



# The dynamics of migration in the euro area

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Overall adjusted net migration to the eurozone fell from 1.6 m in 2003 to 0.52 m in 2009 and 0.68 m in 2012. Beside a general temporary decrease in global migration this primarily reflects the crisis in the peripheral countries. From 2008 to 2012 net migration from non-EU countries to the GIPS countries (Greece, Ireland, Portugal and Spain) decreased from 286,000 to -108,000. In contrast, Italy has remained a gateway to the EU.

Due to the crisis, migration patterns within the eurozone have changed fundamentally. While prior to the crisis many citizens from Central and Eastern European EU countries migrated to Spain and other peripheral countries, the westward migration is now primarily directed to the core. The crisis has also triggered increasing migration from the periphery to the core. Spain, for instance, lost 480,000 inhabitants from 2010 to 2013 due to migration deficits.

The UK and Germany, with the latter now immigration country no. 1 in the EU and no. 2 in the OECD, have benefited most from the new trends. While in Germany in the 2000s net migration was small at 96,000 p.a. on average and even negative in 2008 and 2009, it jumped to 437,000 in 2013.

The increase in migration flows in the EU has been accompanied by an increase in the migrants' education level. The percentage of intra-EMU migrants that were highly educated increased 7 pp between 2005-6 and 2011-12, from 34% to 41%. The share of highly educated migrants from the GIPS moving to other euro member countries even went from 24% of the total to 41%.

Eurozone migration acts as a sensible adjustment mechanism in the labour markets. In Germany it contributes to the reduction of bottlenecks in the market for qualified labour like engineers and doctors. In the GIPS it functions like a safety valve. In Spain, for example, the unemployment rate would be 34.3% instead of 26.1% in 2013, if there had been no change in migration trends.

Migration fosters growth in the host countries. A rough Solow decomposition indicates that about one-tenth of Germany's economic growth in the past few years can be attributed to an increase in employment of citizens from the GIPS and Eastern European partner countries.

The impact on the GIPS is ambiguous. Emigration reduces persistent structural unemployment especially in problem sectors like construction. It also helps to rein in public spending. However, the huge swing in the migration balance, especially in Spain, weighs on domestic demand. Higher remittances (inflow 2013: 0.7% of GDP) would be helpful to mitigate the shock from the outflow of purchasing power. While fears of a brain drain are overstated, lasting migration deficits would accelerate population ageing in the periphery.

\* The author would like to thank Michael Stock for his valuable research assistance.



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### Introduction

Freedom of movement of workers – a key element of the internal market

1

According to Regulation (EU) 492/2011 on freedom of movement for workers within the Union:

Freedom of movement for workers should be secured within the Union. The attainment of this objective entails the abolition of any discrimination based on nationality between workers of the Member States as regards employment, remuneration and other conditions of work and employment, as well as the right of such workers to move freely within the Union in order to pursue activities as employed persons ...

Freedom of movement constitutes a fundamental right of workers and their families. Mobility of labour within the Union must be one of the means by which workers are guaranteed the possibility of improving their living and working conditions and promoting their social advancement, while helping to satisfy the requirements of the economies of the Member States. The right of all workers in the Member States to pursue the activity of their choice within the Union should be affirmed.

Free movement of workers is one of the key rules governing the EU internal market. Of course, there are good reasons for open labour markets. From an individual's point of view, the freedom of choice of workplace is tantamount to a basic right, although member states might not have codified it accordingly. Free individuals pursuing happiness and seeking good living conditions for themselves and their families should be given the right to do so by obtaining a job within the EU wherever they want. From a macroeconomic point of view, open labour markets are a precondition for the efficient use of labour and thus a major instrument to foster growth and employment in Europe.

Within the euro area, labour mobility has become even more important. To adjust imbalances in current accounts and labour markets resulting from differences in the countries' competitiveness, currency unions need a rebalancing mechanism as a substitute for the previous mechanism of appreciation or depreciation of the national currency of the stronger/weaker economies, respectively.

The EU's rules have stipulated the free movement of labour in substance since 1968. Today, EU citizens have the right to move to other member states and work there on the same terms as nationals. In hiring staff the discrimination of applicants from EU partner countries would be illegal, for example.

