Labour mobility within the EU - The impact of enlargement and the functioning of the transitional arrangements

FINAL REPORT - COUNTRY CASE STUDIES

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1. Clarification of terms used throughout this report

Throughout this report, there are a number of terms and abbreviations that are used, to which we attach a precise meaning and interpretation. We clarify these terms below:

**EU-15** is used to designate the 15 countries that form the EU before 2004: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom.

**EU-10** is used to designate the 10 countries that joined the EU in 2004 (Cyprus, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovenia, Slovakia).

**EU-8** is used to designate the EU-10, excluding Malta and Cyprus.

**EU-2** is used to designate the 2 countries that joined the EU in 2007 (Romania and Bulgaria).

**EU-8+2** is used to designate the EU-8 plus the EU-2, as defined above.

**EU-10+2** is used to designate the EU-10 plus the EU-2, as defined above.

Unless otherwise specified, migrant stock figures refer to end-year levels. These correspond to the 1 January figures of the following year where sourced from the Eurostat Population statistics.
2. Executive Summary

Free movement of workers within the EU was achieved in 1968 and acts as one of the four pillars of the EU Single Market. While the policy was introduced with aim of removing barriers to the functioning of a fully integrated market economy in Europe and improving the matching of labour supply and demand, concerns regarding the sudden shock of opening labour markets in existing member countries have been an issue in all subsequent enlargements where a significant wage differential existed between new and old member states (1981, 1986, 2004 and 2007). While in the long-run, free mobility can be expected to raise potential growth in the EU as a whole, the shock to labour markets and wages may have negative impacts on host economies in the short-term. To counter-act these factors, member states have been allowed to temporarily restrict the free mobility of workers from acceding countries for a period of 5 years in general, and up to 7 years under certain circumstances. These transitional arrangements are intended to smooth the shock to labour markets of the enlargement process.

The main focus of this study is an assessment of the macro-economic impact on both host and home countries of the increased labour mobility that has resulted from the two recent EU enlargements. We first look at the macro-economic impact of the total population flows from the EU-8 and EU-2 to the EU-15 economies between 2004 and 2009. In both cases we restrain our analysis of the receiving countries to the impact on the EU-15 economies. Population flows from the EU-2 to the EU-10 economies have been small in magnitude, and data availability is sporadic, and for this reason these flows are excluded from the simulation studies. The aggregate population flows to the EU-15 are adjusted to reflect the age structure and education level of the mobile population. We also look at the impact of remittances. For the 2004 enlargement, we focus attention on the EU-8 economies, as citizens from Malta and Cyprus were not affected by transitional restrictions and, given their size, the impact of any emigration from these countries can be expected to have negligible impact on the host economies.

We then attempt to quantify the share of population movements that have occurred since 2004 and 2007 that can be attributed to the enlargement process itself, and the share that is likely to have occurred even in the absence of EU expansion. We next look at the impact that transitional restrictions on the free mobility of labour have had on the distribution of EU-8 and EU-2 citizens across the EU-15 countries. The results obtained from these analyses are then applied to the period from 2008-2009, to assess the impact of the global financial crisis on the distribution of population flows across the EU-15. The macro analysis section concludes with estimates of potential
migration flows from the EU-8 and EU-2 to the EU-15 over the next several years, to 2017.

Our estimates suggest that since the 2004 enlargement, about 1.8 per cent of the EU-8 population has moved to the EU-15, raising the host country population by 0.4 per cent. Of this, approximately 75 per cent can be attributed to the enlargement process itself, while the remaining 25 per cent of the population shifts are likely to have occurred even in the absence of enlargement. Since 2007, about 4.1 per cent of the EU-2 population has moved to the EU-15, raising the host country population by a further 0.3 per cent. Of this, just over 50 per cent can be attributed to the enlargement process itself.

The macro-economic impact on individual countries within each of the regions depends on the magnitude of emigration/immigration that has occurred relative to the size of the domestic population. Of the sending countries, the biggest effects are estimated to be in Bulgaria, Romania and Lithuania, where the potential level of output may be permanently reduced by 5-10 per cent as a result of the population shifts towards the EU-15 since 2004. Latvia and Estonia can also expect a permanent scar of at least 3 per cent on the potential level of output in their economies. While remittances can partially offset the negative impact on growth in the short- to medium-term, they cannot fully address the loss of labour input on capacity output in the longer-term. The impact on GDP per capita is much smaller than the impact on total GDP, but also tends to be negative in the sending countries (with the notable exception of Poland), especially given the age structure of migrants, who are predominantly of working age. Migrants from Poland, the Czech Republic and Hungary tend to be biased towards those with higher educational attainment, suggesting evidence of a brain drain from these countries and the decline in average productivity among the non-migrant population acts as a further restraint on productive capacity. GDP per capita may have declined by 0.5-3 per cent as a result of population outflows from Romania, Bulgaria, Latvia, Estonia, Lithuania and Slovakia.

As for the receiving countries, the macro-economic impact of the population shifts from the EU-8 and EU-2 to the EU-15 since 2004 is expected to be small, possibly raising the long-run level of potential output by up to 0.8 per cent, after allowing for the age profile of the mobile population. The impact on Ireland is expected to be more significant, perhaps raising the potential level of GDP by 3¼ per cent in the long-run. The UK may also benefit from a rise in potential output of nearly 1½ per cent, after adjusting for the fact than most incoming migrants from the EU-8 and EU-2 countries are of working age. The long-run impact on GDP per capita is expected to be
negligible, but may be slightly positive, depending on the productive capacity of inward migrants. Outflows of remittances are expected to have only a marginal effect on receiving countries.

Our estimates of the long-run effects on output of the EU enlargement are based on the assumption that all population shifts that have occurred to 2009 are permanent, and we make no assumption about population shifts after 2009. The net emigration rates of both the EU-8 and EU-2 towards the EU-15 had receded towards pre-accession levels by 2009, so it is not clear how much future population movements can be attributable directly to the enlargement of the EU itself. The limited data available for 2010 from the quarterly Labour Force Survey point to some recovery in emigration rates from Poland, Lithuania and Latvia, although the rate of emigration from the EU-2 continued to decline (albeit from a higher level).

There appears to be clear evidence that the pattern of restrictions in place at the beginning of the 2004 enlargement diverted mobile workers away from traditional destinations – namely Germany – and towards the more easily accessed labour markets in the UK and Ireland. However, we should not over-emphasize the magnitude of this impact, as macro-economic developments and demographics have also played a role in the location decision, and in many cases appear to have played the dominant role. Our simple model estimated for the EU-8 economies falls short of explaining a significant portion of the shifting preference for Bulgarian and Romanian citizens for Italy rather than Spain as the destination of choice, a process which began in about 2007. Transitional restrictions may have played a certain role for the EU-2 economies, although the rise in the unemployment rate in Spain can explain about half of the nearly 10 percentage point loss of EU-2 migrant stock share between 2006 and 2009. While unemployment remained relatively low in Spain in 2007 compared to levels reached in 2008-2011, the differential with the EU-15 average had already started to widen.

Our estimates suggest that by 2009, the unemployment rate in Ireland was somewhat lower by 2009 than it would have been without net population inflows from the EU-8 since 2004, although we estimate that in 2005-2007 the unemployment rate was slightly higher in Ireland as a result of the unexpectedly high inflows of workers from the EU-8. Our estimates point to a slight decline in the unemployment rate in Lithuania in the years immediately following the 2004 enlargement, but this effect should have dissipated by 2009. We would not expect unemployment rates in any country to be permanently affected by the population movements.
The population movements from the EU-2 have had only a small macro-economic impact on any of the EU-15 economies. The biggest impacts have materialised in Italy and Spain, where GDP has increased by 1¼-1¾ cent as a result of population inflows from Bulgaria and Romania from 2004-2009. The impacts on the sending countries, on the other hand, have been more significant. Our estimates suggest that the level of GDP in Romania will eventually be more than 10 per cent lower as a result of population losses that have occurred since 2004. In Bulgaria the level of GDP will probably be about 5 per cent lower than it would have been without the loss of labour force that occurred since 2004.

Final transitional restrictions on the free mobility of labour from the EU-8 to the EU-15 were lifted on 1 May 2011. As the existence of support networks for new migrants is one of the most important factors affecting the location decision, any distortion in the distribution of EU-8 citizens across the EU-15 that has resulted from the transitional restrictions is likely to prove permanent. Our estimates suggest that transitional restriction on the free mobility of labour introduced in some countries at the onset of the 2004 enlargement and their extension into the second and third phases of the transitional process, has significant altered the distribution of EU-8 citizens across the EU-15 economies. Our preliminary results suggest that the long-run effect of these distortions can be expected to raise the potential level of output in Ireland, the UK and Sweden by at least 0.1 per cent, while they will leave a permanent scar on the level of potential output in Germany, Austria, Belgium and Denmark of at least 0.1 per cent.

It is far less clear that transitional restrictions on the free mobility of labour from the EU-2 to the EU-15 following the 2007 EU enlargement have significantly affected the location decision of EU-2 citizens within the EU-15. The most important shift in location share for EU-2 citizens since 2006 has been away from Spain (although net migration continued to be positive) and toward Italy. Both countries had introduced some restrictions on labour market access for citizens of these countries in 2007. Spain lifted all restrictions at the beginning of 2009, while the restrictions in Italy remained in place (although work permits are not required in important sectors), so the existence of restrictions itself cannot explain the shift in location preference towards Italy. These shifts are more likely to reflect factors such as the employment opportunities in Italy compared to Spain, which experienced a severe recession in 2009 and where the unemployment rate soared above 20 per cent last year.

From 1 May 2011, citizens of the EU-10 countries have full access to labour markets across the EU-27, as the final transitional arrangements were lifted at the end of the 7 year transitional period. As of June 2011, workers from the EU-2 still face some
restrictions on access to labour markets in Belgium, Germany, Ireland, France, Italy, Luxembourg, the Netherlands, Austria, the UK and Malta. The second phase of the transitional arrangements for the 2007 enlargement will come to an end on 31 December 2011, at which point the governments of these countries will have to decide whether or not to extend the restrictions for a further two years. In principle, restrictions can only be extended during the final phase if the country is facing a ‘serious disturbance of its labour market or a threat thereof’. However, in practice there is no agreed definition of what constitutes a serious disturbance of the labour market, allowing a degree of leeway in its interpretation.

The global financial crisis induced a sharp contraction in output in Europe. Labour market responses differed markedly across countries, with sharp rises in unemployment in Ireland and Spain, and limited impact to the labour market in Germany. Our estimates suggest that net population flows from the EU-8 and EU-2 economies were probably about 50-65 per cent lower in 2008 and 2009 than they would have been in the absence of such a sharp recession. The downturn probably reduced population flows to the UK and Spain in particular, while Germany and France gained attractiveness as a location choice due to the relative strength of these economies.

This report also contains six case studies: two on the EU-2 countries (Bulgaria and Romania), and four focused on EU-15 receiving countries: UK, Spain, Germany and Italy. Our case studies have highlighted some interest points.

**Bulgaria:**
In 2010 about 430 thousands Bulgarians lived in EU-15 countries, predominantly choosing Spain, Germany, and Greece as their main destination countries.

The migrating Bulgarians are predominantly young (about 60 per cent of them are younger than 35 years old) and medium-skilled (about 45 per cent of them are medium-skilled). The shares of low-skilled and high skilled account for 34 and 21 per cent, respectively. A great majority of Bulgarian movers (about 70 per cent) are employed in countries of their destination. About half of them (52 per cent) found work in hotels and restaurants, private households, as well as the manufacturing and construction sectors. About 80 per cent of Bulgarians in the EU-15 are employed in elementary occupations, work as service and sales workers, craft and trade workers, and machine operators and assemblers. Only 11 per cent work as legislators and professionals. The above numbers may suggest that Bulgarians tend to work slightly below their qualifications (downskilling).
According to a recent Eurobarometer survey (2010) economic factors constitute one of the more important motivators behind the decision to emigrate from Bulgaria. Both nominal and real income gaps between Bulgaria and -EU15 countries remain large and are important pull factors for both temporary migrants (in terms of sending remittances) and long term movers (in terms of better living and working conditions).

A number of studies emphasise risks of a brain drain for the Bulgarian economy (Belava, 2009, Markova, 2010). While this is one of the negative consequences of migration, a closer look at the skill structure of the migrating population in comparison to the skill structure of the Bulgarian population shows that 21 per cent of migrants are highly skilled (i.e.: hold a university degree), compared to a countrywide share of 23 per cent of Bulgarians. Moreover, enrolment rates in tertiary education in Bulgaria have increased in recent years, and they are somewhat higher than the EU-27 average (although much lower than enrolment rates in Slovenia, Lithuania and Poland).

In 2008 the Bulgarian government published a national strategy on migration policy which aims at attracting Bulgarian citizens and foreigners, especially high-skilled, to return and settle down in Bulgaria. This may influence the dynamics of net migration from Bulgaria, which in recent years has been exceptionally high - about 3.4 per cent of Bulgarian population emigrated between 2004-2009.

**Romania:** In 2010 about 2 million Romanian nationals, that is about 7 per cent of the Romanian population, lived in the EU-15 countries. They resided predominantly in Spain and Italy, the two large countries of Southern Europe, which attract about 83 per cent of all Romanians wishing to work abroad. Romanian mobile workers are rather young (about 60 per cent of the migrating population are below 35) and low- and medium-skilled (about 88 per cent of Romanian migrants do not have a university degree). They are employed predominantly in elementary occupations and as craft and related trade workers in manufacturing and construction sectors, as well as in private households. We find that depending on the country of destination the skill and occupational structure of mobile Romanians change somewhat. Italy and Spain attract lower-qualified workers, while Germany is a popular destination among high-skilled workers.

Existing studies (Mara, 2010, Ferri, Rainero, 2010, Potot, 2010) suggest that Romanian migration is to a relatively large extent circular, both due to geographical proximity and large amounts of seasonal and temporary work. Annual outflows from Germany in particular are high. The temporary character of Romanian migration may also be illustrated by the relatively high levels of remittances sent by Romanian
nationals to their home country. According to the World Bank data, in 2009 the value of remittances sent by Romanians working abroad amounted about 3 per cent of Romanian GDP and was one of the largest among the EU-8+2 countries. Results of a field survey by Sandu (2010) show that the opportunity to improve one’s living conditions at home is one of the important aspects of work abroad (in particular, about 56 per cent of those with experience of migration for work purposes claim that their plan for the next 2-3 years is to improve conditions in their current house; 27 per cent plan to open a business).

Large income gaps between Romania and the EU-15 countries make the option of working abroad attractive - both for circular and temporary migrants, and to a lesser extent long term migrants. Nominal GDP per capita and wages in the EU-15, taken into account by circular and temporary migrants who may migrate with the aim of sending remittances, are about 5 times higher than GDP per capita and wages in Romania. Real gaps are somewhat smaller (2 to 3 times of the Romanian level). Although Romania is catching up, the wide income gaps, which are expected to persist for several years, suggests that migration from Romania to the EU-15 countries is likely to continue, although possibly at a slightly slower pace than before. The pent-up demand to emigrate has largely been relieved by high rates of emigration since 2004. Since 2007 the net migration rate has slowed down somewhat, although to some extent this has been driven by the global financial crisis and serious recessions in Italy and Spain.

**Spain:** The migration phenomenon in Spain has attracted a lot of attention over the last ten years. Since the late 1990s the number of migrants in Spain increased dramatically. Looking at the stocks of migrants for the period 1 January 2008-2011 from the municipal registers (which is considered a reliable source to measure the presence of migrants in Spain, as it covers both legal and illegal migration), the number of Bulgarians and Romanians residing in Spain has continued to increase, though at a much lower rate than in previous years (the largest increase took place between 2006 and 2008). However, looking at the estimations of inflows and outflows we can identify a large drop in the migration inflows from Romania for the period 2008-2009 (particularly inflows coming during the year 2008).

As a result of the economic crisis, however, employment prospects of immigrants in the Spanish labour market have worsened significantly with decreases in employment particularly amongst the foreign-born population. Migrants from Bulgaria and Romania have suffered the consequences of the economic crisis to a larger extent, which has been widely attributed to the adverse developments in the construction sector. The rise in unemployment rates during 2008 and 2009 amongst migrants,
however, was not due only to the employees losing their jobs, but also reflected the increase in the numbers of migrants participating in the workforce. Resident permits statistics show that the number of Romanian and Bulgarian continued to increase during the recession years, although to a lesser extent than it had done previously. However, in the short-run our understanding of the real magnitude of the inflows and outflows of migrants remains limited. A key issue is the distinction between regularisation of existing migrants from the measuring of new waves of migrants. Recent data show that net inflows of foreign-born migrants coming from abroad have decreased substantially since 2007, affecting the Romanian population in particular.

**United Kingdom:** nationals of the EU-8 were allowed free access to the UK labour market in May 2004, leading to a considerable rise in immigration to the UK from these countries. In comparison, access to the UK labour market has been much more limited for nationals from Bulgaria and Romania following their accession to the EU in 2007.

Nevertheless, the data suggest there has been a sizeable increase in the number of Bulgarians and Romanians migrating to the UK following the 2007 enlargement. National Insurance Number allocations to Bulgarians and Romanians increased from just over 4,000 in 2006 to more than 30,000 in 2007.

On average, migrants from both the EU-2 and EU-8 appear to have higher education levels than other foreign-born migrants resident in the UK (as measured by age on leaving full-time education). However, there is some evidence to suggest that they tend to earn lower wages than other immigrant groups. Both EU-2 and EU-8 migrants were more likely to be in employment than migrants from other countries, and also were more likely to be in employment than the native population.

There is some indication of a fall in the number of migrants from both the EU-2 and EU-8 coinciding with the economic downturn, but it cannot be said categorically whether this is the result of the recession. At the same time, some impact has also been observed on the distribution of immigrants within the UK, with some increase in the proportion locating in London.

**Italy:** from 1 January 2007 to 1 January 2008 the number of Romanians living in Italy almost doubled. This reflects the entry in the European Union, as illegal migrants cannot be inscribed in the municipalities' registers (this is in contrast to Spain, where they can). The number of migrant residents continued to increase considerably after the beginning of 2008 (27% growth rate to 1 January 2009 and 11% in year to 1 January 2010). The number of Bulgarians in Italy is much lower but has also
increased at similar rates. We find that the number of female residents of EU-2 countries has increased at a slightly faster rate. The North-West and North-East regions of Italy absorb the majority of the Romanian migrants.

The most common occupations for EU-2 migrants resident in Italy were craft and related workers and elementary occupations, both of which accounted for around one third of all employed migrants from Bulgaria and Romania. In 2009, the construction sector employed a larger share of EU-2 citizens living in Italy than any other sector, followed by the manufacturing sector and the private households sector. The employed EU-2 and EU-10 migrants are less likely to hold a university degree than natives, but the percentage with secondary education is higher. This was also observed in the Spain's case study where information on employment from Social Security records (by country of birth) was available.

With regards to the employment performance of migrants we see that the average unemployment rate for EU-2 citizens residing in Italy is higher than for the Italian population and has also increased more rapidly during the recession.

Germany: Prior to the enlargement in 2004, Germany was expected to be the most affected country by post-accession mobility, due to the large pre-existing EU-8 resident population and its geographical proximity to the EU-8 countries, in particular the largest country, Poland. Although some estimates of the migration potential have proved broadly accurate in terms of total numbers of migrants to the EU-15, the shift towards the open access countries Ireland and the UK had not been fully anticipated. Germany maintained restrictions on labour market access for citizens of the EU-8 countries for the maximum period of 7 years and experienced only moderate new immigration from the EU-8 from 2004-2011. Germany also maintained restrictions on labour market access for EU-2 nationals since the 2007 enlargement. A new immigration law passed in 2005 provided more change in the access to the labour market for EU-8 and EU-2 citizens than the accessions themselves. The restrictive policies towards mobility from the EU-8 and EU-2 resulted in irregular outcomes, such as the misuse of the freedom of services and freedom of settlement/establishment. In the context of Germany’s rapid population ageing, lack of highly skilled professionals, and overall good economic shape with declining structural unemployment, less restrictive policies towards EU-mobility may benefit the economy.

We identify two clear areas where further research would be of benefit. The first is the returns to education of the mobile population. Do workers become more or less productive when their location changes? Does this depend on the quality of capital in
use or is it a reflection of language barriers and location specific qualifications or other factors that may make skills difficult to transfer across countries. The other area that needs further development is modelling the determinants of emigration flows. We report an assessment of the Brücker (2007) model developed by the European Integration Consortium (2009) in an appendix to this report. This study was intended to provide the empirical underpinnings of our report, but proved inadequate for some of the questions addressed by this study. The estimates reported here could be improved by the development of an explicit model for the rate of emigration from the sending countries, or even a model of bilateral migration flows within the EU. A further area that would benefit from additional research is the determinants of the location decision of EU-2 citizens residing in the EU-15 or EU-25. Transitional restrictions do not appear to have played as important a role as they did following the 2004 enlargement, and a simple model that also takes into account GDP per capita, unemployment and demographics leaves a significant share of location shifts since 2007 unexplained. A more elaborate model should consider the type of restrictions on labour market access in place, rather than the simple restriction versus no restriction model developed here. Linguistic and cultural factors may also prove important.

Our preliminary analysis of available data for the candidate countries of Croatia, FYR Macedonia, Albania, Bosnia and Herzegovina, Montenegro and Serbia highlights the small size of these countries. While GDP per capita is low relative to the EU average, especially in Albania and Bosnia and Herzegovina, even if emigration rates from these countries were high upon accession to the EU they would be expected to have negligible impact on the receiving countries in the EU.
4. Case Studies

4.1 Bulgaria

Macro background and labour market developments
Over the recent decade the Bulgarian economy has evolved, adjusting institutionally and structurally to the EU structures. Negotiations between the Republic of Bulgaria and the European Council started in 1999 and in 2007 Bulgaria obtained the status of the full member of the EU. An important aspect of integration with the European structures was the introduction of the currency board in 1997. The Bulgarian lev was initially pegged to the Deutsche Mark, then, with Germany adopting the euro in 1999, to the European single currency. The process of integration with the EU has also involved increased mobility of labour, the free movement of people remaining one of the four fundamental rights of the EU.

The Bulgarian economy has experienced relatively stable and strong growth over the last decade, with the exception of the crisis period of 2009 (see figure 4.1). The average year-on-year rate of GDP growth over 2000Q1-2008Q4 amounted to 5.8 per cent and the unemployment rate decreased from about 20 per cent recorded in 2001 to about 5 per cent just before the crisis-driven recession. The growth materialised in an environment of relatively high and volatile inflation by EU standards, although inflation rates were moderate compared to the hyper-inflation experienced in the 1990s. Inflation reached 14 per cent in the second half of 2008, compared to an average of 6 per cent per annum recorded over 2001-2007). In terms of foreign trade patterns the economy has been gradually opening to the world; the process of integration with the EU, and the introduction of the Single Market in particular, resulted in a marked increase in the openness ratio of the Bulgarian economy.

The impact of the crisis
The global financial crisis took a relatively severe toll on the Bulgarian economy. In 2009, Bulgarian GDP declined by 5.5 per cent and between 2009Q1 and 2010Q2 the unemployment rate doubled, climbing from 5 to 10 per cent. The external sector collapsed and the imported crisis spread to the rest of the economy. Domestic demand has also been hit by a sharp drop in capital inflows, which has led to a near-halt of

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3 Any comments or queries related to section 4.1 of the report can be addressed to Tatiana Fic (t.fic@niesr.ac.uk).
credit growth. In 2009 domestic demand fell by 13.6 per cent and this marked the biggest decline since 1996. As imports contracted more sharply than exports, the current account deficit halved, from about 25 per cent of GDP in 2008 to about 11 per cent of GDP in 2009. In 2010 the current account was balanced, as exports surged by 20 per cent with the recovery in key export markets such as Germany. Despite further declines in domestic demand, this allowed the Bulgarian economy to record a slightly positive growth rate of GDP of 0.1 per cent last year.

The crisis took a severe toll on the labour market and its effects may prove longer lasting. The labour market adjusts to the overall state of the economy with a lag, and the unemployment rate remained high last year at 10.2 per cent, despite the recovery in output. We expect it will take several years for the unemployment rate to recede to its pre-crisis level.

Bulgaria entered the crisis with a relatively large public sector buffers. In 2008 Bulgaria recorded a budget surplus of 1.7 per cent of GDP. In 2009 a budget deficit of 4.7 per cent of GDP opened, but has since diminished, to 3.9 per cent of GDP, and the borrowing requirement remains moderate compared to countries such as Greece, Ireland, Portugal and Spain.

**The outlook**
According to NIESR’s latest April 2011 projections, the Bulgarian economy will expand by 2.6 per cent in 2011 and 2012 may see a further acceleration of GDP growth. As GDP growth is expected to remain somewhat below the pre-crisis trend, we do not anticipate a rapid recovery in the labour market. If the unemployment rate remains elevated relative to the EU average for the next few years, this may encourage further outward migration, towards countries where job prospects are more favourable.
**Institutional settings**

The accession to the EU in 2007 guaranteed Bulgarians (eventual) free access to other EU Member States’ labour markets. However, many EU members imposed transitional arrangements restricting access of workers from Bulgaria to their labour markets for several years after the enlargement.

The transitional period can be decomposed into three phases: from January 2007 to December 2008, from January 2009 to December 2011, January 2012 to December 2013; that is 2+3+2. During the first phase, 2 EU-15 Member States (Finland and Sweden) and 7 EU-10 Member States (Cyprus, Estonia, Latvia, Lithuania, Poland, Slovenia and Slovakia) liberalised access to their labour markets for Bulgarian citizens. Moreover they do not need a work permit to work in the Czech Republic. The remaining countries maintained restrictions on their labour market, mainly through work permit systems. Several countries applied caps on the inflow of low-skilled workers or imposed sector-specific restrictions.

During the second phase, a further 5 member states opened their labour markets: Spain, Greece Hungary, Portugal and Denmark. The remaining countries simplified procedures for taking on Bulgarian workers or reduced restrictions in selected sectors.

There are 10 countries which may potentially open their labour markets in January 2012, which is the beginning of the third phase. These include the largest EU members: Germany, France and the UK. Some of these countries tend to perceive...
their labour markets as vulnerable, and may opt to extend restrictions for the final two years.

Migration trends
The size of migration from Bulgaria to other EU countries is difficult to estimate due to shortcomings in the data. The primary domestic data source for outward migration from Bulgaria is compiled by National Statistical Institute of Bulgaria, which collects data on external migration by age and sex. According to this source the net outflow of people in 2010 amounted to 24190 persons – see table 4.1 below. The data collected by this source include only persons who have declared to the administrative authorities a change of their present address in the country with a new one outside (emigrants) and of an address outside the country with a new one in the country (immigrants). These figures may omit significant population movements. They correspond to a fraction of our estimates of net migration flows to the EU-15, which can be calculated as the change in the stock values reported in table 3.2 above.

<table>
<thead>
<tr>
<th>Year</th>
<th>Immigrants into the country</th>
<th>Emigrants from the country</th>
<th>Net migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1561</td>
<td>2958</td>
<td>-1397</td>
</tr>
<tr>
<td>2008</td>
<td>1236</td>
<td>2112</td>
<td>-876</td>
</tr>
<tr>
<td>2009</td>
<td>3310</td>
<td>19039</td>
<td>-15729</td>
</tr>
<tr>
<td>2010</td>
<td>3518</td>
<td>27708</td>
<td>-24190</td>
</tr>
</tbody>
</table>

Source: National Statistical Institute of Bulgaria

Additional information can be extracted from inward migration statistics of the host countries. According to the population by citizenship matrix compiled from various sources for this project (see full matrix in table 3.2), the stock of Bulgarian citizens in EU-15 countries almost doubled, increasing from around 225 thousand in 2005 to about 430 thousand in 2009 – see figure 4.2. While emigration from Bulgaria is relatively substantial, immigration to Bulgaria is rather small.

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4 These refer to end-period stocks, so are derived largely from the 1 January figures from Eurostat’s Population statistics of the following year.
Figure 0.2. Bulgarian nationals living in EU-15 countries

Source: Table 3.2

Figure 0.3. Bulgarian nationals living in individual EU-15 countries, 1 Jan. 2010

Table 0.2. Distribution of Bulgarian citizens across EU-15, end-period

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>Greece</th>
<th>Spain</th>
<th>Italy</th>
<th>UK</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>52%</td>
<td>11%</td>
<td>3%</td>
<td>9%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>1998</td>
<td>50%</td>
<td>11%</td>
<td>3%</td>
<td>8%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>1999</td>
<td>47%</td>
<td>10%</td>
<td>4%</td>
<td>11%</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>2000</td>
<td>44%</td>
<td>10%</td>
<td>13%</td>
<td>10%</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>2001</td>
<td>37%</td>
<td>12%</td>
<td>23%</td>
<td>8%</td>
<td>6%</td>
<td>14%</td>
</tr>
<tr>
<td>2002</td>
<td>31%</td>
<td>14%</td>
<td>32%</td>
<td>5%</td>
<td>4%</td>
<td>13%</td>
</tr>
<tr>
<td>2003</td>
<td>26%</td>
<td>10%</td>
<td>37%</td>
<td>7%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>2004</td>
<td>20%</td>
<td>13%</td>
<td>42%</td>
<td>8%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>2005</td>
<td>17%</td>
<td>12%</td>
<td>45%</td>
<td>8%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>2006</td>
<td>16%</td>
<td>11%</td>
<td>47%</td>
<td>7%</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>2007</td>
<td>15%</td>
<td>9%</td>
<td>47%</td>
<td>10%</td>
<td>5%</td>
<td>14%</td>
</tr>
<tr>
<td>2008</td>
<td>14%</td>
<td>10%</td>
<td>40%</td>
<td>10%</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>2009</td>
<td>15%</td>
<td>13%</td>
<td>38%</td>
<td>11%</td>
<td>6%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Note: EU15=100%
Source: Table 3.2

The main receiving country of Bulgarian nationals in the EU-15 is Spain, which attracts about 40 per cent of those wishing to live and work abroad. The second most popular destination countries are Germany and Greece, followed by Italy – see table 4.2.

Accession to the EU per se did not result in an abrupt increase in emigration from Bulgaria. Actually, the whole process started well before the EU accession. Neither did the accession significantly alter the distribution of Bulgarian citizens across the EU-15 countries, in contrast to the experience of the 2004 enlargement, when the UK and Ireland gained preference at the expense of Germany and Austria in the location decision.

In terms of the impact of the global financial crisis, the data suggest that the growth rate of the stock of Bulgarian nationals residing in the EU-15 slowed to about 5 per cent in 2009, compared to about 25 per cent per annum in 2007 and 2008. The persistence of emigration despite the severity of the crisis may suggest that those who emigrated did not expect better prospects in Bulgaria or may have longer term plans in their destination countries. The net change in stock figures do mask a certain rise in return migration, and net outflows from some countries. The largest declines in Bulgarian population were observed in the UK. In 2009, as compared to 2008, relatively more migrants chose Greece, Germany and Italy, as well as some destinations that had previously been less popular, such as Belgium, Denmark, and Austria.
As concerns the age structure of the migrating population, movers from Bulgaria are on average younger than the overall labour force (see figure 4.4) both in the sending and receiving countries. Close to 60 per cent of recently moved workers are younger than 35 (see figure below). There are slightly more women among those emigrating. The EU LFS statistics suggest that the representation of women among mobile workers was about 55 per cent over recent years.

**Figure 0.4. Age structure and employment status of Bulgarian migrants in the EU-15, aged 15+**

Source: EU Labour Force Survey

Over 2005-2010, a great majority of migrants, about 70 per cent on average, were employed in their destination countries. Recent arrivals from Bulgaria have an average employment rate that is comparable to the average employment rate in the EU-15. Over the recent years the share of unemployed fluctuated around 5 per cent, although the 2009 recession resulted in an increase in the share of unemployed to about 12 per cent in 2009 and 18 per cent of the migrant population in 2010. About 20 per cent of migrants remain inactive. The crisis resulted in a rise in the share of inactive migration population to about 28 per cent in 2009, however, the latest data suggest that by the end of 2009, the share of inactive migrant population reverted to its medium term average level.

Tables 4.3-4.6 and figures 4.5-4.5 below show the skill structure of Bulgarian citizens moving to EU15 countries, as well as in which sectors and occupations they work in countries of their destination. The data were derived from the EU Labour Force Survey.
Table 0.3. Educational attainment of Bulgarian movers (as of the beginning of 2010)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>34%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>21%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EU Labour Force Survey

The structure of skills of Bulgarian movers is comparable to the skill structure of the EU15 population. According to the Eurostat data, in 2009 about 31 per cent of EU15 nationals were nationals with pre-primary, primary and lower-secondary education, about 42 had upper secondary and post-secondary non-tertiary education, and about 27 had tertiary education.

A closer look at the level of educational attainment of Bulgarian citizens working in individual countries reveals that Greece and Italy attract predominantly low-skilled workforce, while high-skilled Bulgarians prefer to move to Germany. Table 4.4 shows the level of educational attainment of Bulgarians moving to the four most popular countries – Spain, Germany, Greece and Italy, which attract about 77 per cent of Bulgarian movers.

