<td>Years of education (new NMS)</td>
<td>-0.0598***</td>
<td>-0.0492***</td>
<td>-0.0172*</td>
<td>-0.0172*</td>
</tr>
<tr>
<td></td>
<td>(0.0045)</td>
<td>(0.0081)</td>
<td>(0.0068)</td>
<td>(0.0068)</td>
</tr>
<tr>
<td>Years of education (EU15)</td>
<td>-0.0192***</td>
<td>-0.0336***</td>
<td>-0.0220***</td>
<td>-0.0220***</td>
</tr>
<tr>
<td></td>
<td>(0.0012)</td>
<td>(0.0018)</td>
<td>(0.0015)</td>
<td>(0.0015)</td>
</tr>
<tr>
<td>Years of education (RoW)</td>
<td>-0.0300***</td>
<td>-0.0405***</td>
<td>-0.0205***</td>
<td>-0.0205***</td>
</tr>
<tr>
<td></td>
<td>(0.0007)</td>
<td>(0.0011)</td>
<td>(0.0009)</td>
<td>(0.0009)</td>
</tr>
<tr>
<td>Years of education*length of stay (NMS)</td>
<td>0.0008***</td>
<td>0.0006***</td>
<td>0.0006***</td>
<td>0.0006***</td>
</tr>
<tr>
<td></td>
<td>(0.0002)</td>
<td>(0.0002)</td>
<td>(0.0002)</td>
<td>(0.0002)</td>
</tr>
<tr>
<td>Years of education* length of stay (new NMS)</td>
<td>-0.0081</td>
<td>-0.0085</td>
<td>-0.0085</td>
<td>-0.0085</td>
</tr>
<tr>
<td></td>
<td>(0.0051)</td>
<td>(0.0043)</td>
<td>(0.0043)</td>
<td>(0.0043)</td>
</tr>
<tr>
<td>Years of education* length of stay (EU15)</td>
<td>0.0008***</td>
<td>0.0006***</td>
<td>0.0006***</td>
<td>0.0006***</td>
</tr>
<tr>
<td></td>
<td>(0.0001)</td>
<td>(0.0001)</td>
<td>(0.0001)</td>
<td>(0.0001)</td>
</tr>
<tr>
<td>Years of education* length of stay (RoW)</td>
<td>0.0006***</td>
<td>0.0004***</td>
<td>0.0004***</td>
<td>0.0004***</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

Gender dummy 1 1 1 1
Age dummies 11 11 11 11
Region dummies 19 19 19 19
Time dummies 17 17 17 17
Occupation dummies 8
Industry dummies 18
Constant 1.1468*** 0.2910*** 0.2904*** 1.1102***
(0.0075) (0.0072) (0.0072) (0.0080)
R² 0.2440 0.3702 0.3704 0.5502
N 748,882 748,882 748,882 748,333

Source: own calculations from QLFS.

The first column reports basic wage differences between migrants and natives without considering returns to education. Migrants from the NMS who arrived before 2004 earn, on average, 26.5% less than natives. The interaction term for this group with length of stay is positive and significant, but small, suggesting that "catch-up" with natives would only occur after a long period. Recent NMS migrants have an even larger wage gap. The
The coefficient on length of stay for this group is poorly identified presumably because there is insufficient variation in length of stay. In contrast, migrants from the EU15 earn a small wage premium of 2.3%. Migrants from the rest of the world have a smaller wage gap (−14.7%) but an equally long “catch-up” period as pre-2004 NMS migrants.

The second column estimates equation (1) and includes measures of returns to education split by migrant group. Returns to education for natives are estimated to be 8%. Returns to education for all migrant groups are significantly smaller. Interestingly, the largest effect is for post-2004 migrants whose return to education is estimated to be only 2% (8%−6%). This is consistent with returns to education estimated for Polish migrants by Drinkwater et al. (2006).