As there is no rule without an exception, the free movement of workers can be restricted. However, such restrictions can only be applied for a maximum of seven years following the accession of a new member state. These restrictions are meant to prevent shocks on labour markets in old member countries which could result from a sudden influx of workers from new countries with lower wage levels and unfavourable employment and income prospects. However, migrants can avoid these restrictions by settling in the host country as self-employed.

Free access to the EU-15 labour markets

2

EU-15	EU-8	EU-2	Croatia*
BE	2009	2014	2015
DK	2009	2009	2013
DE	2011	2014	2015
IE	2004	2012	2013
GR	2006	2009	2015
ES	2006	2009	2015
FR	2008	2014	2015
IT	2006	2012	2015
LU	2007	2014	2015
NL	2007	2014	2015
AT	2011	2014	2015
PT	2006	2009	2013
FI	2006	2007	2013
SE	2004	2007	2013
GB	2004	2014	2015

After the enlargement rounds in 2004, when besides Cyprus and Malta the EU-8<sup>1</sup> countries of Central and Eastern Europe joined the EU, and in 2007, when Bulgaria and Romania (EU-2) became new members, most established member states opted for transitional restrictions. In 2004, it was only Ireland, Sweden and the UK that refrained from imposing any restrictions. Austria and Germany, in contrast, opted for the full transition period of 7 years. In 2007, only Finland and Sweden offered free access from the beginning. At end-2013, all restrictions for workers from the EU-2 expired. At present, 13 countries continue to close their labour markets to people from Croatia, which joined the EU in 2013.

Reasonably, not only workers but also jobseekers are granted free movement within the EU. But this freedom is limited. Jobseekers have the right of residence for a limited period of 3 months which has to be extended to at least 6 months under certain conditions ("genuine chance" of getting work). Unlike migrant workers, they do not enjoy equal access to their host country's social benefits.

Currently there is much debate on the interpretation of this rule,<sup>2</sup> as the European Court of Justice has granted jobseekers the right of non-discrimination to any "benefit of a financial nature intended to facilitate access to employment in the labour market of a Member state".<sup>3</sup> This has created uncertainty among the social security institutions in several countries. In Germany, for instance, major benefits for jobseekers under the so-called Hartz IV law can be interpreted as welfare benefits as well as assistance for jobseekers. Recently several social

\* According to the so-called 2+3+2 model, restrictions currently effective until mid-2015 may be prolonged until mid-2020.

Sources: Holland, Dawn et al. (2011) (see footnote 17); [http://en.wikipedia.org/wiki/Freedom\\_of\\_movement\\_for\\_workers](http://en.wikipedia.org/wiki/Freedom_of_movement_for_workers)

<sup>1</sup> Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

<sup>2</sup> Wollenschläger, Ferdinand and Jennifer Ricketts (2014). Jobseekers' Residence Rights and Access to Social Benefits: EU Law and its Implementation in the Member States. Online Journal on Free Movement of Workers within the European Union. No. 7.

<sup>3</sup> ECJ, Case C-138/02 [2004] ECR I-2703, para. 63 — Collins; ECJ, Case C-22/08 and C-23/08 [2009] ECR I-4585, para. 37 — Vatsouras.



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courts have followed the latter reasoning and granted Hartz IV benefits to migrants. Together with the expiration of the restrictions for immigration from the EU-2 this has nourished the fear of poverty immigration in Germany.

But not only in Germany has the political debate surrounding migration and free mobility intensified of late. There has been growing concern in several countries like the UK and France that an increase in immigration – above all from Eastern European countries – will result in rising unemployment and surging public expenditures for social transfers to the incoming population.<sup>4</sup> These concerns might have contributed to the success of populist parties in the recent elections to the European Parliament.

Also, within the Schengen area, a prevailing negative attitude in Switzerland towards immigration has provoked a discussion surrounding the limits of free mobility. In February, a Swiss national referendum passed by a small margin allowing the government to tighten immigration restrictions on EU citizens. Depending on how the laws are drafted, this could end Swiss participation in not only the free movement agreement it signed with the EU in 1999, but up to six other economic agreements, as well.<sup>5</sup>

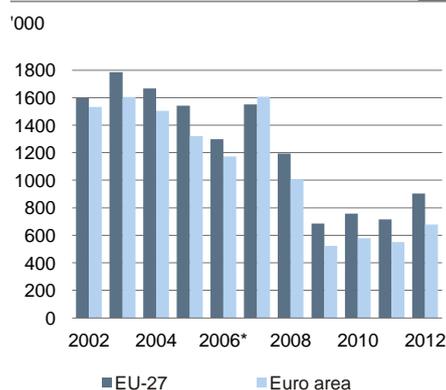
These debates give reason to take a closer look at the development of migration in the EU, especially the euro area. To what extent has migration between the euro area and the EU – as well as non-EU countries – changed within the past few years and which countries in the euro area will be most affected? These questions will be addressed in the first part of our study. In the second part, we will briefly discuss the economic impact of these changed migration patterns.