Table 0.4. Educational attainment of Bulgarian nationals residing in Spain, Germany, Greece and Italy (2010)

<table>
<thead>
<tr>
<th></th>
<th>Spain</th>
<th>Germany</th>
<th>Greece</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>32%</td>
<td>23%</td>
<td>52%</td>
<td>45%</td>
</tr>
<tr>
<td>Medium</td>
<td>48%</td>
<td>43%</td>
<td>37%</td>
<td>43%</td>
</tr>
<tr>
<td>High</td>
<td>20%</td>
<td>34%</td>
<td>11%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey

About 52 per cent of Bulgarians moving to Greece and 45 per cent moving to Italy are low-skilled. The Bulgarian population of low-skilled in these countries is overrepresented – about 22 per cent of the total Bulgarian population has pre-primary, primary or lower secondary education (see table 4.10 in the Romanian case study). In contrast, Germany attracts many more high-skilled Bulgarians than what the skill structure of Bulgarian population would suggest – about 23 per cent of Bulgarians are high-skilled.

About 38 per cent of Bulgarian migrants residing in EU-15 countries work in elementary occupations. Large numbers of arrivals from Bulgaria are also employed as service workers and shop and market sales workers – about 18 per cent, as well as craft and related trade workers – close to 15 per cent. It is estimated that about 11 per cent of Bulgarians work as legislators, senior officials, managers and professionals.
Table 4.5 shows shares of Bulgarian migrants employed in three groups of occupations: requiring low skills (elementary occupations), medium skills (plant and machine operators and assemblers, craft and related trades workers, skilled agricultural and fishery workers, service workers and shop and market sales workers, clerks) and high skills (legislators, senior officials, and managers, professionals technicians and associate professionals) in the EU15, Spain, Germany, Greece and Italy. A more detailed breakdown of the occupational structure of Bulgarians residing and working in selected EU15 countries is shown in annex.

About 39 per cent of Bulgarian nationals working in the EU15 are employed in elementary occupations requiring low skills. Close to 50 per cent of those choosing to work in Greece, Italy and Spain do low skill jobs. Germany attracts and employs highly skilled Bulgarians in occupations requiring high skills. This may result from specific needs and features of the German economy (as an export-oriented economy specialising in high tech products Germany requires highly skilled workers. Not only is the German population ageing, but also enrolment rates in Germany remain much below the EU27 average (see table 4.7), so the labour gap needs to be filled with foreign workers).
Table 0.5. Occupational structure of Bulgarian nationals residing and working in selected EU15 countries (by groups of occupations (2010))

<table>
<thead>
<tr>
<th>Occupations requiring</th>
<th>EU-15</th>
<th>Germany</th>
<th>Greece</th>
<th>Spain</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>low skills (ISCO9)</td>
<td>38.5</td>
<td>:</td>
<td>51.9</td>
<td>45.7</td>
<td>47.0</td>
</tr>
<tr>
<td>medium skills (ISCO4-8)</td>
<td>46.7</td>
<td>49.8</td>
<td>44.3</td>
<td>48.6</td>
<td>46.3</td>
</tr>
<tr>
<td>high skills (ISCO1-3)</td>
<td>14.8</td>
<td>36.5</td>
<td>:</td>
<td>5.7</td>
<td>:</td>
</tr>
</tbody>
</table>

ISCO: 1 Legislators senior officials and managers, 2 Professionals, 3 Technicians and associate professionals, 4 Clerks, 5 Service workers and shop and market sales workers, 6 Skilled agricultural and fishery workers, 7 Craft and related trades workers, 8 Plant and machine operators and assemblers, 9 Elementary occupations

Source: Labour Force Survey

Tables 4.5 and 4.3 suggest that about 11 per cent of Bulgarian population may work below their qualifications: about 30 per cent of high skilled and 10 per cent of medium skilled (although these numbers should be treated with caution as they were calculated on the aggregate basis, they broadly correspond to the degree of overqualification reported in Employment in Europe (2008) calculated on the basis of individual data).

Greece, Italy and Spain attract Bulgarians willing to work in elementary occupations, while Germany is highly attractive for specialists. It seems that in the case of Germany the occupational structure broadly matches the skill structure of the Bulgarian population residing in Germany (see table 4.4 above). At the same time, the degree of overqualification is probably very high in Spain (the aggregate data suggest that up to 70 per cent of Bulgarians with a university degree, and about 30 per cent of those with secondary education may be overqualified for the occupations they are employed in).

The accommodation and food service industries, wholesale and retail trade, transportation and other related sectors (see figure 4.6) are most popular sectors among Bulgarians moving to EU-15 countries to work, employing about 33 per cent of the Bulgarian population. A further 25 per cent are employed by private households, work in the public sector or as other services workers (see figure 4.6). Financial, real estate, professional and administrative activities; manufacturing and related activities (see figure 4.6); and construction employ about 12 per cent of the Bulgarian migrants each. In comparison to the sector breakdown of the EU-15 employment, Bulgarians are somewhat overrepresented in sectors such as agriculture, construction, hotels and restaurants and private households, while they are
underrepresented in sectors such as manufacturing, wholesale and retail trade, public
administration, education and health and social work (compare also Employment in
Europe, 2008).

Figure 0.6. Sectoral structure of Bulgarian migrant workers (2010)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>EU 15</th>
<th>Greece</th>
<th>Spain</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>7</td>
<td>(11.8)</td>
<td>11</td>
<td>(9.9)</td>
</tr>
<tr>
<td>B-E</td>
<td>12</td>
<td>:</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>F</td>
<td>12</td>
<td>(8.5)</td>
<td>9</td>
<td>(10.7)</td>
</tr>
<tr>
<td>G-J</td>
<td>33</td>
<td>25</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>K-N</td>
<td>12</td>
<td>:</td>
<td>10</td>
<td>(8.0)</td>
</tr>
<tr>
<td>O-T</td>
<td>25</td>
<td>43</td>
<td>18</td>
<td>34</td>
</tr>
</tbody>
</table>

See legend for figure 4.6
Source: Labour Force Survey

Table 0.6. Shares of Bulgarian migrants in Greece, Italy and Spain employed in
selected sectors (2010)

Table 4.6 below shows the distribution of Bulgarians moving to Spain, Greece and
Italy working in individual groups of sectors.
Existing studies indicate that many of the migrants may be circular, moving backwards and forwards (see Mobility in Europe, 2010). This may apply particularly to migrants employed in seasonal jobs of a manual kind.

Below we show the structure of the Bulgarian-born population residing in countries other than the EU; mainly in the US, Australia and Switzerland, which will allow us to get a broader picture of movements of Bulgarian population. Data comes from OECD’s “A profile of immigrant population in OECD countries” and the sources of this data are mainly census data of 2000. The main destination countries for citizens born in Bulgaria have been EU countries. Following the breakdown of the communist system and a particularly difficult situation on the labour market, a large number of Bulgarian citizens have moved to the US. Australia and Switzerland have attracted fewer Bulgarian-born migrants. It should be mentioned that large numbers of Bulgarian-born Muslims (over 300000 in total) were deported or moved freely to Turkey in 1989 after a period of socio-political unrest. The Big Excursion, which followed religious and social conflicts, resulted in severe consequences for the agricultural and industrial sectors, with thousands of Turkish nationals residing in Bulgaria abandoning their workplaces. A significant share of Bulgarian emigrants continues to head to Turkey, reflecting the strong role of networks in the location decision. With Bulgaria’s entering the EU in 2007 the relative role of EU countries as favoured destinations for Bulgarian migrants may have increased.

Figure 0.7. Bulgarian expatriates

Source: OECD
Push and pull factors of migration

There is a range of factors that influence people’s decisions on moving to a different country, both of economic and non-economic nature. A vast share of migration from the EU-2 to the EU-15 has economic causes. This is best illustrated by wage and GDP per capita differentials – see figure 4.8.

Although catching up, Bulgaria remains one of the poorest countries in the EU. Below we present absolute and real differences in GDP per capita and wages between Bulgaria and selected EU-15 countries. Comparing absolute GDP and wage differences allows us to assess how likely Bulgarian workers in the EU-15 are to send remittances to Bulgaria, while looking at GDP per capita in purchasing power parities and real wage differentials gives us an indication how much more attractive living in another EU country is in comparison to Bulgaria. Absolute differences may thus matter for temporary migrants or migrants aiming to return to Bulgaria in the medium term, and real differentials are probably taken into account by long term migrants or migrants wishing to stay in their countries of destination for good.

Nominal GDP per capita in Bulgaria is several times lower than GDP per capita in the Euro Area. It is about 4.5 times lower than in Spain and almost 6 times lower than in Germany. The wage gap between Bulgaria and the main destination countries of Bulgarian nationals is also rather large. The salaries in industry and services in EU-15 countries are about 14 times higher than in Bulgaria. The Eurostat Population data suggest that the crisis did not result in a massive return of migrants as probably they did not expect better prospects in Bulgaria. Net emigration persisted into 2009, albeit at a reduced rate relative to the previous two years. Available data for 2010 from the Labour Force Survey confirm that net emigration persisted into 2010. In terms of differences in GDP per capita in purchasing power parity, in 2009 GDP per capita in Bulgaria stood at about 44 per cent of the EU27 average. Real wages in Bulgaria are about 5 times lower than in Germany and about 3 times lower than in Spain.
The still significant GDP per capita and wage gaps between Bulgaria and other EU-15 countries may suggest that Bulgarians will find work opportunities in other EU countries attractive. This may imply that population flows from Bulgaria to other countries are likely to continue. Existing studies show that there is a correlation between income gaps and the propensity to move (Employment in Europe, 2008). On the other hand, many people wishing to work abroad have already moved, so there remains less in the way of ‘pent-up’ demand to migrate, which may suggest that the potential of additional migration from Bulgaria is limited.
The impact of migration

This section looks at the economic impact of migration from a qualitative perspective. For quantitative estimates of the effects of the liberalisation of the EU labour markets see the previous section of the report. Below we briefly discuss macroeconomic and labour market effects of migration, some of which would be difficult to capture in a model.

Remittances

Remittances constitute an important factor in assessing the direct impact of migration on GDP, especially in the sending country. Over recent years the volume of remittances from Bulgarian migrants has increased significantly. The remittances sent from abroad increase income in the receiving country and can be used either for current consumption, boosting GDP growth in the short run, or savings to finance capital investment with effects spread over time.

Figure 0.9. Remittances as % of GDP in the EU-2 and the EU-8 countries

As the number of Bulgarians working abroad expressed in terms of the share of total population is one of the highest in Europe, Bulgaria remains also the biggest recipient of remittances (as a percentage of GDP). Figure 4.9 shows workers’ remittances (as a percentage of GDP) sent to individual EU-2 and EU-8 countries. Data comprise workers’ remittances, compensation of employees and migrants’ transfers. Remittances are classified as current private transfers from migrant workers resident in the host country for more than a year, irrespective of their immigration status, to
recipients in their country of origin. Migrants' transfers are defined as the net worth of migrants who are expected to remain in the host country for more than one year that is transferred from one country to another at the time of migration. Compensation of employees is the income of migrants who have lived in the host country for less than a year. Data come from the World Bank, who derive estimates from the IMF’s Balance of Payments Statistics. While there appears to be a structural break in the series for Bulgaria in 2001 and for Romania in 2005, no explanation is offered for the sudden jumps in the series.

Remittances to Bulgaria peaked at over 8 per cent of GDP in 2003, well above the other EU-8 and EU-2 economies illustrated in figure 4.9. In 2009, the value of remittances accounted for 1557.8 million USD, that is about 3.2 per cent of GDP, in line with remittances sent to Romania and Lithuania.

The financial crisis resulted in a slight deceleration in the flow of remittances in nominal terms, reflecting job losses and possibly lower salaries among the Bulgarian migrant population, but the decline was not out of line with the moderation in remittances relative to GDP observed since 2004. This is partly a reflection of the acceleration of GDP over the period 2004-2008, with GDP growing 5 years in a row at above 6 per cent per annum, raising the level of the denominator of this ratio.

In figure 4.10 we plot the amount of remittances sent from abroad against the background of the size of Foreign Direct Investment (FDI) inflows, both expressed as a per cent of GDP. FDI is connected not only to the overall migration process, but also the state of the labour market, including the unemployment rate.
The amount of remittances sent from abroad did not decrease significantly in the crisis year 2009, while FDI flows decelerated markedly in both 2008 and 2009. Moreover, according to International Association of Money Transfer Networks check point polls of Bulgarians entering Bulgaria for short stays show that 37 per cent of migrants working abroad wire money officially, 15 per cent look for alternative ways than bank transfers, and 48 per cent never send money to Bulgaria. The sharp drop in FDI inflows observed in 2008 and 2009 may have an impact on the situation on the Bulgarian labour market. According to NIESR’s April forecasts the relatively high unemployment rate will likely persist in 2011, and it is expected to decline somewhat only when GDP growth picks up in the years to come.

**Labour markets**
Emigration can have several effects on the labour market (see also Employment in Europe, 2008; and Belava, 2009). In the short run, migration may relieve tensions on the labour market where the unemployment rate is high, as it reduces the degree of competition for the scarce jobs available. In general we would expect emigration to temporarily reduce the rate of unemployment in an economy. If the labour market is in equilibrium, however, this would put upward pressure on wages, reducing demand for labour in the home country, and in the medium- to long-run we would expect the unemployment rate to revert to previous levels. If the labour market is already tight, emigration can lead to labour shortages and bottlenecks, pushing inflation up sharply. The impact on the home country labour market partly depends on whether emigrants are employed, unemployed or inactive, and if the emigration leaves the economy with
a particular skills gap that is difficult to fill. Several studies indicate that emigration led to labour shortages in some of the EU-8+2 countries, which affect specific sectors of the economy (construction, hotels and restaurants) and professions (e.g. healthcare) (see Employment in Europe, 2008, World Bank, 2006, Bruecker, 2009).

The EU society is ageing and Bulgaria is not an exception. Bulgaria has one of the lowest fertility rates in Europe. The fertility rate in Bulgaria, is much lower than the replacement rate (that is the fertility rate at which newborn women would have, on average, one daughter over their lifetime), implies a population decline. According to Vassilev (2005), among the key factors behind the population decline resulting from low fertility rates, relatively high mortality rates and a significant increase in the emigration rate are the relatively tumultuous transition from one political and socioeconomic system to another involving political and economic turbulence, social stress, and social and personal insecurity.

As those who decide to migrate are primarily young, below 35 (see figure 4.4 above), the departure of people aggravates the problem of population ageing. In effect the age structure of the population in the sending country changes, and the rate of generational replacement declines, affecting the size of the labour force. The emigration has already sparked concerns over a brain drain and labour shortages (see Beleva, 2009; Markova, 2010). In the long run this may lead to a decline in potential GDP and a lower rate of catching up with other members of the EU. Moreover, there may be a detrimental influence of the high skilled migration on the quality of scientific (R&D) institutions and their capacity for further development, and the average level of productivity in the home country may be adversely affected.

The enrolment rates for tertiary education in the EU8+2 countries generally have increased over recent years (see Employment in Europe, 2010), which may, to some extent, offset the outflow of skilled labour. Table 4.7 below shows enrolment in tertiary education for Bulgaria, Romania, EU-8 countries and selected EU-15 countries. The shares of studying population aged 20-24 as a percentage of all 20-24 years old in Bulgaria and Romanian remain lower than corresponding indicators reported for other EU8+2 countries. They are, however, higher than those reported for selected EU-15 countries (the main receiving countries of Bulgarian and Romanian workers).
Table 0.7. Enrolment in education – students (tertiary education) as % of 20-24 years old

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>EU27</td>
<td>29.2</td>
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<td>28.5</td>
<td>28.2</td>
<td>27.8</td>
<td>27.4</td>
<td>26.6</td>
<td>25.8</td>
<td>24.8</td>
<td>23.8</td>
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<td>Bulgaria</td>
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<td>26.5</td>
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<td>23.5</td>
<td>22.7</td>
<td>22.9</td>
<td>23.8</td>
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<tr>
<td>Romania</td>
<td>29.5</td>
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<td>28.0</td>
<td>26.0</td>
<td>23.2</td>
<td>21.8</td>
<td>20.4</td>
<td>18.6</td>
<td>15.5</td>
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</tr>
<tr>
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<td>32.5</td>
<td>31.3</td>
<td>30.5</td>
<td>28.5</td>
<td>27.7</td>
<td>24.9</td>
<td>22.6</td>
<td>21.3</td>
<td>19.1</td>
<td>17.1</td>
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<tr>
<td>Estonia</td>
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<td>31.2</td>
<td>30.8</td>
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<td>28.9</td>
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<td>28.1</td>
<td>27.3</td>
<td></td>
</tr>
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<td>31.4</td>
<td>30.8</td>
<td>30.3</td>
<td>29.5</td>
<td>28.0</td>
<td>25.5</td>
<td>23.0</td>
<td>21.2</td>
<td>20.1</td>
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<td>32.6</td>
<td>32.9</td>
<td>32.8</td>
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<td>28.1</td>
<td>25.8</td>
<td>23.3</td>
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<td>31.1</td>
<td>29.0</td>
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<td>34.7</td>
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<td>46.1</td>
<td>44.5</td>
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<td>39.2</td>
<td>37.8</td>
<td>34.8</td>
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</tr>
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<td>28.6</td>
<td>27.3</td>
<td>25.1</td>
<td>23.0</td>
<td>21.2</td>
<td>19.3</td>
<td>18.6</td>
<td>17.6</td>
<td>16.7</td>
</tr>
<tr>
<td>France</td>
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<td>28.6</td>
<td>28.9</td>
<td>29.0</td>
<td>29.1</td>
<td>30.1</td>
<td>29.9</td>
<td>29.7</td>
<td>30.4</td>
<td>30.5</td>
</tr>
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<td>Germany</td>
<td>24.3</td>
<td>22.4</td>
<td>22.6</td>
<td>22.7</td>
<td>22.3</td>
<td>21.8</td>
<td>20.7</td>
<td>19.9</td>
<td>19.1</td>
<td>18.6</td>
</tr>
<tr>
<td>Greece</td>
<td>40.0</td>
<td>36.6</td>
<td>38.4</td>
<td>37.1</td>
<td>39.9</td>
<td>39.6</td>
<td>36.1</td>
<td>33.8</td>
<td>30.0</td>
<td>22.4</td>
</tr>
<tr>
<td>Italy</td>
<td>31.3</td>
<td>31.3</td>
<td>31.1</td>
<td>30.7</td>
<td>30.0</td>
<td>29.7</td>
<td>28.3</td>
<td>26.2</td>
<td>25.1</td>
<td>24.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>25.1</td>
<td>22.5</td>
<td>23.1</td>
<td>23.0</td>
<td>23.2</td>
<td>23.8</td>
<td>22.9</td>
<td>22.5</td>
<td>21.6</td>
<td>21.1</td>
</tr>
<tr>
<td>Spain</td>
<td>28.8</td>
<td>28.4</td>
<td>28.5</td>
<td>28.8</td>
<td>29.0</td>
<td>29.7</td>
<td>29.9</td>
<td>30.3</td>
<td>30.0</td>
<td>30.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>20.4</td>
<td>19.7</td>
<td>20.0</td>
<td>20.1</td>
<td>20.2</td>
<td>20.4</td>
<td>20.3</td>
<td>20.7</td>
<td>19.8</td>
<td>19.5</td>
</tr>
</tbody>
</table>

Source: Employment in Europe (2010)

There is consensus that skilled migration tends to have more favourable effects for receiving countries than for sending countries, both in the short run as well as in the long run (see e.g. Bruecker et al. 2009). Effects for sending countries, such as Bulgaria, may be either positive or negative. In terms of positive impacts of skilled migration on the Bulgarian economy, one could distinguish several effects. Bulgarian scientists will integrate better with the world scientific community. Returning scientists may inculcate new professional, organisational and managerial experience accumulated when staying abroad in the Bulgarian scientific environment. The increasing share of students studying abroad may be expected to enhance the human capital and potential growth, provided they will return. The benefits of skilled emigration rely heavily on the assumptions of some return migration. While there is a high level of circular migration between Bulgaria and Germany, increasing evidence shows that a large share of Bulgarian graduates finds jobs in the destination country. The possibility of gaining education that would better correspond to the needs of the international labour market constitutes one of the important non-economic pull factors behind migration of young cohorts of Bulgarians. Figure 4.11 shows the number of Bulgarian students studying in another EU-27, EEA or Candidate country as % of the total enrolment in their country of origin. The share of Bulgarian tertiary students studying abroad is high relative to the EU-27 average of just of 2 per cent in 2003/4.
A recent survey of the Eurobarometer shows that about 37 per cent of young Bulgarians indicate that applying for higher levels of education is one of the most important factors of moving to another country. According to the same survey another reasons behind moving abroad are higher wages and improving one’s job opportunities.

According to a recent study conducted by the European Migration Network (2011), the attitude toward emigration may demonstrate a preference for temporary migration. About 20 per cent of Bulgarians declare a positive attitude toward the idea of working abroad for a limited period of time, 13 per cent claim that they would prefer to settle abroad permanently (although one needs to distinguish between preparedness and actual intention). The study indicates that these data remained unchanged in 2008 and 2010, that is just before and just after the crisis recession of 2009.

The above numbers are comparable to estimates of the Special Eurobarometer (2010), which indicates that about 17 per cent of European Union citizens envisage working in another country in the future and 10 per cent are not sure. EU10+2 citizens are more likely to envisage working abroad than EU-15 citizens (21 per cent vs 17 per cent). About 16 per cent of Bulgarians and Romanians declare that they envisage working abroad in the future, while 15 per cent and 27 per cent of Bulgarian and Romanian nationals, respectively, are not sure. The EU10+2 nationals’ choices to move abroad are driven by economic considerations (while those of EU-15 nationals...
are more often driven by lifestyle and cultural factors). According to the Eurobarometer survey another important motivator for mobility is unemployment – almost half of respondents would be willing to move to another country for work.

The above may suggest that Bulgarians and Romanians may continue searching for work in other EU countries, as income gaps are still relatively large. The macroeconomic situation and the situation on the labour market in Bulgaria and Romania, and also in the main destination countries, will also matter for Bulgarians’ and Romanians’ decisions to migrate.

In 2008 the Bulgarian authorities published a National Strategy of the Republic of Bulgaria on Migration and Integration (2008-2015), setting strategic goals and priorities of the Bulgarian migration policy. The main strategic goals are: attraction of persons with Bulgarian citizenship living abroad as well as persons of Bulgarian origin with foreign citizenship for permanent return and settlement in Bulgaria, and achievement and implementation of an adequate policy on acceptance and integration of foreigners. The policy is aimed at attracting skilled workers to return or settle in Bulgaria, which would help reverse the negative effects of the brain drain and loss of labour input that has occurred with emigration of Bulgarian nationals to other EU countries. It is also aimed at promoting circular migration, which may also limit the brain drain.

**Conclusions**

In 2010 about 430 thousands Bulgarians lived and worked in EU-15 countries, predominantly choosing Spain, Germany, and Greece as their main destination countries.

The migrating Bulgarians are predominantly young (about 60 per cent of them are younger than 35 years old) and medium-skilled (about 45 per cent of them are medium-skilled). The shares of low-skilled and high skilled account for 34 and 21 per cent, respectively. A great majority of Bulgarian movers (about 70 per cent) are employed in countries of their destination. About half of them (52 per cent) found work in hotels and restaurants, private households, as well as the manufacturing and construction sectors. About 80 per cent of Bulgarians in the EU-15 are employed in elementary occupations, work as service and sales workers, craft and trade workers, and machine operators and assemblers. Only 11 per cent work as legislators and professionals. The above numbers may suggest that Bulgarians tend to work slightly below their qualifications (downskilling). While Greece, Italy, and to a lesser extent Spain, attract rather low-skilled workers, Germany (along with France and Denmark) is frequently chosen by highly skilled.
According to a recent Eurobarometer survey (2010) economic factors constitute one of the more important motivators behind the decision to emigrate from Bulgaria. Both nominal and real income gaps between Bulgaria and EU15 countries remain large and are important pull factors for both temporary migrants (in terms of sending remittances) and long term movers (in terms better living and working conditions).

A number of studies emphasise risks of a brain drain for the Bulgarian economy (Belava, 2009, Markova, 2010). While this is one of the negative consequences of migration, a closer look at the skill structure of the migrating population in comparison to the skill structure of the Bulgarian population shows that 21 per cent of migrants are highly skilled, compared to a countrywide share of 23 per cent of Bulgarians holding a university degree. Moreover, enrolment rates in tertiary education in Bulgaria have increased in recent years, and they are somewhat higher than the EU-27 average (although much lower than enrolment rates in Slovenia, Lithuania and Poland).

In 2008 the Bulgarian government published a national strategy on migration policy which aims at attracting Bulgarian citizens and foreigners, especially high-skilled, to return and settle down in Bulgaria. This may influence the dynamics of net migration from Bulgaria, which in recent years has been exceptionally high - about 3.4 per cent of Bulgarian population emigrated between 2004-2009.
4.2 Romania

Macro background and labour market developments
Romania, along with Bulgaria, joined the EU in 2007. The country submitted its application for formal membership to the EU in 1995 and the official process of negotiations started in 2000. During the 2000s Romania implemented a series of reforms to prepare for accession, from human rights legislation to rules of a free market economy. The economy has undergone massive changes and after institutional and structural adjustments Romania was granted the official status of an EU member in 2007.

The growth rate of the Romanian economy over the last decade, with the exception of the period affected by the global financial crisis, on average fluctuated around 6 per cent per annum, although it has been rather volatile. During the recession of 2009, GDP declined dramatically. The Romanian economy contracted by about 7.1 per cent in 2009, which was one of the most serious GDP declines in Central and Eastern Europe (the Baltic countries were the only EU-10+2 economies to record even deeper recessions). The economy has recovered moderately since then. However, growth still remains rather fragile.

Despite the volatile pattern of growth observed over the last decade the unemployment rate in Romania varied to a lesser extent. Adjusting for a declining trend in the level of structural unemployment, the unemployment rate has fluctuated within a 2 percentage point band. The crisis, although painful in terms of output losses, resulted in only a moderate increase in the number of unemployed and after an initial post-crisis rise in the unemployment rate, the situation on the labour market has improved. This may suggest that the labour market in Romania may be relatively robust to shocks.

The impact of the crisis
Romania has been hard hit by the global financial crisis. The 7.1 per cent decline in GDP in 2009 reflected a dramatically sharp 16 per cent contraction in domestic demand. The contribution of net exports was positive, but only thanks to larger declines in imports than in exports. This allowed the current account deficit to narrow from 16.3 per cent of GDP in 2008 to about 6 per cent in 2009 and 2010.

Any comments or queries related to section 4.2 of the report can be addressed to Tatiana Fic (t.fic@niesr.ac.uk).
The worsening economic situation took its toll on the situation of public finances. The deficit of the general government shot up to 8.6 per cent of GDP in 2009, the highest since the beginning of transition of the economy in the early 1990s. In 2010, the Romanian government approved a programme of fiscal consolidation (including an increase in VAT, a temporary reduction in public wages, and a reduction in social spending) and the budget deficit decreased to 6.4 per cent of GDP. The consolidation of public finances is expected to continue. On the revenue side tax rates are projected to remain unchanged; on the expenditure side consolidation measures will continue to be implemented.

The labour market remained relatively resilient. The unemployment rate went up to 6.9 per cent in 2009 and 7.3 per cent in 2010. However, in comparison with many other European countries, the increase in unemployment was not dramatic. The rise did not exceed increases in the unemployment rate recorded during previous recessions of 1997 and 1992, following the Russian crisis and the transition shock.

**The outlook**

The macroeconomic outlook for Romania has brighten somewhat. We expect that the Romanian economy will expand by 1.5 per cent in 2011 and the economy should grow more rapidly in 2012. The rate of growth is, however, expected to remain below recent trend rates of growth in Romania. This may affect Romanians’ decisions on migration. The situation on the labour market is expected to remain rather unchanged in terms of the unemployment rate in the short-term, as the economic recovery may not result in sufficient job creation.

**Figure 0.12. GDP growth and unemployment rate in Romania**

Source: NiGEM database
Institutional settings
General institutional settings for Romanian emigration are largely the same as in the case of Bulgaria. Romanians have the right to move and work in a different country, as the unrestricted movement of people remaining one of the fundamental EU freedoms. However, several EU-15 countries have adopted restrictions and apply transitional arrangements concerning access of Romanian workers to their labour markets. Restrictions are still binding in 10 of the EU-15 countries, including the largest ones Germany, France and the UK.

Germany has maintained work permit requirements. It also applies restrictions on the posting of workers in certain sectors. France applies a simplified procedure for 150 occupations, where a work permit is issued without a labour market review. The UK applies a work permit system, and low skilled workers are restricted to existing quota schemes in the agricultural and food processing sectors, while skilled workers need to qualify for a work permit. Italy, one of the main destinations for Romanian migrants (see below) also requires work permits, although some sectors are exempt from this requirement (e.g. agriculture, hotel and tourism, domestic work, care services, construction, engineering, managerial and highly skilled work, and seasonal work). We will show below that these are some of the most important sectors for Romanian workers abroad, suggesting that the work permit requirement in Italy has had limited impact on worker mobility.

Among the EU-10 countries, only Malta maintains restricted access to its labour markets for Romanian nationals. Hungary lifted restrictions for Romanians in 2009.

Migration trends
The scale of Romanian migration to other EU countries has been increasing steadily since 2004, with the onset of this acceleration occurring a good three years before Romania’s accession to the EU. Figure 4.13 shows the stocks of Romanian nationals residing in EU-15 countries, by country of residence. Over the period 2005-2009 (end-period) the number of Romanian citizens residing in the EU-15 more than doubled, reaching 2.1 million.

The main destination countries for movers from Romania are Italy and Spain. As of 1 January 2010, of Romanians residing in the EU-15 about 43 per cent and 40 per cent were located in Italy and Spain, respectively – see figure 4.14. Prior to the financial crisis, about 50 per cent of all migrant Romanian workers in the EU-15 were located in Spain. As the crisis hit the Spanish economy badly – in 2009 Spanish GDP declined by 3.7 per cent and the unemployment rate rose to 18 per cent - the dynamics of migration to Spain slowed down somewhat in 2009, although net flows to Spain
remained positive. The crisis has not adversely affected the relative attractiveness of Italy as a destination country for Romanian nationals wishing to move. Since 2007, the share of Romanian citizens residing in Italy continued to increase significantly – see table 4.8.

Figure 0.13. Romanian nationals living in EU-15 countries

Source: Table 3.2
Figure 0.14. Romanian nationals living in individual EU-15 countries, 1 Jan. 2010


Table 0.8. Distribution of Romanian citizens across EU-15

<table>
<thead>
<tr>
<th>Year</th>
<th>Germany</th>
<th>Spain</th>
<th>Italy</th>
<th>UK</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>52%</td>
<td>1%</td>
<td>20%</td>
<td>2%</td>
<td>25%</td>
</tr>
<tr>
<td>1998</td>
<td>52%</td>
<td>2%</td>
<td>20%</td>
<td>2%</td>
<td>24%</td>
</tr>
<tr>
<td>1999</td>
<td>43%</td>
<td>3%</td>
<td>30%</td>
<td>3%</td>
<td>22%</td>
</tr>
<tr>
<td>2000</td>
<td>38%</td>
<td>11%</td>
<td>30%</td>
<td>2%</td>
<td>19%</td>
</tr>
<tr>
<td>2001</td>
<td>31%</td>
<td>18%</td>
<td>29%</td>
<td>2%</td>
<td>20%</td>
</tr>
<tr>
<td>2002</td>
<td>24%</td>
<td>30%</td>
<td>25%</td>
<td>2%</td>
<td>19%</td>
</tr>
<tr>
<td>2003</td>
<td>16%</td>
<td>35%</td>
<td>33%</td>
<td>1%</td>
<td>14%</td>
</tr>
<tr>
<td>2004</td>
<td>10%</td>
<td>40%</td>
<td>35%</td>
<td>2%</td>
<td>12%</td>
</tr>
<tr>
<td>2005</td>
<td>8%</td>
<td>44%</td>
<td>34%</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>2006</td>
<td>7%</td>
<td>49%</td>
<td>31%</td>
<td>2%</td>
<td>11%</td>
</tr>
<tr>
<td>2007</td>
<td>6%</td>
<td>45%</td>
<td>38%</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>2008</td>
<td>5%</td>
<td>41%</td>
<td>41%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>2009</td>
<td>5%</td>
<td>39%</td>
<td>42%</td>
<td>4%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Note: EU-15=100%
Source: Table 3.2

As in the case of migrants from other countries movers from Romania are rather young. About 60 per cent of migrating Romanians are younger than 35 – see figure 4.15. The gender structure of the migrating population is slightly skewed towards women. According to the Labour Force Statistics the share of women among mobile workers accounted for about 53 per cent over recent years.
Over the period 2005-2010, a majority of Romanian citizens resident in the EU-15, close to 70 per cent, were employed. The 2009 recession limited employment opportunities for all workers in the EU-15, including Romanian migrants. In effect, the share of unemployed among Romanian mobile workers went up to about 15 per cent in 2010. The share of inactive remained practically unchanged over 2005-2010, and amounted to about 20 per cent of the migrant population - see figure 4.15. Below we discuss the skill structure of Bulgarian citizens moving to EU-15 countries, as well as the sectors and occupations in which they tend to work.