Finally in column 3 we also introduce interactions between education and length of stay. A positive coefficient here indicates that a particular migrant group’s return to education increases with length of stay. We find small but significant effects for all migrant groups except recent NMS migrants. So, for example, a migrant from the NMS who arrived before 2004 is estimated to have a return to education of 4% (8%−4%) upon arrival, but after 10 years this would rise to about 4.7% (8%−4%+(10 × 0.08% = 4.7%). Again, the short period of time that new NMS migrants have been here means that the interaction term for these migrants is poorly identified.

There are a number of reasons why returns to education might be lower for migrants. One possibility is that their choice of occupation and industry leads to low-skill jobs which do not reward human capital. If this were the case, the inclusion of controls for occupation and industry should reduce the negative coefficient of \( \beta_{Fe} \). In column 4 we add these controls. Their inclusion significantly reduces the overall rate of return to education for natives and migrants, but the gap between natives’ and migrants’ returns to education remains significant. Now, however, the gap between natives’ and migrants’ returns to education no longer differs significantly between migrant groups (p-value=0.7185), suggesting that the larger gap for new NMS migrants found in Model 2 was the result of occupation and industry differences.

A second possibility is that, even within an occupation or industry, education is less well-rewarded for migrants, perhaps because of discrimination or because they have genuinely lower productivity for a given level of education. An example of this latter might be related to language skills.

### 4.6.2 Are immigrants employed below their skill levels?

A second way of assessing “brain waste” is to compare the occupational structure of similarly educated migrants and natives. We classify education using the age when the individual left full-time education, grouped into bands corresponding loosely to ages when significant qualifications are received in the UK education system, namely 16, 18 and 21. Occupations are classified using the SOC-2000 major groups.
The results, shown in Tables 8a-8c are quite striking. Table 8a shows the distribution of occupations across educational groups for workers born in the UK. Nearly 80% of workers who left full-time education after the age of 21 (most of whom will have a degree) are employed in managerial, professional or associate professional occupations. In contrast, nearly 80% of workers who left school before the age of 16 are in non-managerial and non-professional occupations.

### Table 8a: Distribution of occupation by education: UK-born workers

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Age left full-time education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤15</td>
</tr>
<tr>
<td>Managers and senior officials</td>
<td>9.01</td>
</tr>
<tr>
<td>Professionals</td>
<td>2.40</td>
</tr>
<tr>
<td>Associate professional and tech.</td>
<td>5.60</td>
</tr>
<tr>
<td>Admin and secretarial</td>
<td>12.93</td>
</tr>
<tr>
<td>Skilled trades</td>
<td>13.41</td>
</tr>
<tr>
<td>Personal services</td>
<td>12.88</td>
</tr>
<tr>
<td>Sales and customer services</td>
<td>8.82</td>
</tr>
<tr>
<td>Process, plant and machine oper.</td>
<td>16.23</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>18.71</td>
</tr>
</tbody>
</table>

Source: own calculations from QLFS.

### Table 8b: Distribution of occupation by education: migrants from NMS (pre-2004)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Age left full-time education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤15</td>
</tr>
<tr>
<td>Managers and senior officials</td>
<td>8.33</td>
</tr>
<tr>
<td>Professionals</td>
<td>2.78</td>
</tr>
<tr>
<td>Associate professional and tech.</td>
<td>5.56</td>
</tr>
<tr>
<td>Admin and secretarial</td>
<td>8.33</td>
</tr>
<tr>
<td>Skilled trades</td>
<td>8.33</td>
</tr>
<tr>
<td>Personal services</td>
<td>5.56</td>
</tr>
<tr>
<td>Sales and customer services</td>
<td>6.94</td>
</tr>
<tr>
<td>Process, plant and machine oper.</td>
<td>27.78</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>26.39</td>
</tr>
</tbody>
</table>

Source: own calculations from QLFS.

### Table 8c: Distribution of occupation by education: migrants from NMS (post-2004)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Age left full-time education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤15</td>
</tr>
<tr>
<td>Managers and senior officials</td>
<td>0.00</td>
</tr>
<tr>
<td>Professionals</td>
<td>0.00</td>
</tr>
<tr>
<td>Associate professional and tech.</td>
<td>0.00</td>
</tr>
<tr>
<td>Admin and secretarial</td>
<td>3.85</td>
</tr>
<tr>
<td>Skilled trades</td>
<td>19.23</td>
</tr>
<tr>
<td>Personal services</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales and customer services</td>
<td>3.85</td>
</tr>
<tr>
<td>Process, plant and machine oper.</td>
<td>15.38</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>57.69</td>
</tr>
</tbody>
</table>

Source: own calculations from QLFS.