## Migration shifts within the euro area

### Marked decline in EU-27 adjusted net migration

Adjusted net migration in the EU

3



\* 2007 break in the series for the EU-27

Source: Eurostat

For ageing Europe migration is a major source of population dynamics. However, in the EU-27 adjusted net migration strongly declined between 2007 and 2009 and has only slightly recovered since then. At 685,000 in 2009 net migration was scarcely half as high as in the 6 years from 2002 to 2007 prior to the series of recent crises, i.e. global financial market and economic crisis and later eurozone crisis, when every year immigration surpassed emigration by 1.573 m on average.<sup>6</sup> The Eurostat data for the EU-17 show an even more pronounced setback (524,000 in 2009 vs. 1.457 m in the pre-crisis years). For both areas, however, adjusted net migration rose again in 2012. These developments are in line with the trend in global migration which was also markedly hampered by the global crisis then.

In interpreting these data one has to keep in mind that adjusted net migration is a statistical construct. It is defined as the difference between the changes in total population numbers and in the surplus or deficit of births in the respective year. Thus it also covers statistical adjustments like the naturalisation of illegal immigrants. But in contrast to the data on adjusted net migration where time series are available, Eurostat has only published migration figures for the EU-27 and not for the eurozone and only for the past few years from 2009 onwards. According to these figures, in the EU-27 net migration from non-EU countries fell from 582,000 in 2009 to 397,000 in 2012.

<sup>4</sup> Even before these controls lapsed, British politicians had proposed limiting net migration in the UK to fewer than 100,000.

<sup>5</sup> The Economist. Charlemagne: "Switzerland's Crossbow." February 14, 2014.

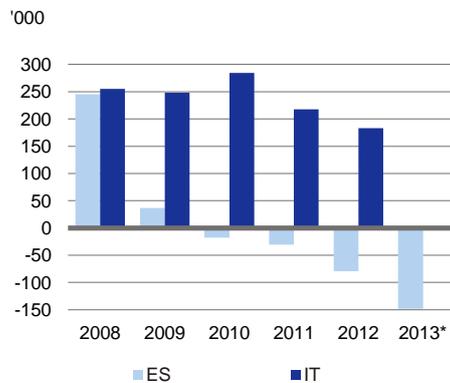
<sup>6</sup> These are data for adjusted net migration, i.e. net migration plus adjustments. As such adjustments of the population statistics cover, among other things, the naturalisation of illegal immigrants, which happened in Spain, for example, net migration has been lower, in fact.



## The dynamics of migration in the euro area

### Migration from outside the EU: Downward trend in the periphery

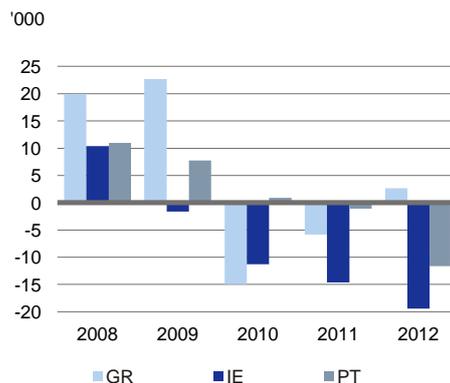
Italian and Spanish net migration from non-EU countries



\* Data for Italy not yet available

Sources: National statistical offices, Deutsche Bank Research

GIP net migration from non-EU countries



Sources: National statistical offices, Deutsche Bank Research

There is much evidence that the strong migration surplus to the EU-27 in the period before the crises primarily resulted from migration to Spain and Italy and – to a lesser extent – to the UK. Due to the lack of robust data, however, it is not possible to quantify how much the individual member states have contributed to this surplus.<sup>7</sup> But national data can give some hints. From 2002 to 2007 Spain and Italy registered net migration from non-EU-27 countries totalling 2.488 m and 1.292 m, respectively.