Table 0.9. Educational attainment of Romanian movers to EU-15 countries (2010)

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>34%</td>
</tr>
<tr>
<td>Medium</td>
<td>54%</td>
</tr>
<tr>
<td>High</td>
<td>12%</td>
</tr>
</tbody>
</table>

The highest proportion of migrating Romanians, about 54 per cent, are medium-skilled. In comparison to migrating Bulgarians, fewer Romanians have a university degree – only 12 per cent as compared to 21 per cent of Bulgarians. The general skill structure of migrating Romanians broadly matches the skill structure of the Romanian population, although there are relatively more low-skilled, and fewer medium-skilled migrating – see tables 4.9-4.10.
Table 0.10. Educational attainment of Romanian population (2009)

<table>
<thead>
<tr>
<th></th>
<th>Pre-primary, primary and lower secondary education</th>
<th>Upper secondary and post-secondary non-tertiary education</th>
<th>Tertiary education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>25.3</td>
<td>61.4</td>
<td>13.2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>22.1</td>
<td>54.9</td>
<td>23.0</td>
</tr>
<tr>
<td>European Union (15 countries)</td>
<td>31.2</td>
<td>42.0</td>
<td>26.7</td>
</tr>
<tr>
<td>European Union (27 countries)</td>
<td>28.0</td>
<td>46.8</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: Eurostat

Table 0.11. Educational attainment of Romanian nationals residing in Spain and Italy (2010)

<table>
<thead>
<tr>
<th></th>
<th>Spain</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>36%</td>
<td>34%</td>
<td>30%</td>
</tr>
<tr>
<td>Medium</td>
<td>49%</td>
<td>59%</td>
<td>50%</td>
</tr>
<tr>
<td>High</td>
<td>15%</td>
<td>6%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey

A large share of Romanians residing in the EU-15 countries are employed in elementary occupations (see figure 4.16) – about 36 per cent. A further 28 per cent of Romanians work as craft and related trade workers and 14 per cent are employed as service and shop and market sales workers. Only 2 per cent of Romanians work as professionals, legislators, senior officials and managers, compared to 11 per cent of Bulgarians in the EU-15. Although this may reflect lower levels of educational attainment of Romanian movers (only 12 per cent of them have higher education), in comparison with Bulgarian nationals, of whom half with tertiary education are employed as a professional, legislator or manager, only twenty-five per cent of high-skilled Romanians are employed in the above mentioned occupations, suggesting a high level of downskilling, or else non-transferable skills between countries.

The OECD (2008) argues that countries that did not impose restrictions on labour market access would be able to fill skills gaps and labour shortages. However, they highlight that a disadvantage for high-skilled immigrants, especially in the initial phase of migration, is the acceptance of under-qualified jobs. Cingolani (2007) shows
that about 93 per cent of high-skilled Romanian migrants residing in Italy have undertaken jobs below their qualification level, and that for 70 per cent of them this situation has persisted on a long-term basis. At the same time, 82 per cent of those accepting under-qualified occupations are those who intend to return home.

**Figure 0.16. The structure of occupations in which Romanian migrants are employed (2010)**

![Chart showing the distribution of occupations among Romanian migrants in Italy, Spain, and Germany.](chart.png)

Source: Labour Force Survey

Table 4.12 shows shares of Romanian workers in Italy, Spain and Germany (which attract about 88 per cent of mobile Romanian citizens in the EU-15) employed in elementary occupations, occupation requiring medium skills (such as inter alia service and shop workers, and craft and related trade workers) and occupations requiring high skills (inter alia legislators, senior officials and managers).

**Table 0.12. Shares of Romanian migrants in Spain, Italy and Germany working in selected occupations (2010)**

<table>
<thead>
<tr>
<th>Occupations requiring:</th>
<th>Spain</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>low skills (ISCO9)</td>
<td>40</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td>medium skills (ISCO4-8)</td>
<td>57</td>
<td>59</td>
<td>47</td>
</tr>
<tr>
<td>high skills (ISCO1-3)</td>
<td>3</td>
<td>4</td>
<td>28</td>
</tr>
</tbody>
</table>

ISCO: 1 Legislators senior officials and managers, 2 Professionals, 3 Technicians and associate professionals, 4 Clerks, 5 Service workers and shop and market sales workers, 6 Skilled agricultural and fishery workers, 7 Craft and related trades workers, 8 Plant and machine operators and assemblers, 9 Elementary occupations

Source: Labour Force Survey
About 64 per cent of Romanians moving to Spain, and about 69 per cent of those moving to Italy work in elementary occupations and as craft and related trade workers (see annex). Spain and Italy barely attract professionals and other high-skilled workers, while about one third of those migrating to Germany work as legislators, senior officials and managers, professionals, technicians and associate professionals. This may reflect the relatively greater ease of access to the labour market in Germany for highly-skilled Romanians.

About 24 per cent of Romanians living in EU-15 countries are employed in the construction sector (about 21 per cent of Romanians moving to Spain and about 26 per cent of those choosing Italy). A further 26 per cent are employed by private households or in sectors such as public administration, education, health, entertainment, and related activities (see figure 4.17). Wholesale and retail trade, transportation, accommodation and food service activities, and related sectors (see figure 4.1) attract every fourth Romanian wishing to work in EU15, and every third moving to Spain. About 17 per cent of Romanians moving to Italy and 11 per cent of those moving to Spain are employed in manufacturing or sectors such as electricity, water supply, or mining. In the EU-15 as a whole, about 13 per cent of the migrant Romanian population work in these sectors. Table 4.13 shows the distribution of Romanian workers residing in Spain and Italy across individual sector groups.

**Figure 0.17. The structure of sectors in which Romanian migrants are employed (2010)**

Agriculture, forestry and fishing, B Mining and quarrying, C Manufacturing, D Electricity, gas, steam and air conditioning supply, E Water supply; sewerage, waste management and remediation activities, F Construction, G Wholesale and retail trade; repair of motor vehicles and motorcycles, H Transportation and storage, I Accommodation and food service activities, J Information and communication, K Financial and insurance activities, L Real estate activities, M Professional, scientific and technical activities, N Administrative and support service activities, O Public administration and defence; compulsory social security, P Education, Q Human health and social work activities, R Arts, entertainment and recreation, S Other service activities, T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

Source: Labour Force Survey
Table 0.13. Shares of Romanian migrants in Italy and Spain employed in selected sectors (2010)

<table>
<thead>
<tr>
<th></th>
<th>EU15</th>
<th>Spain</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-T</td>
<td>26</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>F</td>
<td>24</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>G-J</td>
<td>24</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>B-E</td>
<td>14</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>K-N</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>A</td>
<td>6</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

See legend for figure 4.17
Source: Labour Force Survey

Push and pull factors of migration

According to a recent Eurobarometer survey (2010) economic factors are one of the more important reasons for migration of Romanian nationals to EU-15 countries. While 33 per cent of Romanians claim that they would have no interest in working abroad regardless of how much they would be paid, for 32 per cent of Romanians wages two and more than two times as high as in Romania would constitute an important pull factor.

Below we analyse GDP per capita and wage differences between Romania and selected EU-15 countries, both in nominal and real terms (in purchasing power parity). Both GDP per capita and wage differentials are large, even larger than in the case of Bulgaria – see figure 4.18.

In terms of the nominal gap, GDP per capita in Romania is about 5 times lower than the EU-27 average. Similarly, wages in Romania remain about 5 times lower than wages in Spain and Italy. In real terms, GDP per capita is only 2 times lower, and real wages in Romania are about 3 times lower than in Spain and Italy. The still substantial income gaps show that migration may be perceived by Romanian nationals as an attractive option both in the short term (especially if they plan to send remittances) and in the longer term (as far as economic conditions and the standard of living are concerned).
The value of potential remittances from working abroad may be well illustrated by the share of households making ends meet with difficulty. Almost 90 per cent of Romanian households declare that they find making ends meet very difficult, difficult or relatively difficult – see figure 4.19. A similar pattern applies to Bulgaria. As we discuss further below, the value of remittances sent by Romanian citizens working abroad is rather substantial.
The impact

This section looks at the economic impact of migration from a qualitative perspective. For quantitative estimates of the effects of the liberalisation of the EU labour markets see the previous section of the report. Below we briefly discuss macroeconomic and labour market effects of migration, some of which would be difficult to capture in a model.

Remittances

According to the World Bank, over recent years the value of remittances sent to Romania from abroad has been relatively close to the value of foreign direct investments. Over 2007-2009 Romanian migrants working abroad sent to Romania about 4.3 per cent of GDP in remittances, while foreign investors invested about 5.3 per cent. In terms of countries of origin of remittances, the largest roles, not surprisingly, are played by Italy and Spain. A significant share of remittances is used for consumption purposes, suggesting that the positive impact on the level of Romanian GDP may be even bigger than suggested by the modelling results reported in section 3.4.3.
In comparison to EU-8 countries, Romanian nationals send relatively large amounts of remittances (see figure 4.9 in the Bulgarian case study). Romanian migrants apparently try to exploit opportunities of work abroad to diminish the income gap of Romania relative to the EU average. The fact that many Romanians send remittances home may also suggest that they perceive their work abroad as temporary and their objective is to help families in Romania or build savings before they return home.

**Labour market**

According to our estimates, since 2004 about 7.2 per cent of the Romanian population has migrated to EU-15 countries. In effect, Romania remains one of the countries in Europe which is most affected by migration, especially of the younger cohorts. Migration, however, is not the only factor contributing to labour and skill shortages on the Romanian labour market. Other factors that may matter for the existence of labour shortages remain demographic patterns of ageing populations, insufficient inter-regional mobility within the country and skilled biased technological change (Iara et al; 2008, Bruecker; 2009).

The assessment of the long term impact of migration on the labour market is difficult, as it is unclear the extent to which recent mobility flows may be temporary and emigration itself is only partially registered. In the long run migration may change the

---

6 The sharp jump in remittances in 2005 may reflect a break in the series. The data source offers no explanation for this sudden shift.
age structure of the Romanian population, and this is also the case in Bulgaria. The outflow of labour is also expected to have a series of short- to medium-term effects on the Romanian labour market: declines in unemployment and a rise in the number of vacancies, both of which can lead to wage pressures. In particular, these may materialise in sectors such as construction, manufacturing, catering and hotel services.

The financial crisis, although badly affecting Spain and Italy, did not result in large flows of return migration. The rate of net emigration remained positive – see figure 4.21, although it decreased significantly in comparison with the pre-crisis year of 2007. This shows the relative importance of the recession in Spain and Italy.

**Figure 0.21. Net migration rates prior and at the height of the crisis**

![Net migration rates graph](image)

Source: Table 3.2

The recession hit migrants particularly hard, largely because of kinds of jobs they do – a vast majority of them work in construction, manufacturing, and the tourism industry. Mara (2010) quotes results of interesting surveys of Romanians in Spain, conducted before and at the height of the crisis. In 2007, 78 per cent of Romanians working in Spain planned to remain permanently and only 8 per cent intended to return to Romania. Recession caused a change in plans. At the beginning of 2009, 32 per cent of Romanians intended to return within 5 years, 29 per cent did not plan to return and 39 per cent made their decision conditional on circumstances.

A reaction of Romanian workers to recession in Italy was to become self-employed. According to Mara (2010) the number of new firms owned by Romanians increased from 28 thousand in 2009 to 48 thousand in 2010.

50
A distinctive feature of Romanian migration to Italy is also its circular character. A large part of migration to Italy is return or circular, because of both geographical proximity and large amount of seasonal work. Long-term stays are made difficult, as there are problems with obtaining permanent contracts of employment, especially in sectors where migrants work (Mara, 2010), although work permits in these sectors are not required. Access to social welfare is also very limited.

The government response to recession in Spain and Italy in respect to migration differed. Italy introduced quotas on migrant workers in sensitive sectors (ie in manufacturing). Mara (2010) argues that there has been little attempt at central government level to assist migrants or to help them to return home, although there have been some initiatives taken at local level. The Spanish government, on the other hand, organised access to a database on vacancies in Romania, to assist Romanians that may decide to return home.

Circular migration as a continuing movement of people between countries including both temporary and more permanent movements may bring positive effects for both sending and receiving countries (see Ferri and Rainero, 2010). The receiving countries can fill labour market gaps with adequately qualified workers and the sending countries gain through fostering skills transfer. Circular migration may also mitigate the risks of brain drains. Similarly, return migration of high-skilled workers reverses negative consequences of brain drains, and may even raise domestic productivity if returning migrants bring with them new skills and international connections.

An interesting analysis of mobility of high-skilled Romanians is conducted by Ferro (2004). She finds that the quality of life and encouraging foreign immigration policies are the most important factors that drive emigration by highly qualified workers. Interestingly, she finds that the higher the integration in the host country, the higher the probability of returning home. She emphasises the role of international networks and transnational relations in local development through the dissemination of information, supply of jobs and promotion of business.

Cingolani and Piperno (2005), analysing the situation of Romanian migrants in Italy, argue that after about ten years of work, the probability of returning home increases. Although return migration is still rather marginal, it is expected to increase as socio-economic conditions in Romania improve.

Romanian nationals are relatively mobile (Ferro and Rainero (2010)) and a distinctive phenomenon of Romanian migration is the high level of circular migration among...
women. The high mobility of Romanian female workers is thought to be related to the family network support and their professionally weak position in Romania (those with low qualifications are more vulnerable and more willing to adapt their mobility plans). Ferro and Rainero (2010) argue that temporary migration is relatively common among Romanian migrants. A negative labour market situation in host countries is one of the factors that induces highly-skilled migrants in particular to return to their home country. The duration of stay abroad is generally longer than 5 years and there is an increasing trend of returns especially among those who work in jobs below their qualifications.

In terms of migration policy Iara (2008) argues that policy initiatives addressing temporary migration, encouraging permanent return and facilitating the return and integration into the domestic labour market are highly desirable. The improvement of socio-economic conditions at home, as well as the shortage of skills and the increasing demand for know-how, will also play a role of important pull factors, encouraging Romanian migrants to return home.

**Conclusions**

In 2010 about 2 million Romanian nationals, that is about 7 per cent of the Romanian population, lived in the EU-15 countries. They resided predominantly in Spain and Italy, the two large countries of Southern Europe, which attract about 83 per cent of all Romanians wishing to work abroad. Romanian mobile workers are rather young (about 60 per cent of the migrating population are below 35) and low- and medium-skilled (about 88 per cent of Romanian migrants do not have a university degree). They are employed predominantly in elementary occupations and as craft and related trade workers in manufacturing and construction sectors, as well as in private households. We find that depending on the country of destination the skill and occupational structure of mobile Romanians change somewhat. Italy and Spain attract lower-qualified workers, while Germany is a popular destination among high-skilled workers.

Existing studies (Mara, 2010, Ferri, Rainero, 2010, Potot, 2010) suggest that Romanian migration is to a relatively large extent circular, both due to geographical proximity and large amounts of seasonal and temporary work. Annual outflows from Germany in particular are high. The temporary character of Romanian migration may also be illustrated by the relatively high levels of remittances sent by Romanian nationals to their home country. According to the World Bank data, in 2009 the value of remittances sent by Romanians working abroad amounted about 3 per cent of Romanian GDP and was one of the largest among the EU-8+2 countries. Results of a field survey by Sandu (2010) show that the opportunity to improve one’s living conditions at home is one of the important aspects of work abroad (in particular, about
56 per cent of those with experience of migration for work purposes claim that their plan for the next 2-3 years is to improve conditions in their current house; 27 per cent plan to open a business).

Large income gaps between Romania and the EU-15 countries make the option of working abroad attractive - both for circular and temporary migrants, and to a lesser extent long term migrants. Nominal GDP per capita and wages in the EU-15, taken into account by circular and temporary migrants who may migrate with the aim of sending remittances, are about 5 times higher than GDP per capita and wages in Romania. Real gaps are somewhat smaller (2 to 3 times of the Romanian level). Although Romania is catching up, the wide income gaps, which are expected to persist for several years, suggests that migration from Romania to the EU-15 countries is likely to continue, although possibly at a slightly slower pace than before. The pent-up demand to emigrate has largely been relieved by high rates of emigration since 2004. Since 2007 the net migration rate has slowed down somewhat, although to some extent this has been driven by the global financial crisis and serious recessions in Italy and Spain.
4.3 United Kingdom

4.3.1. Institutional setting for labour migration

Nationals of the eight accession (EU-8) countries joining the EU in May 2004 were allowed free access to the UK labour market. Individuals from these countries were required to register with the Worker Registration Scheme (WRS) if they wished to take up employment for at least one month. The WRS closed on the 30th April 2011, as transitional arrangements could only remain in place for the seven years following enlargement (as in all EU countries).

However, different arrangements applied for nationals from Bulgaria and Romania following the accession of these countries (EU-2) to the EU on 1 January 2007; access to the UK labour market for these individuals has been more limited.

The Accession (Immigration and Worker Authorisation) Regulations 2006 mean that Bulgarian and Romanian nationals taking employment in the UK following accession are subject to a requirement to hold a work authorisation document. This is usually in the form of an accession worker card, with employers required to apply for work permits to first approve the employment (with the exception of certain occupations).

Access for low-skilled workers has been restricted through quota based schemes, namely the Sector-Based Scheme (SBS) and the Seasonal Agricultural Workers Scheme (SAWS). The SBS allows EU-2 nationals to carry out low-skilled work in the food manufacturing sector, within certain specified occupations (UK Border Agency, 2011a). The SBS quota for 2009 was 3,500 workers. The recruitment must be to fill a genuine vacancy which cannot be filled by a resident worker. Applicants must be aged between 18 and 30 years, with SBS permits issued for a maximum of 12 months.

The SAWS allows UK farmers to employ EU-2 nationals to carry out short-term agricultural work (UK Border Agency, 2011b). In 2010 and 2011 the quota is 21,250 places; farmers are allowed to employ a certain number of individuals through the scheme each year. Participants are allowed to work in the UK for up to six months under this scheme. Workers are paid at least the Agricultural Minimum Wage and are provided with accommodation by the employer.

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7 Any comments or queries related to section 4.1 of the report can be addressed to Lucy Stokes (l.stokes@niesr.ac.uk).

8 See Migration Advisory Committee (2008) for further explanation of the restrictions applying to EU-2 nationals.

9 Including airport based operational ground staff of an overseas airline; au pairs; domestic workers in a private household; ministers of religion; overseas government employment; postgraduate doctors, dentists and trainee general practitioners; private servants in a diplomatic household; representatives of an overseas newspaper, news agency or broadcasting organisation; sole representatives; teachers or language assistants; overseas qualified nurses coming for a period of supervised practice (UKBA, 2011).
Self-employed individuals from the EU-2 are free to work in the UK; such individuals can choose whether to apply for a registration certificate to confirm their right to work in a self-employed capacity in the UK. Other Bulgarian and Romanian nationals not taking employment but exercising a Treaty right in the UK may also seek a registration certificate. This includes those exempt from the worker authorisation restrictions; highly skilled migrants (through the Highly Skilled Migrant Programme, which awards points based on age, qualifications and previous earnings); those with restricted access to the labour market; and Bulgarian and Romanian family members of main applicants (Home Office, 2011). Students from the EU-2 are allowed to work part-time while studying in the UK, but need a work authorisation document to do so.

EU-2 nationals are not required to leave the UK once their permit expires; they are eligible to remain in the UK provided they can support themselves. Once EU-2 nationals have worked in the UK for a continuous 12 month period, they gain unrestricted access to the labour market.

4.3.2. Migration trends

4.3.2.1 The extent of migration

There is no single comprehensive source of data on migration to the UK and it is widely acknowledged that there exists a need for more accurate and detailed data (Boden and Rees, 2010; Drinkwater, 2010). We therefore review a range of data sources below in order to try and provide a more rounded picture of migration patterns. While we focus principally on migration from Bulgaria and Romania, we also present some recent trends in migration from the EU-8 countries, and elsewhere. We consider firstly data on migration flows and then estimates of migrant stocks.

**International Passenger Survey**

The International Passenger Survey (IPS) forms the basis for estimates of long-term international migration by the Office for National Statistics (ONS). The IPS is a continuous voluntary sample survey of travellers entering the UK; the survey achieves relatively high response rates and the entry routes at which the survey takes place capture the significant majority of travellers to the UK.

The IPS data provides a rich source of information on migration to the UK, and collects a range of information including country of birth, nationality, country of last residence, purpose of visit, and intended length of stay. Individuals who state an intention of staying in the UK for a year or more are classified as international migrants. Hence short-term migrants will not be included.

The country-specific information in the IPS is generated from relatively small samples, leading to large sampling errors for some point estimates (especially for countries from which there is little migration).

Table 0.14 presents estimates of the inflow of Bulgarian and Romanian citizens to the UK for the period 2007 - 2009, along with the standard errors surrounding these...
estimates. These estimates suggest 14,000 and 20,000 migrants have arrived in the UK from Bulgaria and Romania respectively during this period. Even aggregating across this three-year period, it is clear from the standard errors that a considerable bound of uncertainty remains around the precision of these estimates (particularly for Bulgaria).

Table 0.14. Inflow of Bulgarian and Romanian citizens to the UK since their accession to the EU (Annual data 2007 to 2009 combined, Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>SE%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>Romania</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: ONS Long-Term International Migration, Estimates from the IPS, Crown Copyright

Table 0.15 shows the inflow of citizens from the EU-8 countries as a whole over the period 2004 - 2009, along with the net inflows or 'balance' (i.e. also taking into account the outflow of this group of migrants). The inflow of EU-8 citizens reached a peak in 2007 of just over 110,000. The inflow of EU-8 migrants fell in 2008 and 2009, and the outflow of migrants increased, so that the net inflow was notably lower in these years, standing at around 16,000 in 2009.

Table 0.15. Gross and net inflows of EU-8 citizens, 2004 - 2009, thousands

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow</td>
<td>53</td>
<td>76</td>
<td>92</td>
<td>112</td>
<td>89</td>
<td>68</td>
</tr>
<tr>
<td>Balance</td>
<td>+49</td>
<td>+61</td>
<td>+71</td>
<td>+87</td>
<td>+20</td>
<td>+16</td>
</tr>
</tbody>
</table>

Source: ONS, Long-term International migration Statistics, Table 2.01

**National Insurance Number registrations**

In recent years, administrative data have added to the pool of available data sources for exploring migration to the UK. This includes the records of National Insurance Number allocations to adult overseas nationals. Any individual looking to work or claim benefits in the UK would require a National Insurance Number (NINo). The NINo allocations data provide information on registrations by nationality, as well as characteristics such as gender and age\(^\text{10}\).

In contrast to the IPS data, this source includes all adult overseas nationals allocated a NINo, regardless of length of stay. However, while the data provide a measure of the inflow of migration to the UK, they do not provide any information about outward

\(^{10}\) Which we explore further in Section 3.2.
migration or the migrant stock. Registrations are also allocated to years based on date of registration; this could potentially be sometime after an immigrant’s arrival in the UK.

Table 0.16 shows migration flows from NINo allocations for the EU-2, EU-8 and all other countries for the period 2004-2009.

The table shows the sizeable increase in NINo allocations to Bulgarians and Romanians following the expansion of the EU in 2007. The number of NINo allocations increased further in 2008, before falling slightly for both nationalities in 2009; in total, there were just under 34,000 NINo allocations to Bulgarian and Romanian nationals in this year.

For comparison, we also present the numbers of NINo allocations to migrants from the EU-8 countries. NINo allocations to this group as a whole reached a peak of 335,000 in 2007, and have since fallen, standing at around 168,000 in 2009. However, not all countries have experienced a fall in migration to the UK over this period; NINo allocations to those from Latvia more than doubled between 2008 and 2009, and Lithuania also saw a rise in allocations in 2009 compared to 2008, with inflows returning to a similar level to those observed in 2007.

The number of NINo allocations to all other nationalities reached a peak of around 430,000 in 2007. This then fell to just under 400,000 in 2008, before increasing again in 2009.
Table 0.16. National Insurance Numbers allocated to adult overseas nationals, thousands

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-EU-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>5.7</td>
<td>3.1</td>
<td>1.9</td>
<td>12.3</td>
<td>15.9</td>
<td>13.5</td>
</tr>
<tr>
<td>Romania</td>
<td>3.6</td>
<td>3.0</td>
<td>2.4</td>
<td>19.2</td>
<td>23.4</td>
<td>20.1</td>
</tr>
<tr>
<td>EU-8</td>
<td>68.7</td>
<td>236.4</td>
<td>276.5</td>
<td>334.6</td>
<td>230.9</td>
<td>167.7</td>
</tr>
<tr>
<td>Rep of Estonia</td>
<td>1.1</td>
<td>3.0</td>
<td>2.2</td>
<td>1.7</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Czech Rep</td>
<td>4.7</td>
<td>13.0</td>
<td>11.0</td>
<td>12.3</td>
<td>10.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Slovak Rep</td>
<td>6.9</td>
<td>24.7</td>
<td>26.2</td>
<td>32.1</td>
<td>27.0</td>
<td>15.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>2.6</td>
<td>7.7</td>
<td>8.9</td>
<td>13.9</td>
<td>14.7</td>
<td>13.8</td>
</tr>
<tr>
<td>Rep of Latvia</td>
<td>3.7</td>
<td>13.5</td>
<td>11.4</td>
<td>9.3</td>
<td>8.0</td>
<td>20.1</td>
</tr>
<tr>
<td>Rep of Lithuania</td>
<td>10.7</td>
<td>29.1</td>
<td>24.2</td>
<td>22.2</td>
<td>16.5</td>
<td>21.8</td>
</tr>
<tr>
<td>Poland</td>
<td>38.4</td>
<td>144.7</td>
<td>192.2</td>
<td>242.5</td>
<td>152.3</td>
<td>85.9</td>
</tr>
<tr>
<td>Rep of Slovenia</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Malta</td>
<td>0.4</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0.6</td>
<td>1.1</td>
<td>1.0</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>All other countries</td>
<td>333.8</td>
<td>374.4</td>
<td>350.5</td>
<td>429.0</td>
<td>397.5</td>
<td>410.4</td>
</tr>
</tbody>
</table>

Source: Department for Work and Pensions (Tabulation Tool, accessed 2nd March 2011)

Complete data for 2010 are not yet available, but data are available for the first three quarters of the year. Figure 0.22 below presents quarterly NINo allocations to Bulgarian and Romanian nationals since the first quarter of 2007; while Figure 4.23 shows the equivalent figures for the total EU-8.

The increase in migration flows in the third quarter of 2010 is in line with previous seasonal increases in earlier years, although migration in the first two quarters of 2010 was lower than that seen in the equivalent quarters in 2009.
Figure 0.22. National Insurance Number allocations to Bulgarian and Romanian nationals, thousands, quarterly, Q1 2007 – Q3 2010

Source: Department for Work and Pensions (Tabulation Tool, accessed 2nd March 2011)

Figure 0.23. National Insurance Number allocations to EU-8 nationals, thousands, quarterly, Q1 2007 – Q3 2010

Source: Department for Work and Pensions (Tabulation Tool, accessed 2nd March 2011)
**Scheme data for Bulgarian and Romanian nationals**

While NINo allocations data cover all nationalities, there are also additional administrative sources related specifically to schemes for migrants entering the UK from particular countries.

In Section 2 above, the routes through which Bulgarian and Romanian nationals have been able to migrate to the UK following accession to the EU were discussed. Table 0.17 below shows the number of approved applicants for accession worker cards, registration certificates, the SBS and the SAWS since EU enlargement, up to and including 2010.

In 2007, almost 19,000 migrants entered the UK from Bulgaria via these routes. Over half of these were approved for registration certificates, with around a further three in ten entering via the SAWS. The number of approved applicants for registration certificates fell considerably in 2008, and has remained broadly stable since at around 6,000 per year. In contrast, the number of migrants approved via the SAWS increased considerably in 2008, continuing to rise in 2009, before falling to just under 10,000 in 2010. By 2010, this was the most common scheme through which Bulgarian nationals came to the UK. The numbers of migrants with accession worker cards and arriving through the SBS have both fallen since 2008. The total number of migrants entering on these schemes reached a peak of almost 21,000 in 2009, before falling to just under 17,000 in 2010.

Registration certificates were also the most common scheme for Romanian nationals in 2007, accounting for around four-fifths of the 27,000 who arrived in this year. The remaining Romanian migrants were divided fairly evenly between those arriving on accession worker cards and the SAWS, with a small number on the SBS. As for Bulgaria, the number receiving registration certificates fell considerably from 2008, while the number on the SAWS increased. However, registration certificates remained the most common of the schemes for entry in 2010, still accounting for more than half of this group.
Table 0.17. Approved applicants for schemes for Bulgarian and Romanian nationals

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bulgaria</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accession worker cards</td>
<td>1810</td>
<td>1505</td>
<td>915</td>
<td>695</td>
</tr>
<tr>
<td>Registration certificate</td>
<td>10145</td>
<td>6260</td>
<td>6820</td>
<td>5810</td>
</tr>
<tr>
<td>SBS</td>
<td>1160</td>
<td>1380</td>
<td>705</td>
<td>450</td>
</tr>
<tr>
<td>SAWS</td>
<td>5640</td>
<td>10835</td>
<td>12420</td>
<td>9970</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18755</td>
<td>19980</td>
<td>20860</td>
<td>16925</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accession worker cards</td>
<td>2295</td>
<td>1270</td>
<td>1185</td>
<td>1555</td>
</tr>
<tr>
<td>Registration certificate</td>
<td>22290</td>
<td>13305</td>
<td>14660</td>
<td>13490</td>
</tr>
<tr>
<td>SBS</td>
<td>245</td>
<td>190</td>
<td>70</td>
<td>150</td>
</tr>
<tr>
<td>SAWS</td>
<td>2420</td>
<td>5630</td>
<td>7760</td>
<td>7180</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27250</td>
<td>20395</td>
<td>23675</td>
<td>22375</td>
</tr>
</tbody>
</table>

Source: Home Office Control of Immigration Statistics

*Worker Registration Scheme*

As noted earlier, arrangements for migrants from the EU-8 countries were considerably different. The UK introduced the Worker Registration Scheme (WRS) to monitor the inflows of migrants from EU-8 countries. Workers that intended to work at least one month were required to register in the scheme. The self-employed and workers with at least 12 months of uninterrupted employment were exempt from registration. Under European law after April 2011 workers from the EU-8 countries were no longer required to register. It is possible that there is some element of double-counting within the WRS data as there was a requirement to register for each job undertaken.

The table below shows approved applications for the WRS (these were on average around 95 per cent of all applicants). The number of approved applicants from EU-8 countries fell considerably between 2007 and 2008, from around 211,000 to just under 160,000. This then fell further in 2009, before rising slightly in 2010. These overall numbers hide variation amongst the individual EU-8 countries; as observed in the NINo registrations data above, there has been a decline in migrant flows from some countries, while an increase from others. Despite the considerable fall in the number of Polish applicants from 2007, by 2010 Poland still accounted for the greatest share of EU-8 migrants on the WRS.
In comparing the various sources of information on migration it is important to bear in mind the different purposes of these data collections and in particular the differences in the way they define migrants. Gillingham (2010) outlines the different sources of migration data and their associated strengths and weaknesses (with particular reference to sources of migration data for EU-8 nationals).

The NINo allocations data presented above suggest higher migration from the EU-2 and EU-8 countries than indicated by the IPS estimates. As NINo allocations data include all those who register, regardless of length of stay, this is perhaps not surprising. Short-term migration is increasingly important. In the year to mid-2004 there were 113,000 moves to England and Wales for less than 12 months due to employment reasons, this increased to 208,000 in year to mid-2006 (Matheson, 2009). Around two-thirds of applicants to the WRS stated that they intended to stay in the UK for less than 12 months (ONS, 2011). Temporary and circular migration is particularly significant for EU-8 migrants; Sumption and Somerville (2010) estimate that more than half of EU-8 migrants had returned home by the third quarter of 2009.

For EU-8 nationals, NINo allocations generally provide higher estimates than those from the WRS; the NINo data have wider coverage (for example they would include the self-employed). Not all EU-8 nationals register with the WRS; Pollard et al. (2008) estimate that around one third of EU-8 workers are not registered with the scheme. The numbers of Bulgarians and Romanians reported in the specific scheme data are generally higher than indicated by NINo registrations; perhaps because not all individuals arriving through these entry routes (for example on registration certificates) would be required to register for a NINo.