A higher proportion of migrants from the NMS who arrived before 2004 are in less-skilled (and lower-paying) occupations, and this is the case across all education groups. But much greater differences are seen in Table 2c, which looks at NMS migrants who arrived...
after 2004. A remarkable 36% of these migrants who left full-time education after the age of 21 are employed in elementary occupations, compared to 1% of similarly educated natives. These results are quite consistent with the regression results because there are large wage differences between these occupational groups.

5 Summary
The UK provides an interesting test-bed for the impacts of increased migration. Workers from the NMS8 were essentially free to come to the UK to work, and as a result the UK experienced unprecedented flows of migration in a short period of time. Three aspects in particular are worth highlighting.

1 Measuring the size of the inflow
As has been noted elsewhere, it is difficult to precisely estimate the net inflows of migrants into the UK. There is no up-to-date population register, and the best available administrative data records only gross inflows of migrants who enter the official labour force. Nevertheless, the available data sources examined here suggest that up to a million migrants from the NMS-8 arrived in the UK over the period 2004–2007, and that around 600,000 of these are currently residing in the UK.

2 The characteristics of the migrants
All the evidence we have suggests that the vast majority of these migrants arrived in the UK to work. Only a small fraction has claimed benefits of any kind. The new migrants tend to have rather more education than the average native, but they are predominantly employed in low-skilled occupations. This fact explains why the wages of new migrants are significantly lower than equivalently education natives, in contrast to other groups of migrants to the UK who often earn higher wages than UK-born workers. The location of the jobs which the new migrants do means that they are geographically concentrated in London (services and hospitality industries) and the East of England (agriculture and manufacturing industries).

3 The labour market outcomes for natives
The overwhelming consensus from almost all UK studies is that there is no statistically significant relationship between migrant inflows and the labour market outcomes of natives, including both wages and unemployment. However, it should be noted that the available evidence post-2004 is limited to only three studies reviewed in Section 4.1, and there remains a widespread belief that the large numbers of migrants employed in low-skill occupations has put downward pressure on low-skilled wages. The pressures of increased migration have been felt at a local level in the increased use of education, health and social services. This reflects in part the fact that local services are primarily funded by grants from central government (rather than local taxation).
Outlook

The latest data on inflows (see Table 2) shows that the rate at which NMS-8 migrants arrive in the UK has been slowing. Coupled with evidence that a significant proportion of these migrants are leaving, or are intending to stay for a short period, this suggests that the largest wave of migration has probably passed. We would expect, over the next few years, to see net migration from NMS-8 states fall as outflows rise and inflows fall. Developments in the sending countries (such as increases in wages) will strengthen this trend. Furthermore, the recent shocks to the UK economy which have caused increases in inflation and unemployment, and a fall in the exchange rate, would also be expected to reduce net migration trends.

Any lifting of restrictions on migration from Bulgaria and Romania might be expected to cause another wave of migration from those countries. However, there are several reasons to suppose that migration to the UK from Bulgaria and Romania might be considerably smaller than that from the 2004 enlargement. First, in terms of population, the addition of these two countries to the EU is on a much smaller scale. Second, patterns of migration from Bulgaria and Romania to Spain and Italy are already well-established, and this would be expected to continue. Finally, as we have noted, the downturn in the UK economy would tend to discourage additional migration. The Migration Advisory Committee (2008) report on the labour market impact of relaxing restrictions on A2 employment in the UK concludes that “It is not possible to predict accurately what flows from A2 countries will be if the UK lifts restrictions…” but that “...removing the restrictions would probably have a small labour market and economic impact.”

6 References


Migration Advisory Committee (2008) “The labour market impact of relaxing restrictions on employment in the UK of nationals of Bulgarian and Romanian EU member states” Migration Advisory Committee Report, December.