The surplus in the Spanish balance of migration immediately crumbled (2008: 311,000; 2009: 13,000) and net migration became negative from 2010 onwards. This primarily resulted from the development in non-EU migration (2008: 245,000; 2013: -148,000) and especially the re-migration of South Americans. In contrast, Italy has remained a gateway to the EU especially for people from Africa and Asia (net migration 2012: 60,000 and 68,000). Thus, net migration from outside the EU to Italy has only declined slightly, from 223,000 per year 2002 to 2008 to 183,000 in 2012. In the past few years the bulk (2012: 50%) of the EU-27 net migration was due to Italy's migration surplus with non-EU countries.

Given the smaller figures for their area and their population, the other peripheral countries have contributed less to the development of the EU-27's and the eurozone's migration balance. But like in Spain their migration balances with respect to non-EU countries have become negative in the past few years.<sup>8</sup>

Just how many migrants from non-EU countries the core countries of the eurozone have attracted in these periods is hard to tell as comparable up-to-date data is not available for several countries, e.g. France. Figures for the EU suggest that in the past few years the core countries could not compensate the decline in net migration from non-EU countries to the GIIPS (GIPS + Italy) (2008: 541,000; 2012: 76,000). In the UK long-term net migration of non-EU citizens fluctuated around 200,000 from 2005 to 2011, but declined to 146,000 in 2013.<sup>9</sup> Germany only attracted a total of 186,000 in non-European net migration. Since 2009, non-EU net migration has increased from -16,500 to 137,600 in 2013.

Among the smaller eurozone countries net migration from outside the EU increased in Austria from 15,000 to 42,000 in 2012. Data from Belgium also show a marked rise in net migration of non-EU people from about 21,000 per year in the period 2002 to 2007 to 95,000 in 2010. But these figures are not comparable due to methodological changes in the series. The Netherlands reported a negative migration balance for people born in non-EU countries from 2003 to 2008. From 2010 to 2012 the balance was positive by about 22,000 per year.

### Change in migration pattern in the EU and the eurozone

Although the recent crises have impaired net migration to the EU and the eurozone their major result was a marked change in migration patterns within

<sup>7</sup> The (adjusted) net migration of people from non-EU countries to the EU equals the sum of net migration of the 27 member countries. The latter, however, also covers net migration from partner countries and thus is different from net migration of non-EU individuals to the respective country.

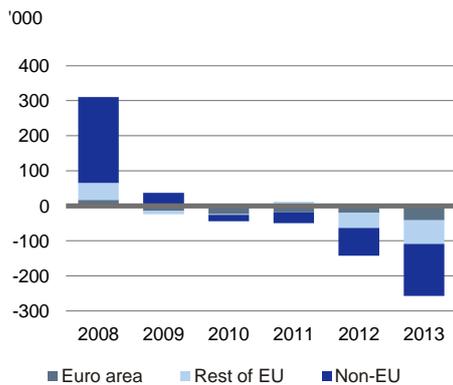
<sup>8</sup> In Greece net migration from non-EU countries fell from about 20,000 in 2008 to 2,600 in 2012. Ireland, for instance, reported a non-EU net migration totalling 10,400 in the statistical year (April on April) 2008, but -17,300 in statistical 2013, as many people from Ireland emigrated to Australia, Canada and the US. Portugal shows similar figures for non-EU net migration, namely a decline from 10,950 in 2008 to -11,600 in 2012. This is primarily due to emigration and re-migration to Portugal's former colonies, especially Angola and Brazil.

<sup>9</sup> These figures are distorted due to the EU enlargement in 2007. Furthermore, the net migration balance with non-EU countries – instead of citizens – shows different figures due to substantial emigration of British nationals. From 2006 it fluctuated around 130,000, then surged to 174,000 in 2010 and went down to 96,000 in 2012. In addition to the long-term migration there was substantial short-term immigration, especially from Poland (over 200,000 in 2006 and 2007).