Table 0.18. Approved applicants for Worker Registration Scheme, by country

<table>
<thead>
<tr>
<th>Country</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>7510</td>
<td>6530</td>
<td>4315</td>
<td>4185</td>
</tr>
<tr>
<td>Estonia</td>
<td>965</td>
<td>945</td>
<td>1155</td>
<td>1315</td>
</tr>
<tr>
<td>Hungary</td>
<td>8875</td>
<td>10890</td>
<td>8370</td>
<td>9270</td>
</tr>
<tr>
<td>Latvia</td>
<td>6285</td>
<td>6980</td>
<td>15880</td>
<td>18440</td>
</tr>
<tr>
<td>Lithuania</td>
<td>14270</td>
<td>11560</td>
<td>15210</td>
<td>23900</td>
</tr>
<tr>
<td>Poland</td>
<td>150260</td>
<td>103115</td>
<td>55840</td>
<td>52325</td>
</tr>
<tr>
<td>Slovakia</td>
<td>22450</td>
<td>18330</td>
<td>8010</td>
<td>7170</td>
</tr>
<tr>
<td>Slovenia</td>
<td>190</td>
<td>195</td>
<td>140</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>210805</strong></td>
<td><strong>158550</strong></td>
<td><strong>108920</strong></td>
<td><strong>116760</strong></td>
</tr>
</tbody>
</table>

Source: Home Office Control of Immigration; Quarterly Statistical Main Tables - Q4 2010 (October to December 2010), accessed 2nd March 2011
Labour Force Survey

The administrative data sources reviewed above do not provide information on migrant stocks (and they provide no indication of migrant outflows). One source of information on the stock of migrants is the UK Labour Force Survey (LFS), a nationally representative survey of private households. It has been suggested that the LFS is likely to underestimate migrants, due to the design of the survey (Upward, 2009; Drinkwater, 2010). Further, as in the IPS, small sample sizes can limit analysis of migrant stocks by country of birth. Nevertheless, the LFS remains probably the best source of migrant stock estimates (Upward, 2009).

Table 4.19 below provides estimates of stocks of migrants from the EU-2 and EU-8 countries, providing an update of Table 1 in Upward (2009). Migration can be measured in different ways, for example by country of birth or nationality (see Anderson and Blinder, 2011, for discussion of the different ways of defining migrants and the associated consequences). Each definition has its relative merits, for example, while an individual's nationality may change throughout their life, their country of birth will clearly remain the same. However, nationality may be more significant in determining access to certain labour markets. The choice of migration measure depends upon the purpose of the analysis, although in practice this may be limited by the data available. Following Upward, the figures presented in Table 4.19 are based on country of birth, rather than nationality. Table 0.20 presents data from the LFS on migrants from the EU-8 and EU-2 as measured by both nationality and country of birth for the second quarter of 2010; these figures are broadly similar.

The figures in Table 4.19 below show an increase in the number of Bulgarian-born migrants living in the UK since 2007; this number did not increase further in 2010. The number of migrants from Romania has also increased considerably, and in contrast to Bulgarians, continued to see a further rise in 2010.

The picture for EU-8 countries is mixed. In line with the data on flows presented earlier, there has been an increase in the stock of migrants from Latvia and Lithuania over this period. It is also clear that Polish-born individuals account for the largest share of EU-8 migrants living in the UK, although the LFS estimates indicate a slight fall in 2010 compared with the previous year. Indeed, in the year to June 2010, Polish was the most common non-British nationality, and the second most common country of birth for UK residents born outside the UK (ONS, 2011).
### Table 0.19. Stocks of migrants (based on country of birth) in the UK (thousands)

<table>
<thead>
<tr>
<th></th>
<th>Q2 2007</th>
<th>Q2 2008</th>
<th>Q2 2009</th>
<th>Q2 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>32</td>
<td>29</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>Estonia</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>11</td>
</tr>
<tr>
<td>Hungary</td>
<td>25</td>
<td>25</td>
<td>28</td>
<td>42</td>
</tr>
<tr>
<td>Latvia</td>
<td>16</td>
<td>31</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td>Lithuania</td>
<td>57</td>
<td>70</td>
<td>62</td>
<td>92</td>
</tr>
<tr>
<td>Poland</td>
<td>442</td>
<td>495</td>
<td>541</td>
<td>537</td>
</tr>
<tr>
<td>Slovakia</td>
<td>57</td>
<td>50</td>
<td>54</td>
<td>31</td>
</tr>
<tr>
<td>Slovakia</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>14</td>
<td>29</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>Romania</td>
<td>27</td>
<td>39</td>
<td>55</td>
<td>78</td>
</tr>
</tbody>
</table>

Source: UK Labour Force Survey, weighted estimates
Note: Estimates of 10,000 or below are suppressed, due to greater uncertainty around the precision of these estimates

### Table 0.20. Migrant stocks by country of birth and by nationality in the UK, Q2 2010 (thousands)

<table>
<thead>
<tr>
<th></th>
<th>Country of birth</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Estonia</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Hungary</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>Latvia</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>Lithuania</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>Poland</td>
<td>537</td>
<td>553</td>
</tr>
<tr>
<td>Slovakia</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td>Slovenia</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Romania</td>
<td>78</td>
<td>74</td>
</tr>
</tbody>
</table>

Source: UK Labour Force Survey, weighted estimates
Note: Estimates of 10,000 or below are suppressed, due to greater uncertainty around the precision of these estimates
4.3.2.2 Demographic characteristics of migrants

In this section we move on to explore selected demographic characteristics of migrants, in particular age, gender and education levels, focusing mainly on migrants from Bulgaria and Romania.

Data on migration flows from NINo allocations include information on the age and gender of those registering. Using this source, table 4.21 below shows the age profile of migrants from Bulgaria and Romania, along with that for EU-8 migrants as a whole, as well as for all other migrants.

The vast majority of migrants from Bulgaria and Romania were aged between 18 and 34 years old at the time of registration (migrants from Bulgaria were on average slightly younger than those from Romania). The age distributions of migrants from the EU-8 and all other countries were broadly similar, although it is important to note that these figures may conceal considerable heterogeneity among individual countries.

Gillingham (2010) using data from both NINo allocations and the WRS, shows there has been some change in the age profile of EU-8 migrants arriving in the UK since 2004. Both sources indicate a decrease in the proportion of those aged under 35, and an increase in the proportion aged 35 and above.

<table>
<thead>
<tr>
<th>Age</th>
<th>Bulgaria</th>
<th>Romania</th>
<th>EU-8</th>
<th>All other overseas nationals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 18</td>
<td>0.4</td>
<td>0.6</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>18-24</td>
<td>43.6</td>
<td>37.8</td>
<td>40.6</td>
<td>38.4</td>
</tr>
<tr>
<td>25-34</td>
<td>37.1</td>
<td>43.7</td>
<td>33.0</td>
<td>42.8</td>
</tr>
<tr>
<td>35-44</td>
<td>12.0</td>
<td>13.2</td>
<td>13.2</td>
<td>11.6</td>
</tr>
<tr>
<td>45-54</td>
<td>5.2</td>
<td>3.9</td>
<td>9.2</td>
<td>3.9</td>
</tr>
<tr>
<td>55-59</td>
<td>1.2</td>
<td>0.5</td>
<td>2.1</td>
<td>0.8</td>
</tr>
<tr>
<td>60 and over</td>
<td>0.7</td>
<td>0.2</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Total (thousands)</td>
<td>13.5</td>
<td>20.1</td>
<td>167.7</td>
<td>411.9</td>
</tr>
</tbody>
</table>

Source: Department for Work and Pensions (Tabulation Tool, accessed 2nd March 2011)

Just over half of Bulgarian and Romanian nationals allocated a NINo in 2009 were male, very similar to the proportion observed for EU-8 nationals, and for all other overseas nationals (Table 4.22).
Table 0.22. Per cent of migrants by gender, NINo allocations, 2009

<table>
<thead>
<tr>
<th></th>
<th>Bulgaria</th>
<th>Romania</th>
<th>EU-8</th>
<th>All other overseas nationals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55.9</td>
<td>55.8</td>
<td>53.5</td>
<td>53.6</td>
</tr>
<tr>
<td>Female</td>
<td>44.2</td>
<td>44.2</td>
<td>46.5</td>
<td>46.4</td>
</tr>
<tr>
<td>Total</td>
<td>13.54</td>
<td>20.06</td>
<td>167.67</td>
<td>411.94</td>
</tr>
</tbody>
</table>

Source: Department for Work and Pensions (Tabulation Tool, accessed 2nd March 2011)

Kausar (2011) provides a detailed analysis of demographic characteristics of migrants from the EU-2 and compares these with migrants from the EU-8 countries, using data from the UK LFS for the period 2004-2009.

Qualifications held by immigrants are not well reported in the UK LFS, with a large proportion reporting 'other' qualifications (Migration Advisory Committee, 2008). Identifying education levels of immigrants according to this measure is therefore difficult. An alternative is to compare the age at which migrants completed full-time education. Using this measure, Kausar (2011) finds migrants from both the EU-2 and the EU-8 countries were more likely to have remained in full-time education until they were at least 18 (Figure 0.24). Of migrants from the EU-2 and the EU-8, 27 and 33 per cent respectively had completed full-time education by the time they were 17; this proportion was much higher (at around half) among the remainder of the foreign-born population resident in the UK.
Data from the European Labour Force Survey provide an indication of education level, divided into low, medium and high qualifications. Table 0.23 shows the percentage of EU-2 and EU-8 migrants by level of qualification, as well as the equivalent shares for nationals and non-EU migrants, for 2010. This indicates that the majority of EU-2 and EU-8 migrants had medium level educational qualifications. These migrants were less likely to hold high level educational qualifications compared with UK nationals and non-EU migrants.

Table 0.23. Per cent of migrants and nationals by education level, 2010

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Non response</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 2</td>
<td>21.3</td>
<td>60.2</td>
<td>16.9</td>
<td>1.6</td>
</tr>
<tr>
<td>EU 8</td>
<td>17.1</td>
<td>64.7</td>
<td>15.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Nationals</td>
<td>24.0</td>
<td>42.6</td>
<td>30.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Non EU</td>
<td>18.6</td>
<td>44.5</td>
<td>34.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Source: EU Labour force survey, 2010 data (based on nationality)

With regard to other demographic characteristics, using the UK LFS, Kausar also reports that both EU-2 and EU-8 migrants were more likely to be married than migrants from other countries; half of EU-2 migrants and three-fifths of EU-8 migrants were married compared with around two-fifths (42 per cent) of all other migrants.
Both EU-2 migrants and EU-8 migrants were less likely to have dependent children than other migrants, with around three-fifths (63 per cent) having no dependent children (compared with just over half (54 per cent) of other migrants). However, three per cent of EU-2 migrants had more than four children, this was more than for EU-8 migrants and other migrants.

Matheson (2009) documents the increase in the number of children (0-15 years) within the EU-8-born population residing in the UK, from 11,000 in 2004 to 75,000 in 2008, as a result of children born in EU-8 countries migrating with their families. The number of babies born to mothers from the EU-8 residing in the UK rose considerably between 2004 and 2008, from just under 4,000 to nearly 26,000, although this represented only around three per cent of all births in the UK.

4.3.2.3 Country-specific issues

Upward (2009) showed that EU-8 migrants were more likely to be employed than individuals born in the UK, using data from the LFS. Kausar (2011) shows this still to be the case in 2010, and that this is also true for migrants from Bulgaria and Romania. The employment rate for Bulgarians and Romanians stood at 84 per cent for both EU-2 and EU-8 migrants in 2010, compared with 79 per cent for the UK-born and 72 per cent for other migrants. In the same year, unemployment stood at 5.9 per cent for the UK-born, compared with 5.6 per cent for EU-8 migrants and 4.4 per cent for EU-2 migrants. In comparison, unemployment over the period 2004-2009 stood at 3.5 per cent for both the UK-born and EU-2 migrants, and at 5 per cent for EU-8 migrants.

Figures from Kausar show almost half (46 per cent) of Bulgarian and Romanian migrants in the UK were self-employed (based on the period 2004-2009). This is much higher than for EU-8 migrants (11 per cent), other migrants (15 per cent) and UK-born (13 per cent). Around ten per cent of employment for EU-8 migrants was temporary, double the proportion for EU-2 migrants.

Figure 0.25 presents figures from Kausar (2011) of the occupational breakdown of EU-2 and EU-8 migrants for the period 2004-2009.
EU-2 migrants were most commonly employed in skilled trade occupations (26 per cent) and elementary occupations (25 per cent). This compared with 38 per cent of EU-8 migrants employed in elementary occupations. In contrast, around one in ten UK born individuals were employed in elementary occupations.

While around 15 per cent of the native population worked in managerial and senior official occupations, this was the case for eight per cent of those born in the EU-2 and four per cent of those from the EU-8. In comparison, amongst other migrants, this proportion was also 15 per cent.

Construction was the most common sector of employment for EU-2 migrants over this period; three in ten EU-2 migrants worked in this sector (Figure 0.26). A further quarter were employed in 'other sectors'; followed by 12 per cent employed in health and social work. Manufacturing was the most common sector of employment for EU-8 migrants, accounting for around one quarter; followed by 'other sectors' (16 per cent) and retail (14 per cent).
Evidence suggests that migrants from the EU-2 and EU-8 earn lower wages; 89 per cent of EU-8 and EU-2 workers earned less than £400 per week in 2007, compared to 57 per cent of UK-born workers (Pollard et al., 2008). Clark and Drinkwater (2008) found that EU-8 migrants earned the least of any immigrant group. This may be due to a variety of factors, such as language barriers, limited recognition of foreign qualifications or a willingness to temporarily work in occupations for which they are over-qualified.

Clark and Hardy (2011) note that EU-8 workers often worked in insecure employment, often through temporary employment agencies, and some experienced poor working conditions. They note that EU-8 workers fared better where trade unions were present. Employers have reported a greater work ethic among EU-8 migrants, finding them to be reliable, motivated and willing to work longer hours.

Migrants' choice of location within the UK has potentially important consequences for local economies and demands on services. London continues to attract the greatest proportion of new migrants arriving in the UK, although this share has decreased over time as migration to other regions has increased (Rincón-Aznar and Stokes, 2011). London continues to have the highest proportion of foreign-born residents. There is some indication that the economic downturn has increased the concentration of migrants in London (Boden and Rees, 2010).

Table 0.24 shows the percentage of NIINo allocations to Bulgarians and Romanians by region of the UK, from 2007. Romanians are more likely to reside in London; in
2007, 52 per cent of Bulgarians registered in London compared with 69 per cent of Romanians. For nationals from both countries, the proportion registering in London has fallen over time, so that by 2009, just over a third (35 per cent) of Bulgarians were in London compared with just under a half (49 per cent) of Romanians. The South East was the next most common region for both Bulgarians and Romanians, which experienced an increase in the share of registrations in 2009. EU-8 migrants have also become more dispersed over time (Matheson, 2009).

Table 0.24. Regional distribution of EU-2 nationals allocated a NINo, 2007-2009

<table>
<thead>
<tr>
<th></th>
<th>Bulgaria</th>
<th></th>
<th></th>
<th>Romania</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2008</td>
<td>2009</td>
<td>2007</td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>Scotland</td>
<td>4.6</td>
<td>7.6</td>
<td>8.7</td>
<td>2.6</td>
<td>3.7</td>
<td>5.2</td>
</tr>
<tr>
<td>North East</td>
<td>0.6</td>
<td>0.4</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>North West</td>
<td>3.0</td>
<td>3.8</td>
<td>3.6</td>
<td>2.2</td>
<td>2.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>1.6</td>
<td>2.2</td>
<td>2.2</td>
<td>1.9</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Wales</td>
<td>0.8</td>
<td>0.8</td>
<td>1.3</td>
<td>0.8</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>West Midlands</td>
<td>9.4</td>
<td>11.1</td>
<td>12.9</td>
<td>3.2</td>
<td>5.4</td>
<td>7.3</td>
</tr>
<tr>
<td>East Midlands</td>
<td>3.4</td>
<td>2.9</td>
<td>2.8</td>
<td>4.2</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>East of England</td>
<td>7.7</td>
<td>9.5</td>
<td>9.0</td>
<td>4.0</td>
<td>5.9</td>
<td>8.9</td>
</tr>
<tr>
<td>South East</td>
<td>13.4</td>
<td>13.5</td>
<td>17.9</td>
<td>8.0</td>
<td>9.0</td>
<td>11.9</td>
</tr>
<tr>
<td>London</td>
<td>51.7</td>
<td>42.9</td>
<td>35.1</td>
<td>69.1</td>
<td>61.2</td>
<td>49.0</td>
</tr>
<tr>
<td>South West</td>
<td>3.0</td>
<td>3.7</td>
<td>3.9</td>
<td>2.6</td>
<td>3.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>0.9</td>
<td>1.6</td>
<td>2.0</td>
<td>0.7</td>
<td>0.5</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: Department for Work and Pensions (Tabulation Tool, accessed 2nd March 2011)

4.3.2.4 Postings

Limited data is available on posted workers to the UK. Hall (2010) presents data on the sectoral distribution of posted workers by gender in the UK. These figures are derived from ONS data, which is only available for the second quarter of 2008\(^\text{11}\). According to this source, in the period April to June 2008, 181,209 workers were posted to the UK.

Around three-quarters of posted workers were male. Figure 0.27 presents the number of posted workers by sector. The most common sector for male posted workers was real estate, renting and business activity (Section K), where this stood at around 32,000, accounting for just over one quarter (26 per cent) of all male posted workers.

\(^\text{11}\) Data on postings is currently available with the Hall (2010 article (http://www.eurofound.europa.eu/eiro/studies/tn0908038s/uk0908039q.htm). The ONS data is not currently available online, but is expected to be made available in due course through the UK Data Archive.
This was followed by financial intermediation (Section J; 15 per cent), manufacturing (Section D; 11 per cent) and hotels and restaurants (Section H; 9 per cent). Female posted workers were most commonly employed in the health and social work sector (Section N), at around 10,000 this accounted for 27 per cent of all female posted workers, followed by manufacturing (22 per cent).

**Figure 0.27. Number of posted workers by sector, Q2 2008**

The data reported above refer to all posted workers to the UK, and do not provide a breakdown by country of origin. Data on posted workers relating specifically to postings across EU countries is available from the European Commission report on the issue of E101 certificates (European Commission, 2011).

This source indicates that for the period April 2009 to March 2010, there were around 32,000 postings of UK workers to specific EU countries, a slight fall from the previous year, when this stood at around 36,000 (this fall is apparent for a number of EU countries, most likely as a result of the recession). This does not include other E101 certificates issued, which would include individuals active in two or more EU countries and in international transport (this stood at around 9,000 in both years).

This source also indicates some fall in the number of posted workers coming to the UK. In the period April 2009 to March 2010, the UK received around 35,000 posted workers from the EU member states, compared with 38,000 in the previous year. The vast majority were from the EU-15 (around 83 per cent in 2008 and 80 per cent in...
2009). While this source provides comparable data across EU countries, it should be noted that not all E101 certificates issued may result in eventual postings, and some workers may be posted by their employers without having applied for an E101 certificate.

4.3.3. Impact of migration on the economy

In this section, we briefly discuss existing evidence on the macroeconomic and labour market effects of immigration to the UK. Unless otherwise stated, the studies cited below refer to all immigration to the UK, rather than specifically to migration from the EU-8 or EU-2 countries.

4.3.3.1 Macroeconomic effects

Upward (2009) reports that migration to the UK has largely been found to have had a positive impact on GDP. Citing findings from Riley and Weale (2006), total immigration to the UK in 2004-05 was estimated to contribute about one per cent to GDP. Barrell, FitzGerald and Riley (2007) estimate that in the long-run output in the UK is around 0.64 per cent higher than it would have been in the absence of migration from the EU-8 countries following EU enlargement. They find a negative impact on GDP per capita in the short run (within the four years from 2005), but a positive impact in the longer run, contributing to an increase of around 0.2 per cent by 2015.

Wilson and Phillips (2009) find that immigration has made a notable contribution to regional Gross Value Added (GVA). Migrant workers\textsuperscript{12} were found to account for around six per cent of GVA in the North East of England, rising to around 30 per cent in London in 2008. The extent of this contribution is also explored by migrants' year of arrival; in London, those migrants arriving in 2004 or later contributed around seven per cent to regional GVA.

However, in a report by the House of Lords (2008) it is concluded that immigration to the UK has generally been found to have had only small (whether positive or negative) impacts on GDP per capita, especially in the long run, and called for further research into this area. They argue that measuring impacts on total GDP is not appropriate as it takes no account of the increase in the size of the population, and recommend that the focus should be on the impact of additional immigration on the GDP per head of the resident population. One criticism of existing studies is that they do not take into account spillover effects of immigration and may therefore underestimate the effect of immigration on GDP.

The economic impact of migration depends on the skill levels of migrants. Kim \textit{et al.} (2010) argue that the effects of immigration on growth for the host country are greater if migrants are more highly skilled. They set out a theoretical framework of migration, growth and skills. Their model suggests that migration is in general beneficial to the receiving country and also for the world growth rate, except in the case of unskilled migration.

\textsuperscript{12} All those born outside of the UK.
The Migration Advisory Committee (MAC, 2008) report that the economic impact of EU-2 migrants will depend on their characteristics, young, skilled and highly paid individuals are likely to have a small positive effect on GDP per capita.

Studies have generally found little evidence that immigration has had much impact on unemployment in the UK (Upward, 2009). Evidence on labour market effects is reviewed in the next section.

4.3.3.2 Labour market effects

One popular concern regarding immigration amongst the general public is that it may lead to poorer employment prospects for UK-born workers, and create downward pressure on wages. Several studies have investigated the impact of migration on wages and employment (both of natives and of migrants). Much of this research is US-based.

Upward (2009) reviews evidence on the impact of immigration on the UK labour market both pre- and post-2004 enlargement. The studies of the period prior to enlargement find little to suggest adverse effects on the employment or wages of natives (e.g. Dustmann et al., 2003, 2005, Manacorda et al., 2007). Dustmann et al. (2007) found some small positive effects of immigration on wages on average, although this varied across the wage distribution, with some evidence that wages at the lower end of the distribution may be adversely effected to a small extent.

Research on the period post-enlargement has also found little evidence of sizeable labour market impacts, both in studies specifically focused on migration from the EU-8 (Portes and French, 2005; Gilpin et al., 2006; Lemos and Portes, 2008) and when considering all of the non-UK born population (Reed and Latorre, 2009).

Wadsworth (2010) reviews existing research on the impact of immigration on the labour market in the UK. He concludes that while on average immigration has not had much impact on either employment or wages, there may be some downward pressure within low-skilled sectors, although these effects remain small in magnitude. Any impact of immigration is likely to be greatest amongst those groups who are the closest substitutes for immigrant workers; hence it is plausible that the low-skilled are the most affected.

Nickell and Salaheen (2008) find a statistically significant but small negative impact of immigration on average wages once occupation is taken into account, with the largest effects for semi-skilled and unskilled sectors. Manacorda et al., (2007) find that immigration is most likely to impact on wages of former migrants resident in the host country.

Ruhs (2011) states that impacts on the labour market depend on skills, both of migrant workers and existing workers in the country. He notes that the short run effects may differ from long term effects; as in the long run the economy has time to adjust to the rise in labour supply. Importantly, no studies are yet available on the labour market
effects during the economic downturn, it may well be the case that the effects may be different to those experienced during period of economic growth.

MAC (2008) reported on the labour market impact of relaxing the restrictions on Bulgarian and Romanian nationals coming to the UK. Empirical studies of the impact of EU-2 migration specifically are hindered by the small size of the migration inflows from these countries, as well as issues surrounding data quality. MAC suggest that impacts of EU-2 migration to the UK have so far been small (partly due to the relatively small amount of immigration from these countries) and that future impacts would depend in part on migrants' characteristics.

Dustmann et al. (2010) find that EU-8 migrants have made a positive contribution to UK public finances, through their higher rates of labour market participation, and lower use of benefits and public services. EU-8 migrants, even after taking account of their different demographic characteristics, are found to be less likely to claim benefits or to live in social housing compared with the native population. More broadly, Clark and Hardy (2011) note that EU-8 migrants have also contributed to the growth of small firms in the UK, and have brought greater cultural diversity to society.

4.3.3.3 Crisis-related issues

The data discussed in Section 3 suggest some fall in immigration to the UK from the EU-2 and EU-8 coinciding with the economic downturn, but it cannot be said categorically whether this is the result of the recession. At the same time, some impact has also been observed on the distribution of immigrants within the UK, with some increase in the proportion locating in London. Matheson (2009) reports that members of the NPP Expert Advisory Panel (April 2009) suggested that the impact of recession on migration to and from the UK could last up to five years.

While in the past the employment gap has widened during periods of recession, Wadsworth (2010) reports using data from the LFS that unemployment rates for immigrants and the UK-born have risen by similar amounts during the most recent recession. He suggests this may partly be due to the higher skill levels of immigrants compared to past immigrants, so that they are less vulnerable to the adverse economic climate.

It is important to note that the studies reviewed above with regard to the economic impact of immigration have focused on periods of economic growth, but it will be valuable to understand more about how these effects may change during periods of recession.

4.3.3.4 Outlook

The economic downturn may impact on both the amount and type of migration to the UK. Future migration flows will be affected by economic conditions in both the
sending and receiving countries; but it will be some time before the full impact of the recession on migration can be assessed.

Future flows of EU-2 migrants will depend in part on decisions regarding restrictions to the labour market, both in the UK and as a result of the decisions made by other EU-15 countries. Impacts of migration will also depend on the characteristics of EU-2 migrants and whether these alter once restrictions to the labour market are lifted after the end of the transitional period in 2014.
4.4 Spain

Abstract

The migration phenomenon in Spain has attracted a lot of attention over the last ten years. Since the late 1990s the number of migrants in Spain increased dramatically. As a result of the economic crisis, however, employment prospects of immigrants in the Spanish labour market have worsened significantly with decreases in employment particularly amongst the foreign-born population. Migrants from Bulgaria and Romania have suffered the consequences of the economic crisis to a larger extent, which has been widely attributed to the adverse developments in the construction sector. The rise in unemployment rates during 2008 and 2009 amongst migrants, however, was not due only to the employees losing their jobs, but also reflected the increase in the numbers of migrants participating in the workforce. Resident permits statistics show that the number of Romanian and Bulgarian continued to increase during the recession years, although to a lesser extent than it had done previously. However, in the short-run our understanding of the real magnitude of the inflows and outflows of migrants remains limited. A key issue is the distinction between regularisation of existing migrants from the measuring of new waves of migrants. Recent data show that net inflows of foreign-born migrants coming from abroad have decreased substantially since 2007, affecting the Romanian population in particular.

1. Introduction

From the end of the 1990s Spain received the largest migration inflows of all OECD countries relative to its population. Many reasons have been put forward to explain this surge, such as the access from Spain into the Euro-zone, the crises in Latin American countries and the continuous decline in Africa. Tamames et al (2008) provide some explanation to why the large migratory flows of Romanians to countries such as Italy and Spain. By the second half of the 1990s it was very difficult for Romanians to emigrate with a regular work visa given the restrictions throughout Europe. Therefore, the main option was to emigrate irregularly (e.g. with a tourist visa or in a clandestine way). In order for migrants to emigrate successfully they had to choose a destination with an important black economy and in sectors with increasing demand for labour.

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13 Any comments or queries related to section 4.4 of the report can be addressed to Ana Rincon-Aznar (A.Rincon@niesr.ac.uk).
Before the global financial crisis and subsequent economic recession, Spain had been experiencing an impressive employment growth. Most of the growth took place in these highly labour intensive industries where the majority of migrants found jobs, mainly in the construction sector and related services and manufacturing, as well as in the tourism sector. The unemployment rate decreased considerably and the demographics of the labour market were altered by the strong upturn in migration. The large migration inflows were accompanied by a significant boost in the activity rates from traditionally low levels. The incorporation of women into the labour market was significant at this time; this also increased the demand for household services, which migrants provided at lower wages. In addition to these initial effects, the network effects are also key in explaining the larger migrant flows observed in subsequent years.

The economic recession has hit Spain particularly hard in comparison to other countries, and it is currently facing its longest and deepest recession in fifty years. While the depth of the recession has been similar to other advanced economies in terms of real GDP, the rise in unemployment and the deterioration of government finances have been sharper. Since the start of the recession Spain experienced enormous increases in unemployment, with those segments of the labour force that were already at a disadvantage, such as young people, women, immigrants, unskilled and temporary workers, feeling the consequences of the rapidly rising unemployment.

One reason why young people and immigrants have been so badly affected is the disproportionate number of people from both groups of workers employed on temporary contracts. However, while in 2008 the bulk of the employment losses were accounted for by temporary jobs, the loss of permanent employment started to be evident in 2009, with collective dismissals in some manufacturing sectors (known as Expedientes de Regulación de Empleo or EREs). Between 2008 and 2009, the numbers employed in the construction sector decreased by one million and the loss of employment extended to services sectors. Additionally, from 2008 the benefit system saw a sharp increase in the number of applicants, mainly laid-off workers.

Considerable policy attention in recent times has been paid to the situation of immigrants in Spain, the segment of the workforce most severely affected by the economic downturn. Policy recommendations from organisations such as the OECD highlight the need to further integrate immigrants into the labour market, by improving the recognition of their foreign qualifications, increasing language training and teaching new skills. This could be an important step towards achieving a reduction in the excessive concentration of immigrants in the construction and tourism sectors. Amongst the necessary transformations that the Spanish economy
needs to undergo, the structural reforms of the labour market are considered a chief priority, especially given Spain’s record unemployment levels.

In this case study, we review the main migration trends in Spain, focusing on developments of citizens from the countries that entered in the European Union in 2007 (Romania and Bulgaria). We provide a picture of the stock of foreign-born populations, as well as on the inflows and outflows of migrants since the start of the global financial crisis and subsequent economic recession. Additionally, we describe the main socio-demographic characteristics of these migrants focusing on their performance in the Spanish labour market population over the last years.

2. Institutional setting

There exist problems measuring illegal entry as well as measuring short-term migration, particularly in a country like Spain, which has traditionally offered amnesties to illegal immigrants. The increase of immigration from Romania and Bulgaria from 2002 was allowed by the abolition of visa requirements for periods of up to three months in countries of the Schengen area (from the 1st of January 2002). Many of the migrants, however became irregular as their short-term visa expired. The immigration policy of the Popular Party during the period 2000 to 2004 had as an objective to decrease the dependency on labourers from North-Africa, and several agreements between Spain and Romania facilitated the process of hiring Romanian workers after 2002.

During 2005 and 2006 the largest increases in migration figures were largely related to the process of "regularisation" of illegal immigrants (See Makovec, 2007 for more details). The total number of regularisation in Spain in 2005 was 576,000 of which 99,673 was of Romanians. During these regularisation processes, most of the illegal migrants from Romania became regular by the so-called Regimen General of “Normativa de Extranjería”14.

With the entry of Romania and Bulgaria into the EU on the 1st of January 2007, Spain adopted a period of two years of "moratorium", in which citizens of these countries did not have full rights to work in Spain; during that period free circulation of workers

14 This implied that once the employer made a job offer, and once was accepted by the government, the migrant had to return to the country of origin and turn up at the Spanish consulate to request a work permit. This process was facilitated in the case of Romanians by the geographic proximity of Romania compared to migrants from other countries.
applied only to the self-employed. From 1st of January of 2009, all workers from Bulgaria and Romania could work in Spain without the need of a permit. From 2014 all transitional arrangements in the European Union countries will be eliminated.

3. Migration data sources in Spain
Measuring migration poses considerable problems and no data source is likely to provide a perfect measure of migration flows. The main sources of immigration statistics in Spain are the following (see also details in Makovec 2007):

- Regular residence visas statistics (“Tarjeta de residencia”). This information is provided by of the Spanish Ministry of Employment and Social Affairs, and intends to better measure the incidence of legal immigration. It provides detailed information on the number of foreign-born people that have a resident permit, broken down by country of origin, age, gender, occupation, region in Spain etc. This source does not offer a complete picture of the migration inflows in a given year as they may also reflect the fact that previous cohorts of migrants regularise their situation. Most of information provided is annual but additional statistics are available on a quarterly basis.

- “Padrón Municipal” or municipal registers. This refers to the administrative register in which all of the persons who regularly reside in the municipality are recorded. It is provided on the 1st of January every year by the Instituto National de Estadística. It offers a reliable source of migration in every town of Spain as both legal and illegal migrants usually register. Again this only offers a partial picture of migration as we are not able to distinguish inflows from outflows. Information as recent as 1st January 2011 is publicly available. For many authors (Villán, 2002), the information given in the Padrón is the closest to reality, although it tends to over-estimate (Recolons, 2005). The difference between figures from the Padrón and the resident visas allows the estimation of illegal immigration. A major drawback relates to the fact that people that emigrate (whether Spanish or foreign-born) do not usually communicate they are leaving. Duplication of registrations, whether voluntary or involuntary, are also frequent.

- Residential Variation Statistics (Estadísticas de Variaciones Residencial, INE). These statistics calculate the net migratory balance as the difference between

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15 Despite the fact that the count by the municipal rolls takes place every ten years, updates series are published annually by the Instituto Nacional de Estadística (INE).

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immigrations and emigrations, offering an additional insight into the magnitude of the inflows vs the outflows.

Arm Social Security records. This source provides information of the workers in employment paying contributions to the “Seguridad Social”. Both employed and self-employed are included and details on the characteristics of the employment are available.

Arm Encuesta de Población Activa or Economically Active Population Survey (Spanish Labour Force Survey) and the European Labour Force Survey. This continuous quarterly survey that targets households, provides data on the labour force (which is sub-categorised by employed and unemployed), and on the people outside the labour market. We are able to extract information according to the country of birth, however the breakdown of countries available is limited. In the European Labour Force Survey, for instance, only full details for aggregate groups of countries, such as the EU-2, is given. The use of the Labour Force Survey poses important limitations to analyse migration by nationality due to small sample sizes in the survey.

Arm Encuesta Nacional de Immigrantes (National Survey of Immigrants). Designed to investigate the social and demographic characteristics of the immigrant population. This source provides additional information with regards to job mobility of immigrants and natives. This survey has not taken place since 2007 (see Makovec, 2007).