## The dynamics of migration in the euro area

Spain: Net migration by country group 6



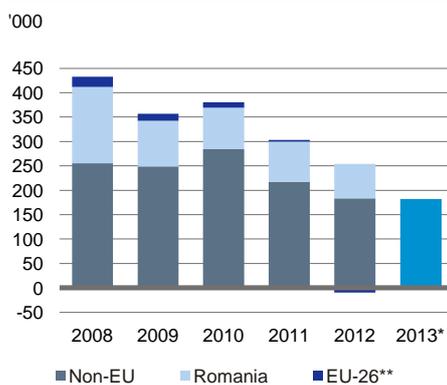
Sources: INE, Deutsche Bank Research

both areas. Two developments are especially worth mentioning. (i) The change in the direction of the east-west migration from then new EU member states towards destinations in the eurozone, notwithstanding ongoing migration especially from Poland to the UK. While prior to the crisis many citizens from the EU-8 and primarily the EU-2 migrated to Spain and other peripheral countries, the east-west migration is now primarily directed to the core countries. (ii) The crisis has also triggered increasing migration from the periphery to the core.

The development of migration in Spain exemplifies the changes. In 2008 net migration from the eastern EU member states amounted to 34,000. In 2013, however, emigration to these countries surpassed immigration by 54,000. This was primarily due to changes in the migration balance with Romania which shows a marked swing from 27,300 to -45,000. In Italy net migration from the ten eastern members shrank by about 55% from 2008 to 2012 (80,000). Here again the driving force was the decline in net migration from Romania. In Ireland net migration from the EU-12 was 35,000 in 2008 but -2,400 in 2013.

### Intensified migration from the periphery to the core

Italy: Net migration by country group 7



\* Total; \*\* EU-27 excl. Romania

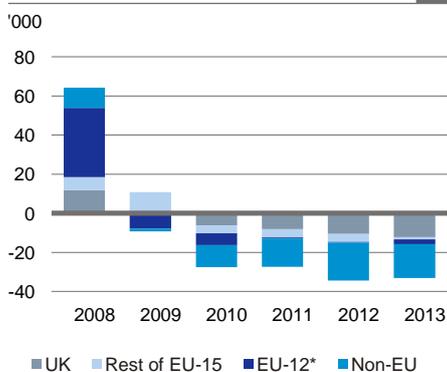
Sources: Istat, Deutsche Bank Research

Prior to the crisis, migration among the eurozone member countries had been weak. If there was a clear direction, at all, it tended to be from the core to the periphery. This trend, however, was partly influenced by German (and British) pensioners who settled in Spain (and Portugal).<sup>10</sup> According to a recent study intra-EU-15 mobility was only 1.1‰ in the years 2003 to 2007.<sup>11</sup>

Now, however, the data tell another story. The crisis has triggered intensified intra-eurozone migration and by and large its direction has changed fundamentally, namely from the periphery to the core. Here, Spain again is a striking example. While in 2008 migration from eurozone partner countries to Spain outstripped migration in the opposite direction by 18,200, Spain reported a deficit of 41,800 for migration with the respective countries in 2013. Italy has shown a negative migration balance with France since 2009 (2012: -3,800). And the migration deficit with Germany that emerged in 2010 increased to 5,700 in 2012. From 2009 to 2012 in total, Italy lost 30,000 inhabitants to the EU-15 including 10,300 to the UK (2012: 18,300 and 4,700, respectively). From 2003 to 2008 the respective net migration figures were slightly positive.

Among the smaller peripheral countries only the Irish Statistics Office provides more detailed data on intra-EU migration. According to this data, Ireland's net migration balance with the EU-15 ex UK, which can be taken as a proxy for the eurozone, switched from 10,700 in 2009 to -1,200 in 2013 (April on April 2012).

Ireland: Net migration by country group 8



\* EU-10 plus RO and BG

Sources: CSO, Deutsche Bank Research

### Peripheral countries have lost appeal

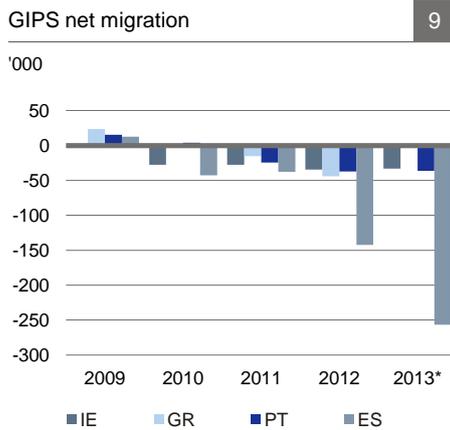
The combined effect of decreasing immigration from outside the EU and from Eastern European EU countries as well as intensified emigration has impaired the population dynamics in the periphery. As a result of the crisis net migration in the GIPS, which still totalled +407,500 in 2008, has become strongly negative (2012: -258,600). The swing was most pronounced in Spain (2008: 310,600; 2012: -142,500; 2013: -256,850) and Ireland (2008: 64,300; 2013: -33,100). By comparison, in Italy the migration surplus has shrunk from 432,700 to 182,600.