Arm Case-studies: Based on qualitative surveys and interviews undertaken in Romania and Spain (e.g. Bleahu 2005, Viruela 2002).

4. Recent migration trends in Spain

The enlargements of the European Union had a direct effect on the official statistics of the foreign-born population resident in Spain. First with the of ten countries on 1st May 2004\(^{16}\) and then in 2007 with the incorporation of Romania and Bulgaria.

Table 4.29 contains a detailed account of the number of foreign-born individuals holding a resident permit during the period 2007-2009, offering a comprehensive picture of legal migration in Spain. The strong growth of resident migrants that took

\(^{16}\) Cyprus, Slovakia, Slovenia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland and Czech Republic.
place in 2007 is largely associated with the entry of Romania and Bulgaria into the European Union. A large number of Romanian migrants, in particular, that were living illegally in Spain, obtained legal permits. In 2007 the migrants from Romania and Bulgaria represented 38.9% of the total foreign-born with a resident permit, in comparison of the 21.9% in 2006 (Makovec, 2007). This process continued during 2008 but to a smaller extent. In 2008 the growth rate of the total number of resident migrants was 12.4%, which was considerably lower than the growth rate of 2007 (31.6%).

During 2009 there was a rapid slowdown in migration flows that had not been seen up to the year 2008. Despite this, the number of resident migrants still grew at an annual rate of 7.15% in 2009, and the total number of migrants with a resident permit in Spain was 4,791,232.

Table 4.29 also shows details on the total number of foreign-born people living in Spain with a valid resident permit by nationality. In 2009 the migrants from Romania represented 16% of the total foreign-born population (751,688 migrants), while the share of Bulgarians was 3% (147,080 migrants). These percentages have remained stable across the sub-period 2007-2009.

In comparison with other nationalities, we can see that the migrants from Latin America accounted for 30% of the total, the migrants from African countries around 20% and migrants from Asian countries represented a further 6%. The EU-8 group represents less than 3% of the total resident foreign-born people, with residents from the Czech Republic amounting to the largest number within this group. Across genders we observe that the male population represented 53% of the total resident migrants in 2009. In the case of Romanian and Bulgarian migrants the share accounted for by males is slightly higher at 55% and also higher than the share represented by males in the EU-8 group (53%).

Figures 4.28 and 4.29 below illustrate the increase in the number of migrants from the different nationalities that took place in 2009 in comparison to 2008 and 2007. We can see that the number of migrants from Bulgaria and Romania holding a regular visa showed an increase during 2009 but to a smaller extent than that experienced in 2008, in particular, with regards to the Romanian migrants. For migrants from other countries of birth, we observe a similar trend, with smaller increments in the migrant resident population in 2009 than in 2008.
Figure 0.28, Number of resident permits (“Tarjeta de residencia”) for EU-2, 2007-2009

Source: Anuario Estadistico de la Inmigración, Ministerio de Trabajo e Inmigración, Observatorio Permanente de la Inmigración.

Figure 0.29, Number of resident permits (“Tarjeta de residencia”), Other countries of birth, 2007-2009

Source: Anuario Estadistico de la Inmigración, Ministerio de Trabajo e Inmigración, Observatorio Permanente de la Inmigración.

The annual figures from the Spanish Ministry of Employment and Social Affairs presented above, however, are likely to hide considerable variation across quarters during the recession years. Figure 4.30 shows that the largest drop in legal migration flows took place at the start of 2009 according to the residence visa statistics. During the first quarter of 2009 the quarterly growth rate in the number of migrants with regular visas fell by around 6% in the case of immigrants from Bulgaria and Romania. Figure 4.30 also provides us with a more recent picture of recent trends in legal migration. From the second quarter of 2009 the quarterly growth rate in the number of
legal migrants has continued to moderate, although it has remained positive throughout. In the last quarter of 2010 the total numbers of legal migrants recorded a quarterly increase of just below 2%; while the number of Bulgarian migrants rose by nearly 2% and the total number if migrants from Romania rose slightly faster at a rate of nearly 3%.

**Figure 0.30. Quarterly variation (%) in number of foreign-born individuals with a regular visa (“tarjeta de residencia”), 2008-2010**

![Figure 0.30](image)

Source: Anuario Estadístico de la Inmigración, Ministerio de Trabajo e Inmigración, Observatorio Permanente de la Inmigración.

Table 4.30 shows the migration trends according to figures from the Padrón Municipal (municipal rolls). The main advantage of this source relies on its coverage of illegal immigration. Moreover, annual revisions of the census are published every year on the 1st of January, therefore the analysis of this source enables us to obtain the most recent picture of the migration available, by country of birth.

According to this register, migrants from Romania represent 13% of the total, while the Bulgarians represent around 2.7%. These shares, especially in the case of the Romanian migrants, appear lower than the ones we obtained from the analysis of resident permits. The trends, however, are similar. When considering the evolution of resident permits up to 2009, the number of immigrants from the EU-2 continued to show a small but positive increase. We also observe an increase in the registered Romanians and Bulgarians in the municipal census from 2008 to 2011 (Figure 4.31). The figures for the immigration from other origins, such as Latin American countries, show a fall in the most recent period (2010 and 2011). This indicates that, a large number of immigrants from Latin America have returned to their countries, in response to the crisis, in comparison to other groups of immigrants.
The analysis presented above provides a snapshot of the number of legal and illegal migrants estimated to be living in Spain. However, in order to have a better understanding of the magnitude of the inflows and outflows underlying these trends we present additional descriptive analysis using the Residence Variation Statistics (RVS).

The Residence Variation Statistics are compiled by the INE mainly using information regarding registrations and cancellations due to changes of residence registered in the Municipal Registers (Padrón Municipal). The balance, however, does not coincide with the balance that is obtained as the difference between the population figures from the register (Padrón Municipal) and the natural increase in the population (births-deaths) produced in that year. The reasons for these discrepancies are several:\n
1) Variations included during the statement period by which the official population figures are obtained, variations are "recovered" that had not been entered in the INE database at the time of closing of the RVS 2) Variations from previous periods are included in the current year's population figures but not in the RVS which only includes migrations relating to the reference year, and which are received up until March of the following year 3) The natural increase (Births-Deaths) from the Civil Register does not coincide with the natural increase taken from register entries, which is obtained as the difference between registrations due to birth and cancellations due to death. Differences due to entries that are neither renewed nor cancelled after the expiration date of the NCFNWPRP (Non-Community Foreign Nationals Without a Permanent Residence Permit) 4) Additionally, cancellations by expiration have been included since 2006. These cancellations arise as a result of the legislative modification introduced by Organic Law 14/2003 on foreign nationals, to Law 7/1985, Regulation of the Basis of Local Regimes, which establishes that those non-community foreign nationals who do not have...
We focus here on migration flows from and to foreign countries of foreign-born people, thus excluding inter-municipalities flows of migrants. It is also useful to highlight that these annual migratory flows refer to migrations and not to migrants, as a citizen may change his or her residence from one municipality to another more than once a year. This drawback will be less relevant in our case since we are considering movements of foreign-people from and to foreign-countries.

Figure 4.32 below shows a summary of the external migratory balance (defined as the total foreign-born population in Spain). In 2007 the net inflow of migrants was over 700,000. This figure decreased in 2008 to around 450,000. In 2009 the net inflows were estimated to be below 200,000.

Figure 0.32. Migratory balance of foreign-born migration (from and to foreign countries), Residence Variation Statistics, INE 2006-2009

Source: Residence Variation Statistics, Instituto National de Estadistica

Figures 4.33 and 4.34 offer an additional insight into the inflows and outflows data for different nationalities of migrants. Figure 4.33 represents the evolution of inflows from migrants from 2004 until 2009. We see that from 2005 until 2007 there was a strong increase in the number of migrants from Romania (at the same time there was a rise in migration from the American continent). The inflow of Romanian migrants permanent residence permits, are required to renew their registration every two years. If this renewal does not take place, the City Councils should declare the expiration of the registration. Strictly speaking cancellations by expiration do not correspond strictly to migratory movements, but, are "adjustments" of the Population Registry.

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was estimated around 175,000 in 2007. Since 2007 there has been a sharp decline in the number of migrants coming to Spain. In 2008 the inflow from Romania was around 50,000. With regards to the Bulgarian migrants, the figures are more modest. The inflows of Bulgarians in 2007 were estimated at around 30,000. This number has also shown an important decrease in 2008. During 2009 the inflows from Bulgaria and Romania continued to decrease but more moderately.

Figure 4.34 shows the evolution of migrant outflows for every year from 2004 to 2009. We observe a continued increase in the outflows since 2004, but a slowdown during 2008 and 2009. We observe that the magnitude of the outflows is significantly smaller than the magnitude of the inflows. In the year 2007 the number of Romanians leaving Spain was estimated to be around 6,000 and the number of Bulgarians below 2,000.

Recently the Spanish government has implemented some mechanisms to provide incentives to migrants that wish to return to their countries of origin. Despite this and the increasing demand of labour in countries such as Romania (e.g. in the construction sector) the number of migrants that leave Spain remains low. This is largely attributed to the relative lower level of salaries prevailing in Romania (unemployment benefits in Spain can sometimes be higher than average salary in Romania). According to recent estimates the remittances account for 4% of GDP in Romania. An important factor that prevent large amount of out-migration is the role of family and friends and in many occasions the difficulty of leaving established businesses in Spain. Marcu (2011) analyses in detail the process by which Romanian immigrants to the Autonomous Community of Madrid return to their country, looking at objective and subjective factors influencing their decisions.

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18 http://www.diariodenavarra.es/noticias/los_trabajadores_del_este_regresan.html
Figure 0.33. Migration inflows of foreign-born population by source country, Residence Variation Statistics, INE 2004-2009

Source: Own calculations, Residence Variation Statistics, Instituto National de Estadística

Figure 0.34. Migration outflows of foreign-born by destination country, Residence Variation Statistics, INE 2004-2009

Source: Own calculations, Residence Variation Statistics, Instituto National de Estadística
5. Socio-demographic characteristics of EU-2 migrants.

Tables 4.32-4.33 describe the age distribution of the stock of legal immigrants in Spain (for the years 2008 and 2009). For the EU-2 group the largest share is represented by the 30-34 year old group. The percentage in 2009 was 15.3% in the case of Bulgaria and 17.4% in the case of Romania. The age profile in the case of Romanian migrants appears slightly younger than in the case of Bulgaria. Around 15% of migrants from Romania are aged between 20 and 24 years old; in the case of the Bulgarian immigrants this percentage is lower (10%). In addition, 17% of Romanians are aged between 25 and 29 years while this percentage is only 12% in the case of the Bulgarians. In comparison with the immigrants from the EU-8, the immigrants from the EU-2 are older on average. A larger share of migrants from the EU-8 are aged between 25 and 34 years old, while a smaller share are over 40 years old, particularly in comparison with Bulgaria. The percentage of the Romanian migrants above 60 years old is 0.6% while the average for the EU migrants is around 10%.

It is also interesting to highlight the employment situation of migrants according to their level of education (Pajares 2009). Amongst the economically active population the percentage of university graduates is higher for the Spanish-born that for the foreign-born population (35% vs 20.4% in 2009). However, the percentage of those with secondary studies is comparable; in fact, the percentage of foreign-born with second stage-secondary education qualification is higher; which suggests that level of intermediate education of immigrants may in fact be higher (Pajares, 2009). It was also observed that over 50% of new unemployed during 2007 and 2008 held secondary education. At higher levels of education, the proportion of migrants in unemployment was higher than for the natives.

With regards of the geographic distribution of migrants across Spanish regions, in 2009 over 50% of the legal immigrants settled in three regions (CC.AA) -Cataluña, Madrid, and Comunidad Valenciana. In 2009 22% were located in Cataluña, 18% in Madrid, 13% in Comunidad Valenciana and 12% in Andalucia (Pajares, 2010).

Figure 4.35 displays the migratory balance by region (Comunidad Autónoma) for 2009. The regions with a higher net inflow of migrants were Andalusia and Comunidad de Madrid, followed by Comunidad Valenciana, Canarias y Cataluña.
With regards to the Romanians they are largely concentrated in a few provinces and cities, which increased their population considerably over the last years. The migration phenomenon of Romanians is also characterised by a process of diffusion across the Spanish territory, due to the rapid increase in the stock of Romanians and the high mobility of these, one of the highest among the foreign-born population. Some case studies (Blachu 2005, Aparicio and Tornos 2005) show the important role of networks of family and friends in explaining Romanian migration flows to Spain19.

Figure 4.36 below shows the geographical distribution of the inflows from Romania and Bulgaria for 2009. The majority of Romanians settle in the region of Madrid, followed by Comunidad Valenciana, Andalucía, Catalunya, and Castilla la Mancha. The Bulgarians choose to settle mainly in Comunidad Valenciana, followed by Castilla-León, Madrid and Catalunya.

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19 In 2009, for first time the Spanish government (Ministerio de Trabajo e Inmigracion) publishes a breakdown of authorisations of temporary residence by reason. The results show that currently around 5% of the visas in Spain are granted for family reasons.
Table 4.25 below reveals that the share of employed Romanian workers with an indefinite contract in 2009 was 48%; this is lower than the percentage of Bulgarian and EU-8 migrants, which stands at around 53%. These figures were lower than the average of the European Union countries, where about 56% of employed people hold an indefinite contract. For the Romanian-born, the percentage of workers with a temporary contract is higher in the case of the men (53.2%) than in the case of the women (46.7%).
### Table 0.25. Distribution of employment by type of contract and gender, Social Security records, 2009

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
<th>Men</th>
<th></th>
<th>Women</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indefinite</td>
<td>Temporary</td>
<td>Unknown</td>
<td>Indefinite</td>
<td>Temporary</td>
<td>Unknown</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>53.2</td>
<td>46.5</td>
<td>0.3</td>
<td>51.6</td>
<td>48.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Romania</td>
<td>48.8</td>
<td>50.6</td>
<td>0.5</td>
<td>46.0</td>
<td>53.6</td>
<td>0.4</td>
</tr>
<tr>
<td>EU-8</td>
<td>53.4</td>
<td>45.6</td>
<td>1.0</td>
<td>51.5</td>
<td>47.2</td>
<td>1.2</td>
</tr>
<tr>
<td>EU</td>
<td>56.6</td>
<td>42.6</td>
<td>0.8</td>
<td>55.2</td>
<td>44.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>55.1</td>
<td>43.9</td>
<td>0.9</td>
<td>52.9</td>
<td>46.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Anuario Estadístico de la Inmigración, Ministerio de Trabajo e Inmigración, Observatorio Permanente de la Inmigración.

Table 4.33 in the Appendix shows some interesting features of the age profile of those EU-2 immigrants making social security contributions. The age distribution reveals that the Romanian workers are, on average, younger than the Bulgarians; in 2007 around 22% of employed Romanians were aged between 25 and 29 years while this percentage was only 15% for Bulgarians. Moreover, 14% of those employed of Bulgarian origin were between 40 and 44 years old and 11% between 45 and 49 years. For the Romanians these percentages were below 7%. The share of employed immigrants above 50 years old was also higher for the Bulgarian-born. During the years of the recession we see that there has been a slight shift in the age distribution of the Romanians and Bulgarians, with an increase in the share represented by the 40-44 year old group and a decrease in the 25-29 year old group.

In table 4.34 we observe the employment composition of immigrants by economic sector and nationality, for both males and female. In 2009 around 20% of all employed Romanians were working in the construction sector. This percentage was lower in the case of Bulgarians (13%). The share of employed in the construction sector was relatively high for migrants from certain other countries, such as Poland and African countries.

Table 4.35 offers further detail on the employment distribution for 21 detailed sectors of activity for both genders. We can see that approximately 20% of Romanians work in the hotels and restaurants sector, a similar percentage to those working in the construction sectors. Pajares (2009) reports some differences by gender; the Romanian men are employed mainly in the construction sector, as well as in hotels.
and restaurants and some manufacturing industries. The Romanian women tend to be employed mainly in the services sector, mainly in hotels and restaurants and private households (Pajares, 2009).

With regards to the migrants from Bulgaria, table 4.35 shows for 2009 the sector absorbing the highest employment for Bulgarians is the hotels and restaurants sector (approximately 18%). A lower share than the Romanians is employed by the construction sector (13.5%) and a higher share is employed in the transport and storage sector (17% in for Bulgarians vs 7.4% for Romanians). For the EU-8 group the high share employed in the construction sector (16%) is driven by the higher proportion of immigrants from Poland working in this sector (nearly 20%). For other migrants, such as the Estonians, the share employed in construction was rather small. For non-European migrants the sectoral distribution of employment follows different patterns. With regards to the Asian-born, 41% were employed in the hotels and restaurants and a further 28% in the wholesale and retail sector. For the Latin American immigrants the numbers employed in the construction, wholesale and retail and hotels and restaurant sector account for 50% of total employment. It is noticeable the low percentage of Latin American paying social contributions within the private household sector, where most of the employment remains illegal20.

Table 4.36 shows the distribution of migrants according to their occupation. Over 50% of the total employed migrants from Bulgaria and Romania hold intermediate-level occupations within the manufacturing and services sectors (“Oficiales de 1a y 2a and Oficiales de 3a). Another third of immigrants registered were adults with no qualifications. The percentage of employees in managerial occupations was less than 1% in the case of Romanians and just over 1% in the case of Bulgarians. In comparison, for some EU-8 countries' migrants, such as the Slovenians and Hungarians, this percentage was over 10%. Analysing data from the “Encuesta Nacional de Immigrantes” for 2007, Pajares (2009) concludes that immigrants experience higher job mobility than the native population, despite the fact that the distribution of migrants is concentrated in the low-skilled occupations compared to the Spanish-born.

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20 Despite the "Ley de Extranjeria" imposing severe penalties to those employing workers illegally, these practices are widespread. Most of illegal immigrants work as carers in the case of women and in the construction and agricultural sectors in the case of men.

Since the end of the 1990s, large migratory inflows in Spain had been accompanied by a considerable drop in the unemployment rate. However, figure 4.37 shows the rapid increase in unemployment that took place from the year 2007 onwards. While in the last quarter of 2007 the unemployment rate was 8.6%, in the last quarter of 2009 the percentage of the labour force seeking jobs in Spain had more than doubled, reaching 18.8% (Economically Active Population Survey or EPA\textsuperscript{21}).

In comparison with the Spanish-born, the foreign-born population fared worse in terms of unemployment, averaging a rate of 20% in 2008 and a rate of 30% in 2009 (Figure 4.37). Across groups of migrants the heterogeneity is significant. For the European Union migrants the rate was around 24% while the rate of migrants from the rest of European countries and Latin America was nearly 30%. In comparison, the unemployment performance of immigrants from other world countries was considerably worse (unemployment rate of 42%). Available figures for the last quarter of 2010 and 2011 show that the situation in the job market has worsened since; currently one in five active workforce members are unemployed. In the case of the women, immigrants and young people the unemployment rate is significantly higher.

**Figure 0.37. Evolution of unemployment rate (2007-2009, 4th quarter, EPA)**

![Graph showing unemployment rate from 2006 to 2009](image)

Source: Pajares (2010) based on the Encuesta de Población Activa (EPA)

Significant differences can be seen in the labour market performance of migrants between the years 2008 and 2009 (see Pajares (2010) for details of the quarterly trends based on statistics from the EPA).

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\textsuperscript{21} Spanish Labour Force Survey
Between 2001 and 2008 the increase in the economically active population (as result of e.g. a higher participation of women in the labour market), was considerable. Amongst the foreign-born, an increase in the economically active population during the first years of the crisis continued for both men and women, and to a larger extent than in the case of the native population (Pajares, 2010). Therefore changes in the unemployment rate were not exclusively the result of employment losses. During 2008 the number of economically active continued to increase significantly, as did the numbers unemployed. The new people entering the workforce included young people that had started looking for a job, women, older people that had been retired, etc. This phenomenon was more evident amongst the immigrant population. The activity rates in 2008 increased for both men and women immigrants whilst they only increased in the case of women for the native population (Pajares 2009).

However, in 2009, the economically active population showed no further increase and the bulk of the increase in unemployment was thus accounted for by employment losses. The increase of the economically active population amongst the foreign-born stopped by the first quarter of 2009 (showing instead a decrease in the following three quarters). Overall, the entry of new migrants in 2009 was not significant. By the end of 2010 the relative loss of employment amongst the immigrants was relatively larger than for the Spanish-born.

In 2008 those migrants that suffered the largest increases in unemployment include the Romanian, Bolivian and Colombian. The higher participation of these groups of migrants in the construction sector, as well as the increases in the economically active populations, may explain these trends. By 2009, most of the groups experienced less increases in unemployment than in 2008, mainly due to the declines in the economically active population. The two groups with largest decreases were of Ecuadorian and Romanian origin. In comparison with 2008, the largest increases in 2009 were accounted by the long-term unemployed (those unemployed for more than 1 year), in particular in the case of men. Many of these long-term unemployed males were the ones that had lost their jobs at the start of the recession. Some groups of migrants, such as Romanian, lost the bulk of employment during 2008, due to their larger involvement in the construction sector.

According to the EPA, the three sectors of activity that suffered the largest employment declines were the Construction (F), the Manufacturing (D) and the Wholesale and Retail sector (G). While in 2008 the construction sector accumulated

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22 Trends shown in Pajares (2010)
the majority of employment losses, by 2010 the manufacturing and wholesale and retail sector did not lag much behind (Pajares, 2010).

In the 4th quarter of 2009, the total unemployed in the construction sector represented approximately 12% of the total unemployed population. In the case of the foreign-born population, the weight of the construction sector is considerably higher, with unemployment in this sector reaching 21.2% of the total unemployment. The weight of the manufacturing and services sectors in the unemployment of native and migrants workers does not differ greatly. Sectors such as Hotels and Restaurants did not suffer significant employment losses during this period.

Occasional and temporary migration was affected by the recession to a greater extent than permanent migration, due to their higher sensitivity to economic cycle fluctuations. Figure 4.38 shows that the number of people employed from Romanian origins continued to rise during the years of recession, particularly in 2009. According to the Social Security records, in 2007, 11.7% of all employed immigrants paying social security contributions were from Romania. This percentage went up to 12.2% in 2008 and to 15.15% in 2009. For the Bulgarian migrant group the percentages were 2.6% in 2007, 2.51% in 2008 and 2.95%.

The large increase in the number of employed according to social security records may also be reflecting of the end of the restrictions on the free circulation of Romanian and Bulgarian workers (Pajares 2010). Thus many of these new affiliations may correspond to the "legalisation" of illegal migrants (these new registrations may include a large amount of seasonal workers). In Pajares (2009) the discrepancies in the number migrants according to the social security records and the EPA during 2008 were highlighted. A reason given was the considerable number of migrants from Romania and Bulgaria still working illegally in Spain throughout 2007 and 2008. Many migrants that appeared in the EPA as working in fact did not have a legal employment contract. The difference in the migration figures between social security records and the EPA after 2009 appear indeed substantially smaller (Pajares 2010).
In figure 4.39 we observe that despite the crisis, the number of self-employed from EU-2 countries in 2008 showed minor decreases in comparison with 2007. This was also a reflection that with the entry of Romania and Bulgaria in the EU, many irregular migrants working in Spain registered as self-employed. Figure 4.39 reveals that the number of self-employed experienced a sharp decrease in 2009. The number of self-employed Romanians paying social security contributions went down from nearly 50,000 in 2007 to less than 30,000 in 2009. The number of self-employed Bulgarians in 2007 was significantly lower and experienced a relatively smaller decline. These figures may more accurately reflect losses in employment during the recession, as self-employed workers from the EU-2 did not have restrictions on working in Spain since their entry into the European Union in 2007. However, these job losses may overstate the situation, if individuals began to declare themselves as employed rather than self-employed after the restrictions on employment were lifted in 2009.
With regards to other types of contracts, those Romanian hired in origin constitute a smaller part. Many workers that are hired in Romania are employed in agriculture and generally with temporary contracts et al (Tamames et al, 2008).

Tables 4.26-4.28 below show the performance in the labour market of migrants from the EU-2 countries in comparison to migrants of other origins since the start of the crisis. In 2007 the unemployment rate of the EU-2 countries was around 12% while the unemployment rate of Spanish natives was below 8%. In the second quarter of 2008 the unemployment rate of the EU-2 migrants had reached 18% and in the second quarter of 2009 the rate was 26%. The percentage of the population economically inactive of the EU-2 and EU-10 countries is, however, considerably lower than in the case of the Spanish nationals. In the case of the EU-2 the percentage has continued to decrease throughout the recession period.

Table 0.26. Percentage of population of working-age (15-64) by ILO status, Spain, EULFS, 2nd quarter 2007.

<table>
<thead>
<tr>
<th></th>
<th>Employed</th>
<th>Unemployed</th>
<th>Inactive</th>
<th>Unemployment rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>65.3</td>
<td>5.2</td>
<td>29.5</td>
<td>7.3</td>
</tr>
<tr>
<td>EU-15</td>
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<td>7.5</td>
<td>29.8</td>
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</tr>
<tr>
<td>EU-10</td>
<td>76.0</td>
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<td>20.6</td>
<td>4.3</td>
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<td>4.2</td>
<td>40.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Other Europe</td>
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<td>6.9</td>
<td>21.8</td>
<td>8.9</td>
</tr>
<tr>
<td>North Africa</td>
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<td>11.3</td>
<td>30.5</td>
<td>16.3</td>
</tr>
<tr>
<td>Other Africa</td>
<td>59.5</td>
<td>14.2</td>
<td>26.3</td>
<td>19.3</td>
</tr>
<tr>
<td>Middle East</td>
<td>65.3</td>
<td>11.5</td>
<td>23.3</td>
<td>14.9</td>
</tr>
<tr>
<td>East Asia</td>
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<td>7.7</td>
<td>30.6</td>
<td>11.1</td>
</tr>
<tr>
<td>South-East Asia</td>
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<td>8.9</td>
<td>18.7</td>
<td>10.9</td>
</tr>
<tr>
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<tr>
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<td>9.0</td>
<td>16.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Total</td>
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<td>5.7</td>
<td>28.5</td>
<td>8.0</td>
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Table 0.27. Percentage of population of working-age (15-64) by ILO status, Spain, EULFS, 2nd quarter 2008.

<table>
<thead>
<tr>
<th></th>
<th>Employed</th>
<th>Unemployed</th>
<th>Inactive</th>
<th>Unemployment rate (%)</th>
</tr>
</thead>
<tbody>
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<td>28.5</td>
<td>9.4</td>
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<td>20.6</td>
<td>9.0</td>
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<tr>
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<td>15.1</td>
<td>16.7</td>
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<tr>
<td>Other Europe</td>
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<td>19.0</td>
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<tr>
<td>North Africa</td>
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<td>18.0</td>
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<td>25.9</td>
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<tr>
<td>Other Africa</td>
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<tr>
<td>South-East Asia</td>
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<td>25.6</td>
<td>16.7</td>
</tr>
<tr>
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<td>14.6</td>
<td>13.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td>7.6</td>
<td>27.4</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Table 0.28. Percentage of population of working-age (15-64) by ILO status, Spain, EULFS, 2nd quarter 2009.

<table>
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<tr>
<th></th>
<th>Employed</th>
<th>Unemployed</th>
<th>Inactive</th>
<th>Unemployment rate (%)</th>
</tr>
</thead>
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<td>16.1</td>
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<td>EU-15</td>
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<td>14.5</td>
<td>26.9</td>
<td>19.8</td>
</tr>
<tr>
<td>EU-10</td>
<td>61.6</td>
<td>17.1</td>
<td>21.3</td>
<td>21.8</td>
</tr>
<tr>
<td>EU-2</td>
<td>62.6</td>
<td>22.3</td>
<td>15.1</td>
<td>26.3</td>
</tr>
<tr>
<td>EFTA</td>
<td>67.5</td>
<td>0.0</td>
<td>32.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Other Europe</td>
<td>62.6</td>
<td>19.4</td>
<td>18.0</td>
<td>23.7</td>
</tr>
<tr>
<td>North Africa</td>
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<td>33.8</td>
<td>43.6</td>
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<td>Other Africa</td>
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<td>22.1</td>
<td>45.8</td>
</tr>
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<td>Middle East</td>
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<td>33.2</td>
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<td>East Asia</td>
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<td>4.6</td>
<td>28.5</td>
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<tr>
<td>South-East Asia</td>
<td>57.2</td>
<td>12.3</td>
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<td>North America</td>
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<td>27.1</td>
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</tr>
<tr>
<td>Central America</td>
<td>58.2</td>
<td>24.3</td>
<td>17.5</td>
<td>29.5</td>
</tr>
<tr>
<td>South America</td>
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<td>22.1</td>
<td>15.2</td>
<td>26.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59.9</td>
<td>13.2</td>
<td>26.9</td>
<td>18.0</td>
</tr>
</tbody>
</table>
7. Economic Impact of Migration in Spain

The Spanish labour market institutions and the Spanish immigration policy present some peculiarities which may be important when considering the impact of immigration. Despite highly restrictive policies between 1996 and 2004 by the conservative government (annual quotas of 30,000 vs. inflows of 500,000 on average) the migration inflows showed continuous increases.

The immigration authorities adopted stop-and-go policies consisting of numerous amnesties (1996, 2000 and 2001 on top of previous ones in 1985 and 1991. The new socialist government in 2004 also decided on a large-scale amnesty which rapidly increased social security revenues. In 2005 a massive regularisation process took place providing over 600,000 work and resident permits. In 2007 Romania and Bulgaria gained access to the EU and the main destinations were Italy and Spain.

The existing recent literature analysing the effects of migration in the Spanish economy has shown no significant impact on labour market performance. Pajares (2007) shows that overall migration has not had negative consequences for employment or wages of native workers. Carrasco et al (2007) use information from the municipal rolls (Padrón Municipal) to investigate the influence of both legal and illegal migration and do not find strong evidence of a significant influence on the Spanish labour market. The elasticity of the employment rate with regards to the proportion of immigrants was found to be around -0.02. The authors interpret their results in the context of a process of massive amnesty for illegal immigrants that had taken place in 2005 and concluded that the employment rate of Spanish native workers would fall by about 0.8 percentage points, which would mean 0.5% of their rate of employment. Carrasco et al (2007) also estimate the impact of immigrants with work permits on the employment rates of native-born workers using information on employment rates and incidence of immigration for workers of different groups of age, gender, and sectors of activity. When considering total immigration they found a negative, but not statistically significant, effects of immigration on the employment rate of native workers.

Dolado et al (1996) estimate the effects of immigration on wages and employment of both skilled and unskilled workers across Spanish regions following the lifting of some restrictions on migration policy in 1991. They do not find much evidence that the subsequent inflows of immigrants had any negative effects on either wages or employment of less-skilled natives. In fact, they prove that independently of the
degree of competition in the market for skilled labour, immigration can raise overall employment.

Fernandez and Ortega (2007) study the process of absorption of immigrants in the Spanish labour market, considering their rates of labour market participation, unemployment performance and the incidence of over-qualification and temporary work among migrants groups (Latin America, Eastern Europe and Africa). The authors conclude that the Spanish labour market is absorbing large inflows of migrants by using the increasing labour force in temporary jobs for which the migrants are over-qualified. Using data from the Spanish Labour Force Survey (EPA) for the period 1996-2006 the study finds that, for a given year, migrants are also more likely to show a higher rate of activity and a higher rate of unemployment. After five years, the rates of participation in the labour force of migrants start to converge to the one of the native workers and the unemployment rates start to decrease in comparison to the unemployment rates of the Spanish-born. However, the difference on the incidence of temporary work and over-qualification remains constant and does not decrease. The study finds that the immigrants from Eastern European countries are the ones with a more similar labour market performance to the Spanish population.

Garcia et al (2008) investigate the impact of the large entry of migrants on the long-run fiscal position of the Andalusian region. They find the contribution of immigration to be negligible given the average low wage of the average migrant in the region. With regards to the potential impact of migration on pensions, Conde-Ruiz et al (2008) find that in the medium term migration can be used to counteract the negative impact of the ageing of the population if a selective migration policy is implemented; however there is no empirical evidence that in the long-run immigration will have any influence on unemployment or on the wage distribution.

Changes in labour market demographics brought about by the large migration inflows however, are likely to have had an effect on economic variables such as labour productivity and income per capita. Kangasniemi et al (2009) investigate the extent to which migration affected productivity growth over the 1990s and early 2000s, comparing the case of Spain with the UK. Using a growth accounting methodology they find that migration in Spain fostered gross value added contributing to Spain's impressive growth performance. They estimate that the contribution of migrant labour to the total average growth in Spain during the period 1996-2005 (3.58%) was 0.6%. This contribution was due to the large increase of migrant labour in Spain.

At the same time the large migration inflows explained a great part of the poor performance of labour productivity. Kangasniemi et al (2009) conclude that the
negative contribution of migration to labour productivity performance may be related to the characteristics of migration policies, particularly the ones related to skills requirements, as well as to the capacity of the country to absorb foreign labour. However they also highlight the difficulty in establishing a causal relationship. The contribution of migrants to labour productivity performance appears to be largely sector-specific.