<sup>10</sup> This is the story told by the meagre set of data from national statistical offices and in the literature. In Germany the total amount of net migration from other eurozone countries was only 35,000 per year, i.e. 0.4‰ of the population, from 2003 to 2008. During this period Germany lost 146,000 inhabitants, primarily due to migration deficits with Austria, France, Italy and Spain. In Italy figures for net migration from Germany and France were even smaller, albeit positive.

<sup>11</sup> Bertelsmann Stiftung (ed.) (2014). Harnessing European Labour Mobility. Scenario analysis and policy recommendations.

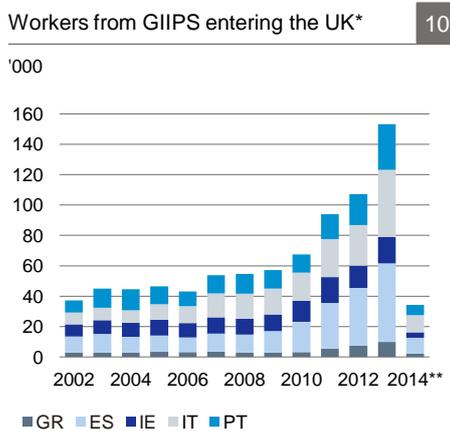


## The dynamics of migration in the euro area



\* Data for Greece not available

Sources: National statistical offices

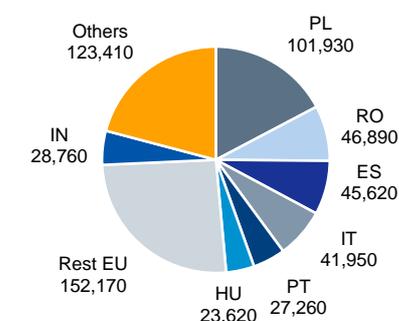


\* National Insurance Numbers allocated to adult nationals from the respective countries. \*\* Jan. - Apr.

Sources: Gov. UK NPS, Deutsche Bank Research

### UK: NI No registrations to adult overseas nationals 2013

Total 602,500



Source: Gov. UK NPS

In the respective countries the migration issue has increasingly attracted public attention, as shrinking immigration was accompanied by increasing emigration and more recently even a surging emigration of local nationals. This is especially true for Portugal, where about 95% of those emigrating had Portuguese citizenship in 2012.<sup>12</sup> In Italy local nationals have recently accounted for nearly two-thirds (82,100) of the total emigration. In Greece and Ireland the respective share was above 50%. Only in Spain is the respective share (2013: 14.5%) much lower, due to the massive (re-)emigration of South Americans (126,900, i.e. 49.4% of total emigration) and Romanians (68,500, or 12.5%).

## Where the grass may be greener: The destinations

### UK: Strong immigration from partner countries

The decline in the dynamics of the eurozone periphery migration contrasts with the development in other countries. The most interesting examples are the UK and Germany. Britain has experienced two major waves of immigration in the past ten years. The first hike resulted from the EU enlargement in 2004 and lasted until 2008. A renewed uptrend started in 2010, triggered by the euro crisis and the EU enlargement in 2011.

However, it is challenging to quantify this development. The British statistics differentiates between short-term (1 to 12 months) and long-term migration. Data on long-term migration from the International Passenger Survey (IPS) understate the inflow. Adding up short-term and long-term figures would also be misleading, as many migrants leave the UK within the 12-month period. Both data sets also include substantial numbers of students. Therefore, IPS data which show an enormous increase in short-term immigration of EU-8 nationals, especially Poles, from 2004 to 2007 should be interpreted cautiously.<sup>13</sup> Better indications for the labour market impact can be derived from statistics on National Insurance Numbers (NI No) allocated to adult overseas nationals entering the UK.