Tamames et al (2008) reviews existing evidence on the economic impact attributed to the large migration inflows from Romania. They argue that migration has had, if any, a positive impact on employment possibilities of Spanish native, for example, facilitating incorporation of women to the labour market, as well as contributing largely to the development of the construction sector. In Spain the salaries tend to be around 30 lower that those of natives. It has also been estimated that the effect of migrants on the the structural rate of unemployment has been negative. Tamames et al estimate the contribution of Romanian migration to the Spanish Economy to be around 1 per cent of GDP.

8. Other social aspects of immigration from EU-2 countries in Spain.

In 2005 and 2006 the Romanian nationals represented the fourth largest group of migrants, after the Moroccan, Ecuadorian and Colombian migrants. In 2007 the number of Romanians was already higher than the number of Ecuadorian and Colombian (Source: Cea and Valles, 2009, based on “tarjeta de residencia” statistics). By 2008 the Romanian-born were the most numerous group, representing 16.1% of the 4473,499 residents in Spain.

In previous sections it was shown that the largest part of migration flows from Romanian were directed towards the Comunidad Autónoma of Madrid. According to the municipal registers (“Padrón Municipal”) the total number of Romanians in Madrid in January 2011 was 222,528. This accounts for 20.17% of the total foreign population. In January 2010 the number registered in this region was 214,531, increasing 3.7% in comparison to January 2010. The Romanian migrants residing in the community of Madrid are located in the city of Madrid (30%), and a further 30% are located in the Easter suburbs (Alcalá de Henares (9.4%); Coslada (8.1%)). The age profile of the Romanian residents in the Comunidad de Madrid indicates that it is mainly a young population (15.6% of the population are aged between 25 and 29 years old and a further 16.7% are aged 30-34). Only 0.84% are older than 65 years (Comunidad de Madrid, 2011).
The region with the second largest community of Romanian migrants was Comunidad Valenciana (122,303 at January 2011) in particular, the province of Castellón. The case of this province deserves special attention; it is a small province in population but has a large number of Romanians. According to the provisional figures of the Padron Municipal 2011, the Romanians represent 8.56% of its total population of 604,019. This phenomenon has been attributed to the fact that the province of Castellón offers a wide range of jobs in the formal and informal economy in sectors such as industry, ceramics, construction, tourism and services. Network effects as a driver of the overall Romanian migration to Spain has been considered of chief importance over the last years. In particular, the importance of the network effects (family, friends, similar ethnicity etc.) in explaining migration inflows to the province of Castellón has been highlighted (Tamames et al, 2008).

The migrants that arrive in Spain come from different regions in Romania, from both rural and urban areas. Both men and women migrate to Spain but the number of males is a little larger although the difference between men and women is decreasing (the number of women working irregularly was traditionally higher). The Romanian are the group of migrants in Spain with a higher incidence of mixed-nationality marriages. The participation of migrants in elections in Spain is generally low but improving. The number of Romanian migrant that applied to vote in the municipal elections of 22\textsuperscript{th} May 2011 was 103,355. Out of these, 25,118 applied to vote in the Community of Madrid. With regards to the Bulgarians 19,045 applied to vote in Spain and 5498 did so in the Comunidad Valenciana\textsuperscript{23}. Some recent studies also show that they Romanians make less use of the national health services than the native population, as they are on average younger.

Romanians workers are generally considered in Spain as "hard-working" and "reliable" (Viruela, 2006) by employers, adapt easily and learn Spanish quickly. Some evidence suggests more managerial occupations are offered to Romanians than to other migrants, such as the North-Africans and even the Polish, given the similarity of the languages and the culture. The cultural and linguistic affinity with Latin America has been widely highlighted as an important factor when explaining migration choices of migrants from this origin. In 2009, 1,458,442 migrants from Latin American held a regular visa, which represent approximately 30% of the total stock of foreign-born residents. Employers have preference for Romanian workers give their high level of qualifications compared to other nationalities. Some sectors in Spain there is preference for migrants from East European countries.

\textsuperscript{23} \url{http://www.abc.es/agencias/noticias.asp?noticia=791657}
Migration policies are increasingly recognising the need to focus the social integration of migrants. Cea and Valls (2009) explore the views of different groups of migrants amongst the Spanish population as revealed by the CIS-OBERAXE survey (2008). The results of this survey reveal that 21% of the total surveyed did not show any adverse feeling towards migrants of any origin. However, 16.7% pointed to the Romanians as the group towards which they had the worse opinion followed by a category of migrants classified as of Moroccan, Muslims, and North African origin (17.8%). Only 2.4% had the worst views on migrants from other East European countries.

Qualitative studies offer additional insights into these issues by country of origin revealing to what extent migrants from certain East European origins raise more “phobias” amongst the native population than others. For example, Spanish people are likely to perceive more favourably the Polish than the Romanians; the negative views about the Romanian migrants focus on the high levels of crime and lack of social integration usually associated with this group of migrants, together with the large presence of Romanies or gypsies. However, we have to be cautious when drawing conclusions from these types of surveys given the small size of the surveys involved.

Recently there has been a discussion in Spanish political circles and in the media over the legitimacy of the decision in France of expelling Romanian gypsies without work permit (in France a period of “moratorium” until 2014 still applies to EU-2 citizens). However, the Spanish government insists that Spanish migration policy will remain committed to the social inclusion of migrants, in particular of the gypsy community, and will be fully supportive decisions made by the European Commission.

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24 The Survey on “Attitudes towards immigration” by the CIS (Centro de Investigaciones Sociologicas) was undertaken between September and October 2008, with a sample size of 2,768. It was the result of a collaboration with the Ministerio de Trabajo e Inmigración (Secretaria de Estado de Inmigración y Emigración, the Dirección General de Integración de los Inmigrantes and OBERAXE (Observatorio Español del Racismo y la Xenofobia)).


Table 0.29. Immigrants with regular visa ("Tarjeta de Residencia") by gender and nationality, 2007-2009

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Source: Instituto Nacional de Estadística.

NOTE: The figures are published on 1st January every year; the figures for 2011 are treated as provisional. The total number of foreign-born estimated for 2011 (5,730,667) represents the 12.2% of the total population registered in the census.
Table 0.31. Immigrants with regular visa (“Tarjeta de residencia en vigor”) by age group and nationality (31-12-2008)

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Source: Anuario Estadistico de la Immigración, Ministerio de Trabajo e Immigración, Observatorio Permanente de la Immigración.
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Source: Anuario Estadístico de la Immigración, Ministerio de Trabajo e Immigración, Observatorio Permanente de la Immigración.
Table 0.33. Age composition of employment, Social Security contributions, 2007-2009

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<th>35-39</th>
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Source: Own elaboration, based on Anuario Estadístico de la Inmigración, Ministerio de Trabajo e Inmigración, Observatorio Permanente de la Inmigración.

Table 0.34. Employment composition of immigrants by sector of activity (%) and gender, Social Security records, 2009

| Total      | Agriculture | Construction | Manufacturing | Services | Agriculture | Construction | Manufacturing | Services | Agriculture | Construction | Manufacturing | Services |
|------------|-------------|--------------|---------------|----------|-------------|--------------|---------------|----------|-------------|--------------|---------------|----------|----------|
| **TOTAL**  | 0.9         | 13.9         | 10.6          | 74.5     | 1.3         | 22.6         | 13.9          | 62.1     | 0.4         | 1.9          | 1.7           | 8.3      | 88.1     |
| Bulgaria   | 3.1         | 13.5         | 11.8          | 71.5     | 3.9         | 21.3         | 14.1          | 60.6     | 1.9         | 1.7          | 8.3           | 10.5     | 86.6     |
| Rumania    | 2.2         | 20.4         | 14.3          | 63.1     | 3.0         | 33.9         | 18.2          | 44.9     | 1.1         | 2.4          | 9.2           | 5.7      | 87.4     |
| **EUROPEAN UNION** | 1.0 | 16.2 | 12.6 | 70.3 | 1.3 | 29.8 | 17.0 | 51.9 | 0.7 | 2.7 | 8.1 | 88.9 |
| (**LATIN AMERICA**) | 0.3 | 7.7 | 7.9 | 84.1 | 0.4 | 17.1 | 12.5 | 70.1 | 0.2 | 2.2 | 5.2 | 92.4 |
| (**AFRICA**) | 1.1 | 3.4 | 3.7 | 91.8 | 3.4 | 4.5 | 5.6 | 86.5 | 0.0 | 2.8 | 2.8 | 94.4 |
| (**ASIA**) | 0.3 | 8.7 | 6.3 | 84.7 | 0.2 | 15.1 | 7.6 | 77.1 | 0.4 | 2.6 | 5.1 | 91.9 |
| **LATAM** | 1.0 | 9.8 | 6.6 | 82.5 | 1.0 | 22.5 | 10.5 | 66.0 | 1.1 | 2.5 | 4.4 | 92.0 |
| Latvia     | 1.7 | 13.7 | 13.9 | 70.7 | 2.3 | 27.4 | 17.8 | 52.5 | 1.1 | 1.8 | 10.5 | 86.6 |
| Lithuania | 1.0 | 19.8 | 14.5 | 64.7 | 1.3 | 34.4 | 19.1 | 45.2 | 0.7 | 2.4 | 9.0 | 87.9 |
| Poland     | 0.5 | 9.7 | 7.9 | 81.8 | 0.9 | 19.3 | 10.7 | 69.1 | 0.3 | 2.4 | 5.8 | 91.5 |
| Slovakia  | 0.5 | 6.0 | 5.5 | 88.0 | 1.0 | 10.6 | 6.2 | 82.1 | 0.0 | 1.1 | 4.8 | 94.1 |
| Slovenia  | 1.3 | 14.4 | 11.3 | 73.0 | 1.7 | 23.5 | 14.4 | 60.4 | 0.7 | 2.2 | 7.3 | 89.8 |
| **AFRICA** | 0.6 | 16.7 | 13.7 | 69.6 | 1.0 | 31.5 | 18.9 | 48.7 | 0.4 | 3.2 | 8.9 | 87.5 |
| **LATIN AMERICA** | 1.8 | 21.3 | 16.5 | 60.4 | 2.2 | 26.8 | 19.2 | 51.8 | 0.7 | 3.0 | 7.5 | 88.8 |
| **AFRICA** | 0.5 | 12.2 | 8.0 | 79.3 | 0.8 | 22.6 | 11.4 | 65.2 | 0.2 | 1.5 | 4.5 | 93.8 |
| **LATIN AMERICA** | 0.2 | 2.5 | 7.2 | 90.1 | 0.3 | 3.2 | 10.1 | 86.5 | 0.1 | 1.7 | 4.2 | 94.0 |
| **ASIA** | 0.1 | 6.8 | 8.9 | 84.1 | 0.2 | 9.3 | 8.9 | 81.6 | 0.1 | 1.3 | 8.7 | 89.9 |
| **OCEANIA** | 0.3 | 7.3 | 8.7 | 83.7 | 0.4 | 9.7 | 10.6 | 78.3 | 0.0 | 2.6 | 5.1 | 92.3 |

Source: Own elaboration based on Anuario Estadístico de la Inmigración, Ministerio de Trabajo e Inmigración, Observatorio Permanente de la Inmigración.
### Table 0.35. Employment composition of immigrants by detailed sector of activity (%), Social Security records, 31/12/2009

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<th>Estonia</th>
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<th>Latvia</th>
<th>Lithuania</th>
<th>Poland</th>
<th>Slovakia</th>
<th>Slovenia</th>
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**Source:** Own elaboration based on the Anuario Estadistico de la Inmigración, Ministerio de Trabajo e Inmigración. Observatorio Permanente de la Inmigración.
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Source: Own elaboration based on the Anuario Estadistico de la Inmigración, Ministerio de Trabajo e Inmigración. Observatorio Permanente de la Inmigración.

27 Translation of occupations:
Ingenieros y licenciados jefes: Managers with engineering degree/5-year degree
Ingenieros técnicos y ayudantes: Engineering with 3-year degrees/assistant
Jefes administrativos: Administrative chiefs
Ayudantes no titulados: Assistants without a title
Oficiales administrativos: Officers
Subalternos: Assistants
Auxiliares administrativos: Clerks
Oficiales de 1ª y 2ª: Occupations within manufacturing and construction sectors (1 and 2 category)
Oficiales de 3ª: Occupations within manufacturing and construction sectors (3rd category)
Mayores de 18 años no cualificados: Over 18 years old without qualifications.
Trabajadores menores de 18 años: Workers of less than 18 years old

July 2011
4.5 Germany

Prior to the enlargement in 2004, Germany was expected to be the most affected country by post-accession mobility, due to the large pre-existing EU-8 resident population and its geographical proximity to the EU-8 countries, in particular the largest country, Poland. Although some estimates of the migration potential have proved broadly accurate in terms of total numbers of migrants to the EU-15, the shift towards the open access countries Ireland and the UK had not been fully anticipated. Germany maintained restrictions on labour market access for citizens of the EU-8 countries for the maximum period of 7 years and experienced only moderate new immigration from the EU-8 from 2004-2011. Germany also maintained restrictions on labour market access for EU-2 nationals since the 2007 enlargement. A new immigration law passed in 2005 provided more change in the access to the labour market for EU-8 and EU-2 citizens than the accessions themselves. The restrictive policies towards mobility from the EU-8 and EU-2 resulted in irregular outcomes, such as the misuse of the freedom of services and freedom of settlement/establishment. In the context of Germany’s rapid population ageing, lack of highly skilled professionals, and overall good economic shape with declining structural unemployment, less restrictive policies towards EU-mobility may benefit the economy.

Macroeconomic and labour market developments (2000-2010)

Germany is the largest economy in the EU. It is also the biggest European exporter, in particular of cars and machines. In recent years, Germany has enforced a set of major labour market and social system reforms called Agenda 2010. The aim of the restructuring was to boost economic growth and to lower unemployment rates in the long term (Deutsche Welle, 2003). The programme is believed to have been responsible for the subsequent success of the German economy, in particular the decrease of the high unemployment rate in the second half of the 2000s (Holland et al., 2010). Figure 4.40 illustrates the recent development of the unemployment rate in Germany.

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28 Any comments or queries related to section 4.4 of the report can be addressed to Pawel Paluchowski (p.paluchowski@niesr.ac.uk).
Germany experienced slow growth in the first half of the previous decade and was strongly affected by the economic crisis in 2009, when the economy shrank by 4.7 per cent. Figure 4.41 shows the annual GDP growth rates from 2001 to 2010. Overall, average growth over this period in Germany was less than 1 per cent per annum. However, the economic recovery in Germany has far outpaced much of the rest of the advanced world, and the most recent post-crisis trend gives hope for a better economic performance in the current decade.
A characteristic of the German economy is the persistent economic disparity between the former Federal Republic and the former German Democratic Republic. Following over 20 years of reunification, Germany is still characterised by a clear East-West divide. In the West, the salaries are higher and employment opportunities a lot better than in the five new states (Neue Bundesländer) in the East. The following graph illustrates the current inner-German economic disparities.

**Figure 0.42. East-West divide in Germany, 2009**

![Graph showing economic disparities in Germany](image)

Source: Federal Statistical Office Germany

A consequence of the economic disparities between East and West is the continuous internal migration trend towards the West. The East also attracts few foreign citizens, who tend to locate in the western regions of the country. Hence, the Eastern part of Germany is ageing more rapidly, exhibits a trend towards population decline and has a less diverse population than in the West.

**Developments before and after the enlargement**

In the accession year 2004, the German economy was ailing, in particular with regards to the unemployment rate which surpassed 10 per cent for the first time since its reunification. The high unemployment figures may have been one factor behind the decision of the German government to restrict access to its labour market for workers from the EU-8 countries.

By 2006, the situation of the German labour market had begun to improve. The unemployment rate was declining and GDP recorded its fastest rate of growth since 1991. The economy remained strong in 2007, but the global financial crisis brought...
Germany’s new found buoyancy to a standstill in 2008-9. Notwithstanding, the unemployment rate exhibited very little rise in response to the 4.7 per cent contraction in GDP in 2009.

Given the uncertainty of the outlook, the German government decided to extend restrictions on labour market access for EU-8 citizens into the final third phase of the transitional arrangements. The following statement (Bundesrepublik Deutschland, 2009) was transmitted to the Commission regarding this decision:

**Communication from the Federal Republic of Germany**

Re: Transitional arrangements for the free movement of workers from the new Member States following enlargement of the EU on 1 May 2004; communication to the European Commission under paragraphs 5 and 14 of the transitional arrangements

Germany hereby informs the Commission under paragraph 5 of the Free Movement section of Annexes V, VI, VIII, IX, X, XII, XIII and XIV of the Act of Accession of 16 April 2003 that it will continue to apply vis-à-vis the new Member States concerned national measures or measures resulting from bilateral arrangements in view of serious disturbances of its labour market or the threat thereof until 30 April 2011. Germany also announces that during this period it will make full use of the option granted in paragraph 13 to derogate from Article 49(1) of the EC Treaty in specific sensitive service sectors and to limit the temporary movement of workers throughout the Federal Republic of Germany.

The case of serious disturbances of the labour market or the threat thereof specified in the transitional provisions applies to Germany. There are both serious disturbances affecting Germany as a whole and very serious disturbances in particular areas, affecting the long-term unemployed, low-skilled workers and eastern Germany, in particular. There is also a danger that these labour market disturbances will become worse. It is therefore necessary to extend the transitional measures for reasons of labour market policy in particular. This decision has also been taken in consultation with the social partners, as recommended by the European Commission in its Communication of 18 November 2008 and required by the Council in its conclusions of 9 March 2009. The trade unions in particular have expressed their opposition to the complete opening of the market and employers’ representatives, such as the Zentralverband des Deutschen Handwerkes (Central German Craft Trades Association), have spoken out in favour of an extension.

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Continued use of the transitional arrangements does not mean, however, that all nationals of the relevant new Member States will inevitably be denied access to the German labour market or posting to Germany. German law permits access by or concessions for nationals of other countries, which are frequently used in practice and were once again extended on 1 January 2009. Extensive restrictions apply only to low-skilled jobs and therefore to the part of the labour market that is suffering the most serious disturbances, although even here there are no blanket restrictions.

Finally, Germany gives the Commission the requested general authorisation to grant access to this letter of notification.

**Impact of the global financial crisis**

The financial crisis and the subsequent recession had a significant adverse impact on the German economy. However, Germany has also experienced a relatively rapid recovery. By the first quarter of 2011 output had already returned to the level of its pre-crisis peak, supported by the trade recovery and strong exports to China and Russia. The unemployment rate increased slightly at the height of the recession, but currently stands more than a percentage point below its level at the beginning of 2008. Recent unemployment figures are the lowest since 1993. This is a phenomenon hardly to be seen in other countries – Figure 4.43 shows the unemployment rates in Germany, France and Italy.

**Figure 0.43. Unemployment rate in Germany, Italy and France**

![Unemployment rate in Germany, Italy and France](image)

Source: NiGEM database and NIESR forecasts

The German labour market “miracle” results from two factors. The first relates to the German anti-crisis policy encompassing: extension of the short time work scheme,
less paid overtime, the reduction of positive balances on working-time accounts. The second factor concerns a series of Hartz reforms, implemented between 2003 and 2005, aimed at generating greater incentives for the unemployed to seek work, and relaxing regulations for firms that want to create jobs.

**Outlook**

As of mid-2011, the German economy appears to be on a relatively strong footing. Unemployment is low and growth steady, and public finances are in a sustainable position. However, there are some challenges ahead. Germany will face rapid and severe population ageing, in particular in the East and in rural areas. The increasing age-dependency ratios will put a large strain on the pension and health care systems. Increased immigration, with particular focus on highly-skilled migration and labour gap filling, are being discussed as a potential measure to alleviate the demographic and economic pressure of population ageing.

**Institutional setting for labour migration**

Germany has an ambivalent attitude towards immigration. During the “economic miracle” (*Wirtschaftswunder*) in the 50s and 60s, Germany recruited hundreds of thousands of foreign workers from mainly Southern Europe (including Turkey) to fill labour shortages. These workers were expected to stay only temporarily and return to their home countries once their work was done. However, many of these workers settled in Germany with their families.

Germany has undergone a large number of territorial changes over the last century, particularly before and after the Second World War, and large numbers of ethnic Germans live in neighbouring countries of Central and Eastern Europe. Germany regards itself as the home nation for all ethnic Germans, and this heritage concept of migration – the *ius sanguine* – led to a mass influx of ethnic German repatriates (*Spätaussiedler*) from Central and Eastern Europe, especially after emigration restrictions were lifted in these countries at the end of the 1980s and early 1990s. Ethnic German immigrants were instantaneously granted German citizenship, whilst grandchildren of Turkish immigrants may still be conceptualised as foreigners. Current issues with integration can be traced back to this heritage concept of nationality (Fellmer and Kolb, 2009).

Germany has been very reluctant to review and change its approach towards immigration and integration. Germany has only recently, after 60 years of mass immigration, implemented the first immigration law in 2005.

At present, Germany requires foreign workers to fill labour shortages in some sectors and to alleviate the effects of population ageing (Boswell and Straubhaar, 2005).
However, the new immigration law is still very restrictive. The restrictions and regulations do not apply to EU-15 citizens (and as of 1 May 2011 EU-10 citizens) as they are granted full access to the German labour market. Apart from Austria, Germany was the only country to decide to restrict its labour market to EU-8 citizens for the maximum duration of 7 years (2+3+2) up until 30 April 2011. Restrictions also apply in the case of EU-2 countries. By the end of this year the government must decide whether it intends to maintain these restrictions for a further two years, until 31 December 2013.

For the duration of the transitional restrictions, the access of EU-8 and EU-2 nationals to the German labour market is regulated by bilateral agreement. The legal framework after accession involves the following (Fellmer and Kolb, 2009):

- Germany has contingents for temporary guest workers in certain sectors. This is for example extensively used in the agricultural sector, in which mainly Polish workers help to relieve labour shortages during harvest time.

- Engineers from EU-8 and EU-2 countries have full access to the German labour market.

- Citizens from the EU-8 and EU-2 are allowed to settle in Germany if they establish their own business (freedom of settlement/establishment) since restrictions can apply only to employees.

Generally, the post accession situation of citizens from EU-8 and EU-2 does not differ hugely from the situation before enlargement (Fehrenbacher, 2004). The adoption of the new immigration law provided a bigger change than the accession. The following changes to the immigration regulations affected EU-8 and EU-2 nationals (Fellmer and Kolb, 2009):

- Highly skilled workers, who were offered a job in Germany, may be granted a permission to work. The term highly skilled workers refers here to senior scholars, academic teachers, and top-level managers in business and industry with a salary of more than € 86,400 p.a. (later lowered to € 63600 p.a.)

- After graduating in Germany, foreign students are allowed to stay in Germany for a year to search for a permanent position. If the search is successful, the graduates are granted a residence permit.

- Qualified workers can gain permission to work if this is in accordance with a regional, economic or labour market interest.
The freedom of services allows transnational companies to post workers from other countries. Exceptions apply in certain branches.

Since the new German migration law generally restricts the inflow of low and non-qualified labour (Storr and Albrecht, 2005), the above mentioned regulations constitute alternative channels of access to the labour market. They have been the subject to extensive misuse.

**Irregularities**

Irregular labour market access can be mainly traced back to the misuse of the freedom of services and the freedom of settlement/establishment. These two channels can be used to employ low and non-skilled workers despite the restrictions.

According to the freedom of services, workers from the EU-8 and EU-2 can be transferred between countries within a company which acts on a transnational scale. Exceptions apply to certain sectors such as construction. The Posted Workers Act (*Arbeitnehmer-Entsendegesetz*) rules that the salaries and the working conditions of foreign workers must generally equal the ones of the native workers. In several cases, employees from EU-8 and EU-2 countries however did work for lower wages and under worse conditions than natives. To tackle wage dumping, Germany has enforced minimum wages in the restricted sectors and is currently drafting a law to also introduce a minimum wage in the temporary worker sector.

Some companies misused the freedom of services channel by establishing ‘letterbox’ companies in EU-8 and EU-2 countries, so they could circumvent the transitional regulations and hire cheaper labour from the EU-8 and EU-2 (Bundesministerium der Finanzen, 2006).

The freedom of settlement/establishment allows citizens from the EU-8 and EU-2 to work in Germany if they are self-employed. The unwanted outcome of this regulation was that many workers, especially in construction, were hired by companies but registered as self-employed. These so-called self-employed workers did not have to pay into the unemployment and pension insurance systems and could offer their work at significantly lower wages (Fellmer and Kolb, 2009).

Potential misuse could also stem from the freedom of movement. Citizens of EU-8 and EU-2 countries are allowed to visit (and under some circumstances to settle in) all EU countries without a visa but would require a working permit for countries with transitional arrangements if they wished to engage in employment. Due to this circumstance, it would be an easy endeavour for an EU-8/EU-2 citizen to enter Germany legally and to take up employment illegally. It is most likely that
overstaying accounted for the largest proportion of irregular flows into Germany after accession (Düvell, 2009).

Engbersen, Snel and de Boom (2010) argue that mobility patterns in the EU have changed after accession and that the movement of EU-8 and EU-2 nationals can be described as liquid migration which comprises short-term and circular movements. These may range in a grey area between legality and illegality. This observation ties in with the German example of unexpected outcomes in which legal pathways of entry have been the subject of misuse.

**Consequences**

It can be argued that the 2005 immigration law is not competitive enough and fails at attracting highly skilled migration. The enforcing of transitional arrangements had a redirecting effect on the mobility from the EU-8 and EU-2. Before EU-enlargement, Germany has been the main destination of workers from Central and Eastern Europe. As the UK and Ireland opened their labour markets to EU-8 citizens immediately upon accession, these countries experienced the largest inflows from these countries.

**Migration trends**

**Data on mobility and foreigners**

Data in this section was obtained from the Federal Statistical Office, Eurostat and the Labour Force Survey. All migration data from the Federal Statistical Office and Eurostat is based on information from the central register of foreigners (Auszänderzentralregister). In Germany, all individuals, Germans as well as foreigners, are obliged by law to register their permanent residence. Additionally, foreigners are required to register with the before mentioned central register of foreigners which collects a variety of personal information, e.g. on earnings, basic socio-demographic profile and the administration process. Hence, German data on international and internal mobility of the population is relatively detailed and reliable compared to countries such as the UK, which have to estimate the number of foreigners with the use of complex statistical procedures and rely on the census data to determine internal mobility patterns.

Due to confidentiality, the access to data can be restricted or limited. Basic macro-data on migration can be accessed freely. In cases where cross-tabulation cell counts are low, the exact count will not be made available. Micro-data can only be accessed in anonymised form and requires a contract with the Federal Statistical Office Germany.
Data material obtained from the Labour Force Survey has to be treated with caution. As it is sample based, some minorities might have small counts and thus the estimated figures may be unreliable due to large confidence bands.

**The extent of migration**

Germany’s foreign population extents to 8.2 per cent of the total population, making it the EU country with the largest total number of foreigners. Almost 20 per cent of the population has a migratory background. Individuals count as persons with a migratory background if they are a foreign national, are born outside Germany, or a German national who has at least one parent who is a foreign national or who migrated to Germany after 1949. The overwhelming majority of the foreign population (and population with a migratory background) originates from Europe if Turkey is included. The following pie chart (Figure 4.44) illustrates the shares of foreign populations.

![Figure 4.44. Foreign population in Germany, 1 January 2010](chart)

Source: Eurostat Population Statistics

On 1 May 2011, Germany had to abolish all forms of mobility restrictions for citizens from EU-8 countries. As there already exist large communities of EU-8 nationals, the abolishment might lead to increased migration. However, the mobility streams have been diverted to other countries, and at least part of this diversion is likely to prove permanent. The largest group of foreign citizens from the EU-10+2 is from Poland which accounts for 0.5 percent of the total population in Germany or about 6 per cent of the foreign population. Other large EU-10+2 communities are Romanians (0.13 per cent), Hungarians (0.08 per cent of total population), and Bulgarians (0.08 per cent).
Recent migration trends are characterised by a lower net migration rate than in the previous decades (pre-2000). Partly, this is due to the restrictive policies in Germany as compared to other EU-15 countries. Recently, without the net migration gains from the EU-8 and EU-2, Germany’s net migration rate would have been indeed negative. The following graph illustrates the development of the net migration rate in Germany since reunification.

**Figure 0.45. Net migration rate in Germany**

![Graph showing net migration rate in Germany](image)

Source: Federal Statistical Office Germany

The low net migration rate is also due to the circumstance that German migration exhibits a high “turnover”. Although the net flows are not immense, the mobility between Germany and the EU-8 and EU-2 countries is significant but high rates of emigration conceal this fact. This circumstance is illustrated in the graph below.
Figure 0.46. Migratory movements between Germany and EU-8/EU-2

The number of moves between Germany and the EU-8 and EU-2 has to be analysed with a pinch of salt. First, the German central register does only count moves, not the moving individuals themselves. Hence, it is possible that a mobile worker enters Germany more than once a year, and would count as multiple migrants. Second, the number of moves also does not specify the nationality of the moving individual. Thus, it cannot be said with certainty what the nationality of the moving individuals is. However, the figures for the annual stocks of foreigners from EU-8 and EU-2 countries suggest that the data for moves between Germany and these countries mainly captures mobility of EU-8 and EU-2 nationals. Hence, it can be assumed that there exists a large circular mobility between Germany and the EU-8 and EU-2 countries. This is especially true for Poland. Circular mobility is thereby the result of several factors. Poland has the largest population of the EU-10+2 countries and also a large community of expatriates living in Germany, shares a border with Germany and has a long history of short work schemes.

Although the total stock of foreign population decreased during the last decade, the stock of EU-8 and EU-2 citizens in Germany increased. The annual growth rates of the foreign population are significantly higher in the post-accession period than in the years before. The bump in the year 2005 might be due to a temporary diversion of mobility towards open-access labour markets in the EU-15 in 2004/05, in particular in the UK. The following graph illustrates these developments.
Figure 0.47. Annual growth rates of foreign population in Germany

![Annual growth rates of foreign population in Germany](image)

Source: Eurostat

The EU enlargement and the adoption of the new immigration law in 2005 made it easier for EU-8 and EU-2 citizens to acquire German citizenship. This is reflected in higher numbers of German citizenship acquisition. Hence, the German figures for the change in stocks of citizens from the EU-8 and EU-2 are slightly damping the true number of inflows from these countries. The UK for example has only recently experienced large inflows from EU-8 and EU-2 countries and thus, the naturalisation rate will be low. Especially as new forms of post-accession mobility are characterised by shorter stays in the host country.

Figure 0.48. Acquisitions of German citizenship

![Acquisitions of German citizenship](image)

Source: Federal Statistical Office Germany
Although the figures generally indicate a strong growth trend of stocks of EU-8 and EU-2 nationals residing in Germany after the accession, the figures have to be interpreted from a European perspective. Compared to other countries in Europe, the increase in stocks of citizens from EU-8 and EU-2 countries was rather moderate which is due to the restrictive transition policy implemented by the German authorities. This circumstance is reflected in the following chart.

**Figure 0.49. Proportion of foreign residents from the EU-10+2 to total foreign population in the EU-15 and Germany**

The graph documents that Germany had a high share of foreigners from the EU-10+2 already before the enlargement. Germany has still a comparably high share of citizens from EU-10+2 countries but citizens of Bulgaria and Rumania have been more likely to move to other destinations in the EU, where they do not face such stringent restrictions.

Before the enlargement, more than 20 studies estimated the migration potential from EU-8 and EU-2 countries. Most projections used a multivariate econometric estimation approach such as Alvarez-Plata et al. (2003), Boeri and Brücker (2001), Dustman et al. (2003) and Sinn et al. (2001). These projections assume that mobility is driven by the economic disparities but they vary in the consideration of cultural, linguistic and geographical factors.

Most studies projected a 3 to 5 per cent emigration potential from EU-10+2 countries to the EU-15 which has been generally estimated correctly. However, the estimations did not predict the redirection of migration streams from Germany and Austria to the UK and Ireland and thus, highly overestimated the inflow of EU-8 nationals to
Germany. This is mainly due to the methodological problem that the prognoses cannot take into account institutional factors in third countries.

The shift of migration away from Germany is illustrated by the table below which outlines current EU-8 net migration to Germany and the EU-15 shortly before and after the enlargement.

Table 0.37. Net migration from the EU-8

<table>
<thead>
<tr>
<th>Year</th>
<th>EU-15</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>130661</td>
<td>18507</td>
</tr>
<tr>
<td>2002</td>
<td>5770</td>
<td>13282</td>
</tr>
<tr>
<td>2003</td>
<td>-97137</td>
<td>14308</td>
</tr>
<tr>
<td>2004</td>
<td>81852</td>
<td>-41862</td>
</tr>
<tr>
<td>2005</td>
<td>242190</td>
<td>42844</td>
</tr>
<tr>
<td>2006</td>
<td>333601</td>
<td>43406</td>
</tr>
<tr>
<td>2007</td>
<td>358985</td>
<td>29294</td>
</tr>
<tr>
<td>2008</td>
<td>208129</td>
<td>13094</td>
</tr>
<tr>
<td>2009</td>
<td>52472</td>
<td>8966</td>
</tr>
<tr>
<td>2010</td>
<td>247583</td>
<td>569444</td>
</tr>
</tbody>
</table>

Source: Baas and Brücker (2010)

A recent estimation of the migration potential to Germany by Baas and Brücker (2010) projects an increase of 350,000 (low scenario) to 900,000 (high scenario) of the EU-8 population in Germany by 2020. The following table illustrates their projected net migration figures.

Table 0.38. Prognosis of net migration from EU-8

<table>
<thead>
<tr>
<th>Year</th>
<th>EU-15</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>223667</td>
<td>134200</td>
<td>100650</td>
<td>51444</td>
</tr>
<tr>
<td>2012</td>
<td>202332</td>
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<td>91050</td>
<td>46536</td>
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<tr>
<td>2013</td>
<td>183365</td>
<td>110019</td>
<td>82514</td>
<td>42174</td>
</tr>
<tr>
<td>2014</td>
<td>165623</td>
<td>99374</td>
<td>74531</td>
<td>38093</td>
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<td>2015</td>
<td>150765</td>
<td>90459</td>
<td>67844</td>
<td>34676</td>
</tr>
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<td>2016</td>
<td>138052</td>
<td>82831</td>
<td>62123</td>
<td>31752</td>
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<td>2017</td>
<td>126394</td>
<td>75837</td>
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<td>29071</td>
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<td>2018</td>
<td>115727</td>
<td>69436</td>
<td>52077</td>
<td>26617</td>
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<tr>
<td>2019</td>
<td>105994</td>
<td>63596</td>
<td>47697</td>
<td>24379</td>
</tr>
<tr>
<td>2020</td>
<td>97135</td>
<td>58281</td>
<td>43711</td>
<td>22341</td>
</tr>
</tbody>
</table>

Source: Baas and Brücker (2010)
As can be seen, the high scenario assumes a rise in net migration from the EU-8 as compared to other EU-15 countries. This reflects the favourable economic developments, in particular in comparison to the UK and Ireland, as well as the abolishment of restrictions in May 2011.

On the other hand, network effects and the growing importance of English in the EU-8 countries might suggest that Germany will not see a return to high shares of immigration from the EU-8 and that current mobility pattern in the EU will be relatively persistent. This potential trajectory is reflected in the low migration scenario.

**Demographic characteristics of EU-8 and EU-2 citizens**

Traditionally, immigration to Germany has been primarily among low-skilled workers. However, there exist large differences between the groups of nationalities. The EU-8 and EU-2 nationals in Germany exhibit a similar and in some cases even higher education profile than the native population but also higher unemployment rates.

Foreigners in Germany exhibit a younger age profile than Germans which is shown in the figure below.

**Figure 0.50. Working age (15 to 64) share of EU-8 and EU-2 citizens in Germany in 2010**

Source: Eurostat Population Statistics
Almost 90 per cent of the EU-8 and EU-2 citizens are aged 15 to 64. Hence, EU-8 and EU-2 nationals should lower the current fiscal burden. They support the high proportion of German pensioners with tax payments and health insurance contributions.

It is striking that EU-8 and EU-2 nationals exhibit a younger age structure than EU-15 citizens or foreigners in general. Thus, the inflow of citizens from the EU-8 and EU-2 has a rejuvenating effect on the German demography.

**Table 0.39. Age structure of EU-8 and EU-2 nationals in Germany**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>EU-27 EU-8</th>
<th>Germany EU-8</th>
<th>Germany EU-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>9.1%</td>
<td>11.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td>15-24</td>
<td>14.0%</td>
<td>17.2%</td>
<td>10.3%</td>
</tr>
<tr>
<td>25-34</td>
<td>35.7%</td>
<td>36.6%</td>
<td>29.4%</td>
</tr>
<tr>
<td>35-44</td>
<td>27.3%</td>
<td>31.7%</td>
<td>36.8%</td>
</tr>
<tr>
<td>45-64</td>
<td>7.1%</td>
<td>2.9%</td>
<td>10.9%</td>
</tr>
<tr>
<td>65+</td>
<td>6.8%</td>
<td>0.6%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey

In comparison to the foreign population from the EU-8 and EU-2 in the entire European Union, EU-8 and EU-2 nationals in Germany exhibit a significantly older age profile. The largest age group of EU-8 and EU-2 nationals in Germany is aged 35-44 years while in the EU as whole, the largest age group is constituted by the 25 to 34 years old. This difference reflects the relative importance of the pre-accession migration from the EU-8 and EU-2 countries to Germany and the shift of recent mobility patterns towards other destinations within the EU-15, in particular the UK and Ireland for EU-8 nationals and Spain and Italy for EU-2 citizens. Another striking fact is the prominence of EU-2 nationals in Germany who are aged 15-24 years. This number reflects the high attractiveness of Germany to students from Romania and Bulgaria.

As post-accession mobility from EU-8 and EU-2 shifted away from Germany to other destinations, it is unsurprising that the majority of nationals from EU-8 and EU-2 countries has been living in Germany already prior to the enlargement in 2004 (and 2007). This circumstance is outlined by the following table.
Table 0.40. Duration of stay, EU-8 and EU-2, 2009

<table>
<thead>
<tr>
<th>Duration of stay</th>
<th>EU-27</th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EU-8</td>
<td>EU-2</td>
<td>EU-8</td>
<td>EU-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 year</td>
<td>7.1%</td>
<td>4.5%</td>
<td>8.7%</td>
<td>17.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 years</td>
<td>13.1%</td>
<td>7.8%</td>
<td>6.2%</td>
<td>3.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 years</td>
<td>13.1%</td>
<td>9.0%</td>
<td>7.4%</td>
<td>5.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 years</td>
<td>12.0%</td>
<td>9.5%</td>
<td>6.6%</td>
<td>13.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years</td>
<td>8.9%</td>
<td>10.4%</td>
<td>6.0%</td>
<td>6.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 years</td>
<td>4.5%</td>
<td>11.9%</td>
<td>4.0%</td>
<td>5.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7+ years</td>
<td>41.3%</td>
<td>46.9%</td>
<td>61.2%</td>
<td>49.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Labour Force Survey

As the table outlines, over 60 per cent of EU-8 nationals in Germany have lived in the country for 7 or more years. The figures might be higher than in the European as a whole also due to the relatively restrictive citizenship law in Germany. Although almost 50 per cent of the EU-2 population in Germany has lived there for 7 years or longer, a significant proportion of EU-2 nationals is more recent arrivals. Strikingly, 17.4 per cent of the EU-2 nationals have been in Germany for only 1 year as of 2009. The comparably large extent of recent arrivals from Romania and Bulgaria hints at an effect of the accession on EU-2 mobility to Germany.

Citizens from the EU-8 and EU-2 are more likely to be female than nationals, especially if they are of working age. For both country groups, EU-2 and EU-8, there are more women than men. This circumstance is likely to be due to the demand for health, caring and nursing professions which traditionally exhibit higher female proportions. The following graph provides an overview of gender balances for different age and nationality groups in 2010.

Figure 0.51. Gender balances in Germany by age group and nationality

Source: Eurostat Population Statistics
By contrast, residents in Germany from other EU-15 countries tend to be male. This could be due to the high demand for foreign workers in professions which can be ascribed to the demand in health and cleaning sectors which are traditionally more female dominated.

**Figure 0.52. Population size of male and female Polish citizens in Germany**

The above figure shows the growth of the Polish population – by far the largest group of foreigners from the EU-10+2 in Germany – divided into female and male. It is striking that a former male dominance in the 1990s turned into a slight female majority by 2003.

Although recent net migration of females from EU-8 and EU-2 countries is overall slightly higher than that of males, males exhibit a higher mobility. This circumstance is illustrated in the following figure.
Figure 0.53. Migratory movements between Germany and the EU-8/EU-2 according to gender (2007-2009)

Number of moves

Source: Federal Statistical Office Germany

Males from EU-8 countries generally exhibit a higher count of moves but since their return migration is also higher, the net migration of females was higher. In the case of EU-2 states, the net migration was slightly higher for males from 2007-2009.

The unemployment figures for citizens from the EU-8 and EU-2 are slightly higher than for the native population. However, it is difficult to distinguish the differences between pre-accession and post-accession arrivals. Moreover, due to small sample sizes, the data for the EU-2 and EU-8, which are taken from the Labour Force Survey, have to be interpreted with caution.

The figure below highlights that EU-2 citizens in Germany exhibit a similar unemployment rate to the German average. The unemployment rate of EU-8 citizens is clearly lower than that of all foreigners but higher than the overall German figure.
The economic activity of EU-8 and EU-2 nationals is characterised by a high degree of entrepreneurship. Registering as self-employed is often used as an effective method to bypass labour access restrictions. In 2005, EU-8 nationals in Germany have registered almost 11000 craft enterprises. The registrations are concentrated in urban agglomerations and regions with a high GDP per capita (Untied et al., 2007).

Data from the Labour Force Survey (refer to tables at the end of the case study) suggests that EU-8 nationals in Germany have had a higher proportion of highly skilled than the native population and foreign nationals from the EU-15 but lower skilled than foreign citizens from other continents. EU-2 nationals exhibited a slightly lower education profile than the native population. Comparably high proportions of EU-8 and EU-2 nationals in Germany can be found in the agriculture (EU-8), construction and accommodation and food sectors. EU-2 nationals feature very strongly in the administration sector. EU-8 and EU-2 nationals are more likely than natives to be employed as service workers and shop and market workers, craft and related workers, as well as employees in elementary occupations.

A recent study by Brenke, Yuksel and Zimmermann (2010) confirms the findings of the descriptive section. Based on more comprehensive, but less accessible microcensus data from the Federal Statistical Office Germany, the researchers find that the Eastern part of Germany is very unattractive to recent EU-8 nationals, which was already indicated by data for foreigners as a whole. EU-8 nationals tend to be
employed in low-paid jobs, to be about 23 per cent less likely to be employed than natives, to be 15 per cent more likely to be self-employed than natives, and to receive the lowest average wage apart from non-EU nationals.

The study also shows that there exist significant differences in the labour market between performances of pre-accession EU-8 and recent EU-8 migrants. Post-enlargement arrivals from the EU-8 receive lower wages and are more likely to be unemployed than earlier EU-8 arrivals.

**Country-specific issues**

Germany will have to face the challenge of a shrinking and rapidly ageing population. A return to higher net migration rates is discussed to be one of the potential measures to counter the negative effects associated with population ageing.

In recent years, there has been a heated debate around issues of migration in Germany with particular emphasis on migration from Muslim countries. In Germany, which is home to a large Turkish community, the potential accession of Turkey is approached with some scepticism.

Despite a few attempts such as the introduction of visas for graduates, German employers continue to point out that Germany lacks an immigration which would facilitate the attraction of highly-qualified foreigners. This has spurred a debate for the introduction of a more competitive and transparent points-based system.

**Impact of migration on the economy**

Several previous studies have simulated the economic impact of the post-enlargement mobility to Germany yet before the accession. The interest in such studies can be partly explained by the large estimated number of post-accession migration to Germany which might analogically suggest a high impact on the labour market.

In earlier studies, Zimmermann (1993) shows that immigration to Germany has a negative effect on wages of natives, in particular for blue-collar workers. Only employees aged below 20 would see a rise in their wages due to immigration. On the other hand, Pischke and Velling (1994) show that there are no effects on unemployment when controlling for endogeneity. Winter-Ebmer and Zimmermann (1998) conclude that immigration has no significant effect on unemployment, wages or growth. DeNew and Zimmermann (1996) demonstrate that migrants, in particular the highly qualified, have a positive impact on the development of wages. The study of Heijdra et al. (2002) finds a positive effect of the enlargement and subsequent
migration on GDP (+0.33 per cent annually) and wages (between 0.26 to 0.34 per cent).

The German Institute for Economic Research DIW (Deutsches Institut für Wirtschaftsforschung) simulated that an inflow of 1 per cent of the total population would lead to an increase of 0.5 per cent of GDP and a decrease of 0.5 per cent in the average wage per capita. The unemployment rate would be simulated to increase by 0.1 per cent points (Brücker, 2003).

In 2010, there have been 196,000 more foreign citizens from the EU-10+2 than before the accession in 2003. This would translate into a 0.25 per cent increase in the total population. According to the simulation results of the DIW, the impact of post-accession EU mobility from 2004 to 2010 would have been equivalent to a 0.13 per cent increase in GDP, a decrease in the average wage of 0.13 per cent and an increased unemployment rate of 0.025 percentage points. Translated into annual effects, the impact is very small.

Following the enlargement, Untiedt et al. (2007) have conducted an extensive study for the German Ministry of Economy and Technology and specifically analysed the economic impact of post-enlargement migration on Germany. The study finds high welfare gains from capital flows and trade. Moreover, the study finds that the German GDP would experience growth of 0.3 percentage points (1.33 per cent) more in case of an abolition of the restrictions on free movement for EU-8 nationals than in the continuation of the restrictions. Employment would increase by 1.6 per cent. If restrictions were lifted for EU-2 nationals, the effects would be even larger. GDP would increase by 1.44 per cent and employment by 1.76 per cent. However, the lifting of restrictions for Eu-8 and EU-2 would have a negative impact on wages as it would reduce the growth of wages from 0.78 per cent to 0.55 per cent (EU-8) and 0.49 per cent (EU-8 and EU-2). Untiedt et al. (2007) also estimate that lifting the restrictions would slow the reduction of the unemployment rate from 0.64 percentage points to 0.48 percentage points or 0.39 percentage points respectively. The study finds that positive labour market effects due to changes in the sector structure and concludes that enlargement generated benefits for the industry and construction sector but losses for the agriculture sector. The services sector would especially profit with an abolishment of restrictions on free movement.

In their study, Baas and Brücker (2010) estimate the macro-economic effects of open labour markets in 2011 for three different migration scenarios. They estimate an increase of GDP per capita by 0.04 (low migration scenario), 0.09 (medium), and 0.2 (high) per cent. They expect wages to decrease by 0.15 (low), 0.28 (medium) and 0.4 per cent and the unemployment rate to rise by 0.07 (low), 0.14 (medium) and 0.2 (high) per cent. The researchers find that migration from the EU-8 will change the
The impact of enlargement and the functioning of the transitional arrangements

Labour mobility within the EU

sectoral structure. The sectoral effects are estimated to be between 0.27 to 1.41 per cent change relative to the basis scenario.

The analysis of Brenke, Yuksel and Zimmermann (2010) suggests that recent EU-8 workers are unlikely to compete with German citizens as they replace workers from outside the EU in low-skilled jobs. Less restrictive policies could help attracting high-skilled workers from EU-2 countries which are needed in the current situation of skilled labour shortages in Germany. Better labour market integration would also increase benefits from post-accession EU mobility.

This is already the case for nationals from the EU-8 since Germany had to grant them open access to the labour market from 1 May 2011. However, the restrictions for EU-2 citizens could be potentially extended up until 31 December 2013.

**Outlook**

On 1 May, Germany had to lift its labour market restrictions for EU-10 citizens. On one hand, the good economic situation and the pre-existence of large diasporas from EU-8 and EU-2 countries in Germany has the potential to trigger large EU-10 inflows to Germany.

On the other hand, the recent diversion of mobility towards other EU-15 countries might proof to be a persistent social phenomenon due to more recently emerged mobility and employment networks which influence the decision making and the actual mobility process of future migrants. Reliable predictions of future mobility trends cannot be made and it is yet to be seen whether the opening of the German labour market to EU-8 nationals will lead to an increased inflow from nationals from these countries.

Judging from past political events in Germany and the wait-and-see attitude of the current government and the public towards further immigration, Germany is likely prolong the transitional arrangements for EU-2 citizens for 2 more years.

However, following the abolishment of free movement restrictions for EU-8 nationals, the German government has mainly emphasized on the potential benefits for Germany. Whether potentially good experiences with a less restrictive approach in the case of EU-8 mobility and the needs of the German economy can bring an attitude change towards EU-2 mobility, remains to be discovered.
<table>
<thead>
<tr>
<th></th>
<th>ISCED 0</th>
<th>ISCED 1</th>
<th>ISCED 3c (&lt;2 yrs)</th>
<th>ISCED 3c (&gt;2 yrs)</th>
<th>ISCED4A,4B</th>
<th>ISCED 4c</th>
<th>ISCED 5b</th>
<th>ISCED 5a</th>
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<td>9.9</td>
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<td>12.7</td>
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<td>10.2</td>
<td>5.3</td>
<td>16.3</td>
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<td>2.0</td>
<td>11.2</td>
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</tr>
<tr>
<td>NEAR MIDDLE EAST</td>
<td>17.5</td>
<td>26.1</td>
<td>0.0</td>
<td>23.4</td>
<td>4.2</td>
<td>1.8</td>
<td>9.5</td>
<td>0.5</td>
</tr>
<tr>
<td>EAST ASIA</td>
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<td>10.6</td>
<td>0.0</td>
<td>34.5</td>
<td>0.9</td>
<td>1.6</td>
<td>33.7</td>
<td>2.2</td>
</tr>
<tr>
<td>SOUTH S-EAST ASIA</td>
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<td>21.8</td>
<td>0.0</td>
<td>21.3</td>
<td>3.7</td>
<td>2.0</td>
<td>11.9</td>
<td>0.8</td>
</tr>
<tr>
<td>NORTH AMERICA</td>
<td>2.9</td>
<td>12.5</td>
<td>0.0</td>
<td>26.7</td>
<td>11.4</td>
<td>2.7</td>
<td>35.7</td>
<td>3.1</td>
</tr>
<tr>
<td>CENTRAL AMERICA</td>
<td>10.0</td>
<td>10.5</td>
<td>0.0</td>
<td>29.4</td>
<td>4.5</td>
<td>1.5</td>
<td>23.1</td>
<td>0.0</td>
</tr>
<tr>
<td>SOUTH AMERICA</td>
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<td>0.0</td>
<td>38.0</td>
<td>4.9</td>
<td>4.7</td>
<td>19.7</td>
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<tr>
<td>AUSTRALIA OCEANIA</td>
<td>17.9</td>
<td>35.1</td>
<td>0.0</td>
<td>17.1</td>
<td>3.1</td>
<td>0.0</td>
<td>10.7</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5.2</td>
<td>16.9</td>
<td>0.5</td>
<td>42.0</td>
<td>4.6</td>
<td>6.5</td>
<td>10.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey
Table 0.42. Sectors of employment in Germany, 2008, per cent of respective nationality group, Nace (rev. 2) classification

| Sector          | A  | B  | C  | D  | E  | F  | G  | H  | I  | J  | K  | L  | M  | N  | O  | P  | Q  | R  | S  | T  | U  |
|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| German          | 1.8| 0.3| 20.2|0.9|0.6|6.5|13.5|4.8|3.0|3.4|3.4|0.6|5.1|4.5|7.9|6.5|11.8|1.4|3.4|0.5|0.1|
| EU15            | 1.1| 0.4|25.0|0.2|0.5|5.4|11.2|4.6|13.1|2.8|2.7|0.2|4.2|6.5|2.3|5.1|7.9|2.2|3.8|0.5|0.4|
| EU-10           | 2.3| 0.0|18.3|1.0|0.3|12.3|9.5|6.8|10.2|2.8|1.0|1.0|5.3|7.1|1.0|4.4|8.2|1.5|3.2|3.6|0.3|
| EU-2            | 0.0| 0.0|10.3|0.0|0.0|9.4|11.6|3.7|12.8|4.8|2.2|2.7|1.9|17.3|1.8|10.8|4.7|1.7|1.7|2.5|0.0|
| EFTA            | 10.7|0.0|28.4|0.0|0.0|0.0|16.3|0.0|6.1|14.1|8.0|0.0|6.0|3.0|0.0|0.0|0.0|7.4|0.0|0.0|
| OTHER EUROPE    | 0.6| 0.5|28.4|0.3|0.9|10.1|14.4|6.1|8.0|1.9|1.1|0.2|2.1|9.8|1.2|2.6|6.9|0.9|3.1|0.8|0.0|
| NORTH AFRICA    | 0.0| 0.0|12.3|0.0|0.9|3.8|21.5|8.2|14.9|2.6|1.2|0.0|2.0|15.4|2.7|6.6|6.4|1.5|0.0|0.0|0.0|
| OTHER AFRICA    | 4.5| 0.0|20.1|0.0|2.4|0.0|13.0|5.8|16.9|3.0|0.0|6.3|0.0|8.9|2.8|3.0|11.6|0.0|1.7|0.0|0.0|
| NEAR MIDDLE EAST| 0.0| 1.3|15.7|0.0|0.0|4.1|11.2|10.6|14.5|3.8|0.0|0.0|3.2|16.2|0.6|1.1|12.1|0.5|2.4|2.6|0.0|
| EAST ASIA       | 0.0| 0.0|7.4|0.0|0.0|1.6|18.2|6.8|14.1|5.6|0.0|0.0|10.8|2.5|1.4|9.9|12.0|6.5|1.8|1.5|0.0|
| SOUTH S-EAST ASIA| 0.0| 0.0|18.3|0.0|0.0|0.8|19.7|3.3|26.5|4.2|1.1|0.8|0.8|6.8|0.7|2.4|8.3|1.2|2.3|2.9|0.0|
| NORTH AMERICA   | 0.0| 0.0|13.1|0.0|1.1|2.2|4.9|8.9|0.0|8.4|2.1|0.0|9.4|12.1|2.0|13.9|10.7|0.0|1.4|0.0|9.9|
| CENTRAL AMERICA | 0.0| 0.0|0.0|0.0|0.0|0.0|22.4|0.0|15.6|4.5|6.9|0.0|0.0|12.8|6.0|9.9|14.5|0.0|0.0|7.4|0.0|
| SOUTH AMERICA   | 0.0| 0.0|7.0|0.0|0.0|3.4|9.7|0.0|16.9|16.9|1.6|0.0|2.6|7.4|0.0|10.7|10.9|2.7|3.8|3.2|3.6|
| AUSTRALIA OCEANIA| 6.2| 0.0|18.4|0.0|0.0|11.8|8.4|6.2|19.5|4.5|0.0|0.0|0.0|4.3|0.0|10.7|4.1|0.0|0.0|5.9|0.0|
| NO ANSWER       | 1.8| 0.0|23.7|2.0|1.2|9.2|15.2|3.3|13.4|0.0|1.2|0.0|1.2|9.8|2.7|3.0|5.4|3.0|3.9|0.0|0.0|
| TOTAL           | 1.7| 0.3|20.5|0.8|0.6|6.6|13.4|4.9|3.7|3.4|3.2|0.6|4.9|4.9|7.3|6.3|11.4|1.4|3.4|0.6|0.1|

Source: Labour Force Survey
<table>
<thead>
<tr>
<th></th>
<th>Armed Forces</th>
<th>Legislators, senior officials and managers</th>
<th>Professionals</th>
<th>Technicians and associate professionals</th>
<th>Clerks</th>
<th>Service workers and shop and market sales workers</th>
<th>Skill agrocultural and fishery workers</th>
<th>Craft and related workers</th>
<th>Plant and machine operators and assembly</th>
<th>Elementary occupations</th>
</tr>
</thead>
<tbody>
<tr>
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<td>15.3</td>
<td>22.7</td>
<td>12.7</td>
<td>12.1</td>
<td>2.0</td>
<td>14.2</td>
<td>7.0</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>EU15</strong></td>
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<td>10.5</td>
<td>14.1</td>
<td>14.6</td>
<td>10.5</td>
<td>13.7</td>
<td>1.2</td>
<td>13.6</td>
<td>9.1</td>
<td>12.8</td>
</tr>
<tr>
<td><strong>EU-10</strong></td>
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<td>3.6</td>
<td>10.5</td>
<td>13.1</td>
<td>9.5</td>
<td>17.2</td>
<td>0.7</td>
<td>18.1</td>
<td>6.7</td>
<td>20.7</td>
</tr>
<tr>
<td><strong>EU-2</strong></td>
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<td>13.9</td>
<td>17.2</td>
<td>6.5</td>
<td>19.9</td>
<td>0.0</td>
<td>15.6</td>
<td>5.2</td>
<td>17.4</td>
</tr>
<tr>
<td><strong>EFTA</strong></td>
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<td>23.3</td>
<td>6.3</td>
<td>37.5</td>
<td>4.1</td>
<td>14.6</td>
<td>10.7</td>
<td>3.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>OTHER EUROPE</strong></td>
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<td>3.3</td>
<td>10.0</td>
<td>6.6</td>
<td>15.4</td>
<td>0.9</td>
<td>22.8</td>
<td>13.9</td>
<td>22.9</td>
</tr>
<tr>
<td><strong>NORTH AFRICA</strong></td>
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<td>7.2</td>
<td>5.8</td>
<td>10.9</td>
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<td>4.5</td>
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<td>14.3</td>
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</tr>
<tr>
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<td>6.4</td>
<td>8.2</td>
<td>8.8</td>
<td>13.4</td>
<td>1.7</td>
<td>12.5</td>
<td>11.3</td>
<td>31.6</td>
</tr>
<tr>
<td><strong>EAST ASIA</strong></td>
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<td>2.9</td>
<td>40.3</td>
<td>16.5</td>
<td>16.2</td>
<td>21.0</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>SOUTH S-EAST ASIA</strong></td>
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<td>11.0</td>
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<td>4.2</td>
<td>31.9</td>
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<td>7.5</td>
<td>4.6</td>
<td>25.5</td>
</tr>
<tr>
<td><strong>NORTH AMERICA</strong></td>
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<td>7.1</td>
<td>23.9</td>
<td>27.0</td>
<td>17.8</td>
<td>3.1</td>
<td>0.0</td>
<td>8.6</td>
<td>2.9</td>
<td>9.6</td>
</tr>
<tr>
<td><strong>CENTRAL AMERICA</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>19.3</td>
<td>0.0</td>
<td>12.7</td>
<td>40.5</td>
<td>0.0</td>
<td>8.5</td>
<td>0.0</td>
<td>19.1</td>
</tr>
<tr>
<td><strong>SOUTH AMERICA</strong></td>
<td>0.0</td>
<td>2.5</td>
<td>26.5</td>
<td>18.7</td>
<td>6.0</td>
<td>20.7</td>
<td>0.0</td>
<td>7.0</td>
<td>3.4</td>
<td>15.2</td>
</tr>
<tr>
<td><strong>AUSTRALIA OCEANIA</strong></td>
<td>0.0</td>
<td>4.7</td>
<td>15.2</td>
<td>12.5</td>
<td>4.3</td>
<td>17.8</td>
<td>0.0</td>
<td>30.2</td>
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<td>5.0</td>
<td>21.1</td>
<td>1.3</td>
<td>20.3</td>
<td>13.8</td>
<td>23.2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>0.5</td>
<td>5.7</td>
<td>14.8</td>
<td>21.8</td>
<td>12.3</td>
<td>12.4</td>
<td>1.9</td>
<td>14.5</td>
<td>7.3</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey
4.6 Italy

1. Institutional setting for labour migration

Italy and Spain have formed the main receiving countries for Romanian migrants. In 2005, around one third of Romanian migrants located in Italy, by 2009 this had increased to around two-fifths (42 per cent). A smaller, although still substantial, proportion of Bulgarian migrants have chosen Italy as their destination; since accession to the EU, around 10 per cent of Bulgarian migrants have located in Italy.

Italy and Spain were popular destinations for these groups of migrants even prior to accession to the EU. Since Bulgaria and Romania joined the EU in 2007, individuals from these two new member states (EU-2) no longer require residence permits in order to enter Italy ("visto d'ingresso"). Furthermore, after three months, they can register in the "Anagrafe del Comune di residenza", the register office of the Italian municipalities.

Some restrictions are in place on the employment of Bulgarian and Romanian nationals in Italy (EURES, 2010). These are largely based on sector of employment. From the point of accession to the EU, a work permit has not been required for Bulgarians and Romanians working in the following sectors: agriculture, hotel and tourism, domestic work and care services, construction, engineering, managerial and highly skilled work and seasonal work. Employers wishing to employ nationals from these countries in other sectors must apply for a work permit. No restrictions are in place on self-employment.

Makovec (2009) provides details of Italian immigration policy and the changes that have taken place over time, highlighting the significant role of regularisation of immigrants already resident in the country. Several waves of regularization of illegal immigrants have taken place in Italy over time (1986, 1990, 1995, 1998, 2002, 2009). Around 1.7 million immigrants have been legalised (around 40 per cent of the resident population of 2010), of which 646,000 were regularised in 2002 (Ministerio del Lavoro e delle Politiche Sociali, 2011).

2. Migration trends

2.1 The extent of migration

Makovec (2009) reports data on immigrants in Italy from two main sources. These are the register of visas ("permesso di soggiorno"), published by the Ministry of Internal Affairs, and the number of immigrants counted as residents of an Italian municipality at the end of each year, collected by ISTAT, through an annual survey covering the register offices of all Italian municipalities. This source is known as the "Anagrafe", and provides a measure of the stock of migrants in the resident population.

31 Any comments or queries related to section 4.4 of the report can be addressed to Ana Rincon-Aznar (A.Rincon@niesr.ac.uk) and Lucy Stokes (L.Stokes@niesr.ac.uk).
Reasons for potential inconsistencies between these two sources are discussed by Makovec (2009). Data from visa registrations are likely to underestimate the true number of immigrants, while data from municipality registers may under-estimate or over-estimate the actual number. It is acknowledged that there can be delays in both the registration and de-registration process; thus the year of registration does not necessarily reflect the period of arrival, and many immigrants only register after several years in employment.

Neither source can provide information on the extent of illegal immigration\(^\text{32}\); the presence of illegal immigrants in Italy cannot be measured but only estimated\(^\text{33}\). Some illegal immigrants can obtain the resident permit after remaining in the country for a certain period of time.

From the 1\(^{st}\) May 2008, only migrants from outside of the EU have been required to obtain the "permesso di soggiorno". Since March 2007, EU citizens have no longer needed to request a residence permit even if they wish to remain in Italy for more than three months. Migrants from within the EU are no longer included in the statistics of "permesso di soggiorno" and it is therefore no longer possible to identify Bulgaria and Romania migration (or any other EU country) from this source from 2007 onwards.

Data published by ISTAT indicate that on the 1 January 2010 there were a total of 4,235,059 foreign citizens resident in Italy (ISTAT, 2010b). This represented an increase of over 340,000 since the previous year, although this increase was lower than that experienced during 2007 and 2008 (this stood at around 494,000 in 2007 and 459,000 in 2008). Around one fifth (22 per cent) of foreign residents were children (either born in Italy to foreign parents or entering to reunite with their families). In 2003, foreign residents accounted for 3.4 per cent of total residents; by 2010 this had increased to seven per cent.

Table 4.4 below shows the number of Romanian and Bulgarian citizens resident in Italy for the period 2003-2010, as well as for all foreign citizens. The number of Romanian residents in Italy has increased considerably over time, from less than 100,000 in 2003 to 889 thousand in 2010. The number of Bulgarian residents is much smaller in comparison, at just under 50,000 in 2010 - this has also seen a notable increase over time, from around seven thousand in 2003. Similarities between the Italian and Romanian languages are thought to have contributed to this being a popular destination for Romanian migrants (Uccellini, 2010).

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\(^{32}\) In Spain, the equivalent register of municipalities known as Padron Municipal allows registration of illegal migrants.

\(^{33}\) In 2008, one source estimated that there were 670,000 illegal immigrants in Italy (Rosenthal, 2008).
Table 0.44. Romanian and Bulgarian residents, 2003-2010 (as at 1 January each year)

<table>
<thead>
<tr>
<th>Year</th>
<th>Romania</th>
<th>Bulgaria</th>
<th>EU-2</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>95,039</td>
<td>7,324</td>
<td>102,363</td>
<td>1,549,373</td>
</tr>
<tr>
<td>2004</td>
<td>177,812</td>
<td>14,311</td>
<td>192,123</td>
<td>1,990,159</td>
</tr>
<tr>
<td>2005</td>
<td>248,849</td>
<td>15,374</td>
<td>264,223</td>
<td>2,402,157</td>
</tr>
<tr>
<td>2006</td>
<td>297,570</td>
<td>17,746</td>
<td>315,316</td>
<td>2,670,514</td>
</tr>
<tr>
<td>2007</td>
<td>342,200</td>
<td>19,924</td>
<td>362,124</td>
<td>2,938,922</td>
</tr>
<tr>
<td>2008</td>
<td>625,278</td>
<td>33,477</td>
<td>658,755</td>
<td>3,432,651</td>
</tr>
<tr>
<td>2009</td>
<td>796,477</td>
<td>40,880</td>
<td>837,357</td>
<td>3,891,295</td>
</tr>
<tr>
<td>2010</td>
<td>887,763</td>
<td>46,026</td>
<td>933,789</td>
<td>4,235,059</td>
</tr>
</tbody>
</table>

Source: ISTAT.

Table 4.45 below shows the ten countries accounting for the greatest number of foreign residents as at the 1 January 2010. Together, migrants from these ten countries accounted for almost two-thirds of all foreign residents in Italy. Immigrants from Romania accounted for around one-fifth of all foreign residents at 1 January 2010. The next most common were immigrants from Albania (467 thousand) and Morocco (432 thousand), each of which accounted for around a further ten per cent of all foreign residents in Italy.
Table 0.45. Number and per cent of foreign residents by country of citizenship (top ten), 1 January 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>887,763</td>
<td>21.0</td>
</tr>
<tr>
<td>Albania</td>
<td>466,684</td>
<td>11.0</td>
</tr>
<tr>
<td>Morocco</td>
<td>431,529</td>
<td>10.2</td>
</tr>
<tr>
<td>China</td>
<td>188,352</td>
<td>4.4</td>
</tr>
<tr>
<td>Ukraine</td>
<td>174,129</td>
<td>4.1</td>
</tr>
<tr>
<td>Philippines</td>
<td>123,584</td>
<td>2.9</td>
</tr>
<tr>
<td>India</td>
<td>105,863</td>
<td>2.5</td>
</tr>
<tr>
<td>Poland</td>
<td>105,608</td>
<td>2.5</td>
</tr>
<tr>
<td>Moldova</td>
<td>105,600</td>
<td>2.5</td>
</tr>
<tr>
<td>Tunisia</td>
<td>103,678</td>
<td>2.4</td>
</tr>
<tr>
<td>Total (all countries)</td>
<td>4,235,059</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: ISTAT.
http://www.istat.it/salastampa/comunicati/non_calendario/20101012_00/?#

The bilancio demografico34 (demographic balance) of the yearly resident population, provides the results of the monthly data collection “Movement and calculation of resident population”, implemented by ISTAT within the Population Register offices (“anagrafi”) of the Italian municipalities (“Comuni”). The following information is taken into account:

- Resident population at the 1st January and at the 31st December
- Births (from parents resident in the municipality)
- Deaths (formerly resident in the municipality)
- Natural Increase (difference between the two previous items)
- Total registrations for change of residence (from other municipalities, from abroad and for other reasons)
- Total cancellations for change of residence (to other municipalities, to abroad and for other reasons)

From the "bilancio demografico" it is possible to retrieve information regarding the number of foreign-born people registered in the Anagrafe in a given year, which constitutes a proxy for new migrants. The table below shows registrations, deregistrations, and the net balance from 2002-2007. The data on registrations and deregistrations come from the survey “Registrations and deregistrations due to change of residence” (ISCAN), a survey which ISTAT conducts on a regular, annual basis. It is clear that the number of registrations has increased considerably over this period. The number of de-registrations has also increased, but to a lesser extent. The net

\[34\] Data for the "bilancio demografico" can be accessed at: http://demo.istat.it/
balance was particularly high in 2007, reaching 476 thousand; ISTAT report that much of this was due to a considerable inflow of Romanian citizens (more than 260 thousand) (ISTAT, 2010a).

Table 0.46. Registrations and deregistrations of foreign citizens as a result of movements to/from foreign countries, 2002-2007

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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<tbody>
<tr>
<td>Registrations</td>
<td>172,836</td>
<td>168,726</td>
<td>392,771</td>
<td>373,086</td>
<td>267,634</td>
<td>490,430</td>
</tr>
<tr>
<td>Deregistrations</td>
<td>7,700</td>
<td>8,840</td>
<td>10,755</td>
<td>11,940</td>
<td>12,099</td>
<td>14,814</td>
</tr>
<tr>
<td>Balance</td>
<td>165,136</td>
<td>159,886</td>
<td>382,016</td>
<td>361,146</td>
<td>255,535</td>
<td>475,616</td>
</tr>
</tbody>
</table>

Source: ISTAT.

2.2 Socio-demographic characteristics of migrants

Table 0.477 shows the number of Bulgarian and Romanian residents by gender. At 1 January 2010, just under half (46 per cent) of Romanian residents and just under two-fifths (39 per cent) of Bulgarian residents were male. The gender composition has remained broadly similar over time, with a slight decrease for both Bulgarian and Romanian residents in the proportion that are male. The numbers of both male and female residents from the EU-2 countries have increased over time, but the number of female residents has increased at a slightly faster rate.

Table 0.47. Bulgarian and Romanian residents by gender

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Per cent male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>143,376</td>
<td>154,194</td>
<td>297,570</td>
<td>48.2</td>
</tr>
<tr>
<td>2007</td>
<td>162,154</td>
<td>180,046</td>
<td>342,200</td>
<td>47.4</td>
</tr>
<tr>
<td>2008</td>
<td>294,212</td>
<td>331,066</td>
<td>625,278</td>
<td>47.1</td>
</tr>
<tr>
<td>2009</td>
<td>373,255</td>
<td>423,222</td>
<td>796,477</td>
<td>46.9</td>
</tr>
<tr>
<td>2010</td>
<td>409,464</td>
<td>478,299</td>
<td>887,763</td>
<td>46.1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>7,616</td>
<td>10,130</td>
<td>17,746</td>
<td>42.9</td>
</tr>
<tr>
<td>2007</td>
<td>8,486</td>
<td>11,438</td>
<td>19,924</td>
<td>42.6</td>
</tr>
<tr>
<td>2008</td>
<td>13,685</td>
<td>19,792</td>
<td>33,477</td>
<td>40.9</td>
</tr>
<tr>
<td>2009</td>
<td>16,313</td>
<td>24,567</td>
<td>40,880</td>
<td>39.9</td>
</tr>
<tr>
<td>2010</td>
<td>17,822</td>
<td>28,204</td>
<td>46,026</td>
<td>38.7</td>
</tr>
</tbody>
</table>

Source: ISTAT.
Other than gender, limited data on the demographic characteristics of EU-2 migrants appears to be available from national data sources for Italy. Some characteristics are available from the visa registration data, but as discussed earlier, this no longer covers migrants from EU countries. Instead, in the next section we explore characteristics of EU-2 migrants using data from the European Labour Force Survey.

The European Labour Force Survey

In this section we provide an overview of several socio-demographic characteristics of the EU-2 migrants in Italy, in comparison with migrants of other nationalities, based on the results of the European Labour Force Survey (EU LFS) for 2009. Additionally we provide some details for migrants in employment, such as their qualifications, occupation levels and sector of activity. However caution is needed when interpreting Labour Force Surveys' results by nationality as sample sizes are generally small.

According to the EU LFS around 45 per cent of the Romanian and Bulgarians in Italy in 2009 were male. In comparison, the percentage of females from the EU-10

35 (which entered the EU in 2004) is considerably higher; three-quarters of migrants from this group were female (Table 0.50).

With regards to the age profile of the EU-2 migrants, Table 0.51 shows that around 55 per cent were aged between 25 and 44 years old; this age group also accounts for the majority of EU-10 migrants. The percentage of migrants from the EU-10 that are aged 50-59 stood at around 11 per cent, compared with around five per cent for those from the EU-2.

Table 0.48 shows the percentage of migrants from the EU-2 and EU-10 in each age band that are male. We noted above that the majority of EU-10 migrants were female; this is true across all age bands, but is particularly pronounced in the younger and older age bands.

Table 0.48. Bulgarian and Romanian nationals by gender and age, 2009, 2nd quarter. Per cent male

<table>
<thead>
<tr>
<th>Nationality</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>
</tr>
</thead>
<tbody>
<tr>
<td>EU-2</td>
<td>40.3</td>
<td>45.0</td>
<td>46.5</td>
<td>47.5</td>
<td>40.0</td>
<td>45.5</td>
<td>30.4</td>
</tr>
<tr>
<td>EU-10</td>
<td>17.1</td>
<td>15.0</td>
<td>34.6</td>
<td>23.1</td>
<td>25.0</td>
<td>23.1</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Source: EU LFS, own calculations

Considering the characteristics of migrants in employment, Table 0.52 shows that around one quarter (26 per cent) of employed EU-2 citizens were working in the

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35 The NMS-10 include: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Slovakia, Slovenia and Poland.
construction sector (F, NACE Rev.2), followed by 18 per cent employed in the Manufacturing sector (NACE C) and 17 per cent working in the "Activities of households" (NACE T).

Around one fifth (20 per cent) of employed migrants from the EU-10 were working in the construction sector and 30 per cent were working in "activities of households". Compared to migrants from the EU-2, a much smaller proportion of this group were employed in manufacturing (around six per cent). In contrast, EU-10 migrants were more commonly employed in some service sectors. Accommodation and food service activities (NACE I) and other service activities (NACE S) each employed around ten per cent of working NMS-10 migrants. In comparison, amongst employed EU-2 migrants, this stood at six per cent and five per cent respectively.

A breakdown of the employed population by highest education level attained is presented in Table 4.51. Employed EU-2 and EU-10 migrants are less likely to hold a university degree than natives; this stood at eight per cent amongst EU-2 migrants and 11 per cent amongst EU-10 migrants, compared with 17 per cent for Italians.

The highest education level attained by the majority (around 63 per cent) of Bulgarian and Romanians employed in Italy is secondary education (ISCED 3a,3b,3C). In comparison with the EU-10 migrants, the percentage of EU-2 migrants with secondary education leading to tertiary education is considerably lower (43 per cent for EU-2 migrants compared with 59 per cent for the EU-10). The percentage of Italian employees for whom secondary education was the highest level attained stood at approximately 45 per cent.

Table 0.54 shows the distribution of employment according to occupation, using ISCO occupation codes at 1 digit level. The most common occupations for EU-2 migrants were craft and related workers and elementary occupations, both of which accounted for around one third of all employed migrants from Bulgaria and Romania. In comparison, 17 per cent of EU-10 migrants were employed as craft and related workers (as were 16 per cent of Italians), while 52 per cent of this group worked in elementary occupations (compared with just seven per cent of Italians). Around a further 10 per cent of EU-2 migrants worked as plant and machine operators and a similar proportion worked as service workers and shop and market sales workers. EU-10 workers were more likely to work in the latter group (15 per cent employed in these occupations), while just three per cent worked as plant and machine operatives.

2.3 Country-specific issues

Employment status of migrants

Table 0.55 provides information on the employment status of both migrants and the native population for both 2008 and 2009.

In 2009 almost three-fifths (58 per cent) of Bulgarian and Romanian migrants were in employment. This percentage is higher than for the EU-10 migrants (of whom 54 per cent were employed), the EU-15 migrants (52 per cent) and the native population (38 per cent). Migrants from the EU-2 were less likely to be inactive in the labour market; this applied for around one-fifth (18 per cent) of this group, compared with 45 per
cent of the native population and 39 per cent of migrants from the EU-15. Around one quarter of migrants from the EU-10 were inactive.

Based on the number of people who were economically active we calculate unemployment rates by nationality. The unemployment rate among the EU-2 migrants in the second quarter of 2009 stood at 10.9 per cent. In comparison the unemployment rate for the EU-10 migrants stood at 12.1 per cent. The unemployment rate for these groups of migrants was higher than for the native population, which stood at around 7 per cent. It is notable however that some groups of migrants were experiencing considerably higher unemployment rates; in particular, among migrants from North Africa and Other African countries the respective unemployment rates were 14 per cent and 16 per cent and the unemployment for migrants from Central America stood at around 21 per cent.

Regional distribution of migrants

It is also interesting to consider the regional distribution of migrants within Italy. Most foreign residents were concentrated in the north and centre of the country; in 2009, over a third (35 per cent) of all foreign residents in Italy were located in the North-West, with a further 27 per cent in the North East (Figure 4.55). Around one quarter were located in the central regions of Italy.

Makovec (2009) notes that it is in the North and Centre of Italy where the demand for lower-skilled labour is greatest, namely for workers in the construction and hotel and restaurants sectors and in providing services for the household.

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36 The unemployment rate is calculated as number of people unemployed over the sum of the unemployed and the employed.
Table 0.49 provides a more detailed breakdown by region, for both all foreign residents and specifically for Romanians. Lazio was the most common region for Romanian residents, with one-fifth located here. This compared with 12 per cent for all foreign residents. The next most common regions for Romanians were Piemonte and Lombardia, both of which accounted for around 15 per cent of Romanians in 2010. The Veneto accounted for a further 11 per cent of Romanians. Among all foreign residents, the most common region of residence was Lombardia, with just under one quarter of all foreign residents living in this region.

37 Similar information was not available for Bulgarians (who account for a much smaller proportion of foreign residents in Italy).
Table 0.49. Per cent of Romanian and all foreign residents by region, 1 Jan 2010

<table>
<thead>
<tr>
<th>Region</th>
<th>Romania</th>
<th>All foreign residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piemonte</td>
<td>14.7</td>
<td>8.9</td>
</tr>
<tr>
<td>Valle d'Aosta</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Lombardia</td>
<td>14.5</td>
<td>23.2</td>
</tr>
<tr>
<td>Trentino-A. Adige</td>
<td>1.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Bolzano-Bozen</td>
<td>0.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Trento</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Veneto</td>
<td>10.9</td>
<td>11.3</td>
</tr>
<tr>
<td>Friuli-V.Giulia</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Liguria</td>
<td>1.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Emilia-Romagna</td>
<td>6.8</td>
<td>10.9</td>
</tr>
<tr>
<td>Toscana</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Umbria</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Marche</td>
<td>2.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Lazio</td>
<td>20.2</td>
<td>11.8</td>
</tr>
<tr>
<td>Abruzzo</td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Molise</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Campania</td>
<td>2.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Puglia</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Basilicata</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Calabria</td>
<td>2.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Sicilia</td>
<td>3.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Sardegna</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>887,763</td>
<td>4,235,059</td>
</tr>
</tbody>
</table>

Source: ISTAT

Living conditions

A new survey was carried out by ISTAT in 2009 on the income and living conditions of households with foreigners (ISTAT, 2011). The survey was conducted in 6,000 households in Italy in which there was at least one foreign citizen in the household. Households with foreigners were more likely to live in more deprived conditions; around one third (34.5 per cent) of households in which foreigners were present were in conditions of material deprivation\textsuperscript{38}, compared with around 14 per cent of exclusively Italian households. Popescu (2008) reporting findings from a 2007 survey for the Agency for Governmental Strategies\textsuperscript{39}, states that satisfaction with daily life is

\textsuperscript{38} Based on the Eurostat summary indicator of material deprivation, based on factors such as not being able to afford unexpected financial expenses, an annual holiday, adequate meals, various household items, among other factors.

higher among those Romanians living in Italy than in Romania, and that compared to being in Romania, migrants in Italy have greater access to facilities and household appliances.

2.4 Postings

The European Commission report on the issue of E101 certificates provides comparable data on postings across the EU countries (European Commission, 2011). While this source provides comparable data across EU countries, it should be noted that not all E101 certificates issued may result in eventual postings, and some workers may be posted by their employers without having applied for an E101 certificate.

In 2009, there were around 30,000 postings of workers from Italy to other specific EU countries, an increase compared with 2008 when this figure stood at just under 25,000. This does not include other E101 certificates issued, which would include individuals active in two or more EU countries and in international transport (this stood at less than 1,000 workers in both years).

The number of postings to Italy remained fairly stable between 2008 and 2009, standing at around 50,000 in each year. The majority (around three-quarters) of these postings came from the EU-15; however, postings from the EU-12 increased in 2009 to around 13,000 (compared with roughly 10,000 in 2008), so that in 2009 they accounted for just over one-quarter of total postings to Italy. The countries accounting for the largest share of posted workers to Italy were France (32 per cent), Germany (18 per cent) and Romania (11 per cent). The number of Romanian workers posted to Italy more than doubled between 2008 and 2009, from 2,496 to 5,419.

3. Impact of migration on the economy

Evidence regarding the effect of immigration on the labour market in Italy is still scant. Some research suggests that the role played by foreigners in the Italian labour market predominantly forms a complementary effect, thus while foreigners seem to have a positive effect on wages (prices) (Gavosto, Venturini, Villosio 1999), the probability of transition from unemployment and into employment does not seem to worsen as a result of immigration.

Makovec (2009) concluded that immigrants from the EU-2 and the EU-10 have made a significant contribution to employment growth in Italy and have provided an important resource for the labour market. His review also indicates that migrants have formed complements rather than substitutes, particularly in view of the high demand for particular types of worker (namely unskilled manual and non-manual workers, as well as in personal and domestic care services).

Venturini and Villosio (2004) found little evidence to associate increased immigration with unemployment of native workers. They investigate whether Italians and immigrants compete for the same jobs, and they consider two aspects of being unemployed, the probability of moving from employment into unemployment (displacement risk), and the probability of moving from unemployment into employment within one year (job-search effectiveness). Despite the study finding
some evidence of competition between foreign and native workers in the manufacturing sector in the North of Italy, in part because of education levels, they conclude that for new Italian job seekers the share of foreign workers has either no effect or has a complementary effect on the probability of finding a job.

Gavosto, Venturini and Villosio (1999) investigated the effect of immigrants on native wages. Their results suggest immigrants have a complementary effect, that is, immigrants favour wage increases for unskilled natives. This result is attributed to the the strong Italian trade unions which impose bargaining at a national level and the concentration of immigrants in the Northern regions where there is an excess demand for labour and unemployment is low.

4. Crisis-related issues and outlook

The financial and economic crisis has had immediate effects on migration inflows. The recession has concentrated in the Construction sector and some manufacturing sectors (Ministerio del Lavoro e delle Politiche Sociali, Rapporto 2011). Earlier we discussed the employment status of migrants and the native population in 2009, using data from the EU LFS. The second panel of Table 0.55 presents the equivalent data for 2008. This suggests there has been some increase in the unemployment rates for both EU-2 and EU-10 migrants since 2008, while the unemployment rate amongst the native population has remained at a similar level. Migration policy in both Italy and Spain has reacted to the crisis by reducing drastically the recruitments from abroad for non-seasonal low and medium skilled workers; some drivers of the Italian migration boom, such as the dynamism of the SME enterprise sector are likely to be affected in the long-run (Pastore, 2010).

Uccellini (2010) finds that the negative image of Romanians in Italy appeared to increase immediately after EU accession, and that Romanians are still perceived as 'outsiders' by the native population. In discussion of Romanian migrants in Italy, it is also important to acknowledge the 'Roma', an ethnic minority group, discriminated against in Romania as well as in Italy. Official statistics on the size of the Roma population in Italy are not available (Makovec, 2009), but there has been a perception among the general public of higher criminality amongst this group. In some cases, this has also led to a perception of higher criminality amongst Romanian migrants resident in Italy in general. Uccellini suggests that while concern about Romanian immigrants amongst Italians seemed to increase immediately following accession, the situation seemed to be improving from 2009.

Based on a 2007 survey, most Romanian migrants in Italy hoped to return to Romania to settle in the longer run, with one in three hoping to return within the next two years (Popescu, 2008). One-fifth eventually hoped to settle permanently in Italy.

From 2014, the transitional arrangements for migrants from Bulgaria and Romania will be removed in all EU countries; it remains to be seen how this may influence migration patterns for these groups.
Table 0.50. Distribution of the population by gender and nationality (%), European Labour Force Survey, 2009, 2nd quarter, Weighted results

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>48.6</td>
<td>51.4</td>
</tr>
<tr>
<td>EU15</td>
<td>39.3</td>
<td>60.7</td>
</tr>
<tr>
<td>EU-10</td>
<td>24.5</td>
<td>75.5</td>
</tr>
<tr>
<td>EU-2</td>
<td>47.3</td>
<td>52.7</td>
</tr>
<tr>
<td>EFTA</td>
<td>40.6</td>
<td>59.4</td>
</tr>
<tr>
<td>Other Europe</td>
<td>47.2</td>
<td>52.8</td>
</tr>
<tr>
<td>North Africa</td>
<td>60.2</td>
<td>39.8</td>
</tr>
<tr>
<td>Other Africa</td>
<td>56.5</td>
<td>43.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>86.6</td>
<td>13.4</td>
</tr>
<tr>
<td>East Asia</td>
<td>55.2</td>
<td>44.8</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>53.8</td>
<td>46.2</td>
</tr>
<tr>
<td>North America</td>
<td>50.7</td>
<td>49.3</td>
</tr>
<tr>
<td>Central America</td>
<td>34.8</td>
<td>65.2</td>
</tr>
<tr>
<td>South America</td>
<td>44.4</td>
<td>55.6</td>
</tr>
</tbody>
</table>

Total 48.6 51.4

Source: EU LFS, own calculations
Table 0.51. Distribution of the population by age band and nationality (%), European Labour Force Survey, 2009, 2nd quarter, Weighted results

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>4.6</td>
<td>4.6</td>
<td>4.9</td>
<td>5.1</td>
<td>5.6</td>
<td>6.9</td>
<td>7.7</td>
<td>8.1</td>
<td>7.5</td>
<td>6.7</td>
<td>6.4</td>
<td>6.3</td>
<td>5.7</td>
<td>5.2</td>
<td>4.4</td>
<td>3.3</td>
<td>1.9</td>
<td>0.5</td>
<td>0.2</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>EU15</td>
<td>2.2</td>
<td>0.9</td>
<td>4.4</td>
<td>1.0</td>
<td>4.2</td>
<td>8.3</td>
<td>9.4</td>
<td>5.3</td>
<td>16.0</td>
<td>13.9</td>
<td>9.9</td>
<td>5.3</td>
<td>5.7</td>
<td>6.3</td>
<td>1.1</td>
<td>1.8</td>
<td>1.5</td>
<td>2.2</td>
<td>0.7</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>EU-10</td>
<td>7.8</td>
<td>1.7</td>
<td>5.0</td>
<td>2.8</td>
<td>2.7</td>
<td>17.5</td>
<td>21.5</td>
<td>13.6</td>
<td>6.2</td>
<td>7.9</td>
<td>6.3</td>
<td>5.0</td>
<td>0.7</td>
<td>0.2</td>
<td>1.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>EU-2</td>
<td>6.3</td>
<td>5.9</td>
<td>4.5</td>
<td>6.6</td>
<td>8.3</td>
<td>15.1</td>
<td>17.6</td>
<td>11.8</td>
<td>10.9</td>
<td>7.4</td>
<td>3.8</td>
<td>1.2</td>
<td>0.3</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>EFTA</td>
<td>2.4</td>
<td>6.1</td>
<td>10.2</td>
<td>0.0</td>
<td>0.0</td>
<td>6.6</td>
<td>14.6</td>
<td>1.4</td>
<td>9.4</td>
<td>4.4</td>
<td>0.0</td>
<td>2.8</td>
<td>3.5</td>
<td>17.9</td>
<td>0.0</td>
<td>3.9</td>
<td>0.0</td>
<td>3.9</td>
<td>12.9</td>
<td>0.0</td>
<td>100</td>
</tr>
<tr>
<td>Other Europe</td>
<td>7.4</td>
<td>6.9</td>
<td>6.4</td>
<td>7.2</td>
<td>8.9</td>
<td>10.1</td>
<td>12.8</td>
<td>12.2</td>
<td>9.0</td>
<td>8.4</td>
<td>5.8</td>
<td>2.8</td>
<td>0.8</td>
<td>0.5</td>
<td>0.3</td>
<td>0.5</td>
<td>0.2</td>
<td>0.0</td>
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Source: EU LFS, own calculations
Table 0.52. Distribution of the employed population by sector of activity (NACE Rev. 2) and nationality (%), European Labour Force Survey, 2009, 2nd quarter, Weighted results

| Nationality | A  | B  | C  | D  | E  | F  | G  | H  | I  | J  | K  | L  | M  | N  | O  | P  | Q  | R  | S  | T  | U  | Total |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| Italy       | 3.6| 0.1| 19.5| 0.5| 0.9| 7.6| 15.2| 4.8| 4.8| 2.5| 2.9| 0.6| 6.4| 3.5| 6.7| 7.5| 7.6| 1.2| 3.3| 0.6| 0.1| 100 |
| EU15        | 0.4| 0.0| 15.5| 0.0| 0.0| 2.9| 9.7| 1.3| 4.5| 5.1| 3.3| 4.0| 18.4| 5.9| 0.0| 14.3| 6.2| 2.3| 4.4| 1.9| 0.0| 100 |
| EU-10       | 2.5| 0.0| 5.9| 0.0| 0.0| 20.1| 6.4| 0.1| 9.0| 0.0| 0.5| 0.0| 4.3| 4.3| 0.0| 2.0| 5.1| 0.0| 10.2| 29.6| 0.0| 100 |
| EU-2        | 3.6| 0.0| 18.3| 0.0| 0.7| 26.0| 4.6| 4.3| 6.2| 0.8| 0.3| 0.9| 15.4| 4.6| 0.0| 9.5| 5.1| 1.1| 4.6| 16.6| 0.0| 100 |
| EFTA        | 10.7| 0.0| 0.0| 0.0| 0.0| 41.1| 3.4| 3.3| 0.0| 0.0| 0.0| 10.5| 0.0| 0.0| 0.0| 29.7| 0.0| 0.0| 1.3| 0.0| 100 |
| Other Europe| 4.4| 0.1| 19.6| 0.0| 0.3| 24.8| 6.1| 3.9| 7.6| 0.0| 0.3| 0.1| 1.0| 4.1| 0.0| 6.7| 3.7| 1.2| 4.6| 17.5| 0.0| 100 |
| North Africa| 6.0| 0.1| 25.3| 0.1| 0.6| 23.8| 12.8| 4.9| 9.0| 0.8| 0.0| 0.0| 0.5| 7.9| 0.2| 0.0| 0.7| 0.0| 3.1| 4.2| 0.0| 100 |
| Other Africa| 1.4| 0.0| 39.6| 0.0| 1.3| 5.6| 14.9| 6.5| 5.0| 0.0| 0.0| 0.0| 0.6| 7.5| 0.0| 0.1| 3.8| 0.4| 2.7| 10.8| 0.0| 100 |
| Middle East | 0.0| 0.0| 3.1| 0.0| 0.0| 15.4| 48.3| 17.4| 7.8| 1.8| 0.0| 0.0| 0.0| 0.0| 0.0| 3.0| 3.2| 0.0| 0.0| 0.0| 100 |
| East Asia   | 2.2| 0.0| 37.1| 0.0| 0.0| 24.4| 0.0| 24.7| 0.0| 0.0| 0.0| 4.0| 0.0| 0.0| 0.0| 5.7| 0.0| 0.0| 2.0| 0.0| 0.0| 100 |
| South-East Asia | 2.2| 0.6| 19.0| 0.0| 0.0| 2.3| 9.8| 2.8| 6.7| 1.1| 0.6| 0.0| 0.1| 9.6| 0.0| 0.1| 1.3| 0.2| 9.2| 34.4| 0.0| 100 |
| North America | 0.0| 0.0| 14.5| 0.0| 0.0| 7.0| 0.0| 1.9| 0.0| 0.0| 16.6| 5.9| 0.8| 33.7| 0.0| 0.0| 15.8| 0.0| 4.0| 0.0| 100 |
| Central America | 0.0| 0.0| 9.8| 0.0| 0.0| 9.7| 12.9| 0.0| 29.1| 0.0| 2.2| 0.0| 0.0| 13.6| 0.0| 0.0| 2.8| 0.7| 7.5| 11.7| 0.0| 100 |
| South America | 0.0| 0.0| 8.0| 0.0| 1.9| 4.3| 5.2| 6.8| 9.2| 0.1| 0.0| 0.4| 0.7| 9.7| 0.0| 0.5| 6.9| 1.5| 7.5| 37.0| 0.4| 100 |
| Total       | 3.6| 0.1| 19.5| 0.5| 0.9| 8.4| 14.6| 4.7| 5.1| 2.3| 2.7| 0.6| 6.0| 3.8| 6.1| 7.0| 7.3| 1.2| 3.5| 2.2| 0.1| 100 |

Source: EU LFS, own calculations
Table 0.53. Distribution of the employed population by highest level of education attained (ISCED) and nationality (%), European Labour Force Survey, 2009, 2nd quarter, Weighted results

<table>
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<tr>
<th>Nationality</th>
<th>No formal education or below primary education (ISCED 0)</th>
<th>Primary Education (ISCED 1)</th>
<th>Lower secondary Education (ISCED 2)</th>
<th>Secondary education not designed to lead to tertiary education (less than 2 yrs.) (ISCED 3C)</th>
<th>Secondary education not designed to lead to tertiary education (more than 2 yrs.) (ISCED 3C)</th>
<th>Secondary education designed to lead to tertiary education (ISCED 4c)</th>
<th>Post-Secondary no tertiary education (occupation-specific) (ISCED 5b)</th>
<th>First stage of tertiary education (theoretically-based) (ISCED 5a)</th>
<th>Second stage of tertiary education (advanced research qualification) (ISCED 6)</th>
<th>Total</th>
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<td>30.2</td>
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Source: EU LFS, own calculations
Table 0.54. Distribution of the employed population by occupation (ISCO-88) and nationality (%), European Labour Force Survey, 2009, 2nd quarter, Weighted results

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<th>Professionals and technicians</th>
<th>Clerks</th>
<th>Service workers and shop and market sales workers</th>
<th>Skill agricultural and fishery workers</th>
<th>Craft and related workers</th>
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Source: EU LFS, own calculations
Table 0.55. Distribution of the population by labour status (ILO definition) and nationality (%), European Labour Force Survey, 2008-2009, 2nd quarter, Weighted results

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<th>Unemployed (%)</th>
<th>Inactive (%)</th>
<th>Less than 15 year old (%)</th>
<th>Unemployment rate</th>
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Source: EU LFS, own calculations
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"::" indicate that the figures are too small to be reliable
figures in brackets : limited reliability due to small sample size

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## Skills structure of Bulgarian, Polish and Romanian residing in EU15 countries

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Source: Labour Force Survey
Table A0.2. The structure of occupations in which EU-8+2 nationals are employed in EU-15 countries (2010)

"":" indicate that the figures are too small to be reliable
figures in brackets : limited reliability due to small sample size
Armed forces are excluded

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| EU15  | 19      | 53      | 28    |     |         |         |       |     |         |         |       |
| BE    | 29      | 43      | 28    |     |         |         |       |     |         |         |       |
| DK    | (29.9)  | 46      | (24.0)|     |         |         |       |     |         |         |       |
| DE    | 29      | 51      | 19    |     |         |         |       |     |         |         |       |
| IE    | 11      | 65      | 24    |     |         |         |       |     |         |         |       |
| ES    | 21      | 60      | 20    |     |         |         |       |     |         |         |       |
| FR    | 30      | 51      | (18.9)|     |         |         |       |     |         |         |       |
| IT    | 13      | 49      | 37    |     |         |         |       |     |         |         |       |
| LU    | 83      | :       | :     |     |         |         |       |     |         |         |       |
| NL    | (23.4)  | 50      | 26    |     |         |         |       |     |         |         |       |
| AT    | 31      | 52      | 17    |     |         |         |       |     |         |         |       |
| FI    | (21.6)  | 60      | :     |     |         |         |       |     |         |         |       |
| SE    | 27      | 54      | 19    |     |         |         |       |     |         |         |       |
| UK    | 13      | 52      | 35    |     |         |         |       |     |         |         |       |

| EU15  | 8       | 56      | 36    |     |         |         |       |     |         |         |       |
| BE    | 33      | 46      | (21.0)|     |         |         |       |     |         |         |       |
| DE    | 32      | 48      | 20    |     |         |         |       |     |         |         |       |
| EL    | :       | 47      | 50    |     |         |         |       |     |         |         |       |
| ES    | 4       | 55      | 41    |     |         |         |       |     |         |         |       |
| FR    | (26.6)  | 54      | (19.2)|     |         |         |       |     |         |         |       |
| IT    | 4       | 59      | 37    |     |         |         |       |     |         |         |       |
| LU    | (86.4)  | :       | :     |     |         |         |       |     |         |         |       |
| NL    | (29.9)  | (50.2)  | :     |     |         |         |       |     |         |         |       |
| AT    | (14.6)  | 55      | 31    |     |         |         |       |     |         |         |       |
| UK    | 18      | 53      | 29    |     |         |         |       |     |         |         |       |

### ISCO1D

1. Legislators senior officials and managers
2. Professionals
3. Technicians and associate professionals
4. Clerks
5. Service workers and shop and market sales workers
6. Skilled agricultural and fishery workers
7. Craft and related trades workers
8. Plant and machine operators and assemblers
9. Elementary occupations

Armed forces are excluded
### Occupational structure of EU8/EU2 residing and working in EU15, by citizenship (by group of occupations)

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### Occupational structure of Bulgarian nationals residing and working in selected EU15 countries (by group of occupations)

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### Occupational structure of Polish nationals residing and working in selected EU15 countries (by group of occupations)

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</table>

Source: Labour Force Survey
Table A0.3. The structure of sectors in which EU-8+2 nationals are employed in EU-15 countries (2010)

"": indicate that the figures are too small to be reliable

figures in brackets : limited reliability due to small sample size

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### Sectoral structure of EU8+2 residing and working in selected EU15 countries

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July 2011
Sectoral structure of EU8+2 residing and working in selected EU15 countries (groups of sectors)

A Agriculture, forestry and fishing, B Mining and quarrying, C Manufacturing, D Electricity, gas, steam and air conditioning supply, E Water supply; sewerage, waste management and remediation activities, F Construction, G Wholesale and retail trade; repair of motor vehicles and motorcycles, H Transportation and storage, I Accommodation and food service activities, J Information and communication, K Financial and insurance activities, L Real estate activities, M Professional, scientific and technical activities, N Administrative and support service activities, O Public administration and defence; compulsory social security, P Education, Q Human health and social work activities, R Arts, entertainment and recreation, S Other service activities, T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

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## Sectoral structure of EU8 residing and working in selected EU15 countries (groups of sectors)

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## Sectoral structure of EU2 residing and working in selected EU15 countries (groups of sectors)

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183
### Sectoral structure of Romanian nationals residing and working in selected EU15 countries (groups of sectors)

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### Sectoral structure of Bulgarian nationals residing and working in selected EU15 countries (groups of sectors)

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### Sectoral structure of Polish nationals residing and working in selected EU15 countries (groups of sectors)

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Source: Labour Force Survey