The number of EU-8 citizens entering the UK labour market skyrocketed in the first years following the 2004 enlargement. It increased from 25,000 in 2003 to 337,000 in 2007 (NI No figures). Then immigration dropped in 2009 and 2011, but recovered again in 2013. Migrants from Poland have dominated these developments. In fact, in 2006 and 2007 about 70% of new entrants were Polish citizens. In the past few years the importance of labour immigration from Poland has decreased in absolute as well as relative terms. From January to April 2014 only 18,000 persons, or 54% of all EU-8 labour immigration, came from Poland.

Besides citizens from the EU-8 also a substantial number of adults from the EU-2 have entered the UK labour market in the past seven years, namely about 33,000 per year on average. This happened despite the immigration restrictions applied to the EU-2 citizens until January 1, 2014. Since then the figures have gone up even further (January to April: 45,350 compared to 27,700 in 2012 as a whole).

Since 2010 the UK has also experienced intensified labour immigration from the GIPS. This is at least the message of the NI No data which, however, is hardly reflected in the PSI data. National data from Ireland and Spain also indicate intensified emigration to the UK and decreased immigration from there.

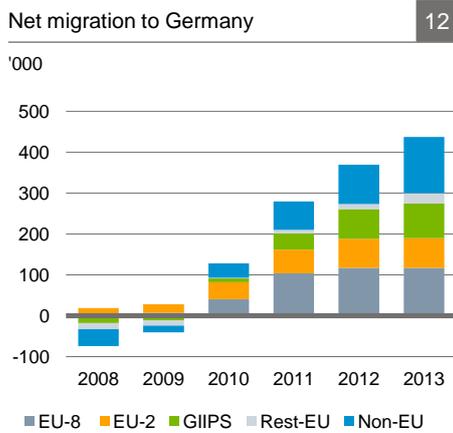
<sup>12</sup> It must be noted that some of the data from Portugal on emigration is not as thorough on the flows of foreign residents as it is with its own nationals.

<sup>13</sup> According to these data long-term net migration from the EU-8 nearly doubled from about 45,000 in 2004 to about 80,000 in 2007 and then collapsed in 2008 and 2009. In the past few years it has slightly increased again (2013: 44,000). Short-term immigration from the EU-8 expanded at much higher numbers (2004: 89,000; 2006: 348,000), primarily driven by immigrants from Poland (2006: 221,000). It dropped in 2009 and has hardly recovered since then (2012: 123,000).



## The dynamics of migration in the euro area

### Germany now immigration country no.1 in the EU

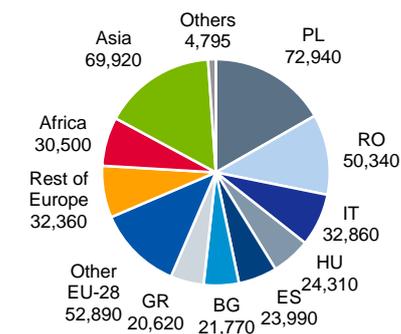


In Germany the emergence of the crisis in the eurozone periphery coincided with the beginning of a marked upturn in immigration. In 2008 Germany's net migration balance was significantly negative (-55,700). But for 2013 Germany has reported the largest surplus (437,300) since 1993 when the country still benefited from the fall of the Iron Curtain. Although the concurrence is striking, it should be kept in mind that in May 2011 and on January 1, 2014 Germany had to open its labour market to immigrants from the EU-8 and the EU-2, respectively. Only since then has Germany fully participated in the redirection of migration flows in the EU and the eurozone, i.e. the change of direction in east-west migration as well as the increasing immigration from the periphery.

In 2013 nearly three-quarters of Germany's migration surplus resulted from surpluses with these regions, namely the EU-8 (26.8%), the EU-2 (16.5%) and the GIIPS (19.5%). Net migration from each of the three regions has increased enormously in this decade. For the GIIPS countries it surged from -20,000 in 2008 to +85,300 in 2013. Among the GIIPS most people immigrated from Italy and Spain. The majority of the eastern immigrants are Poles, Romanians and Hungarians. Primarily due to the surge in immigration from its EU partners, Germany is now the second-largest immigration country in the industrialised world, trailing only behind the United States.

Net migration to Germany 2013 13

Total 437,300



Source: Destatis

### Other core countries have benefited less

In France, more than 60% of non-EU immigration comes from countries in Africa. Among these, Algeria, Morocco, Tunisia and Mali account for the majority<sup>14</sup>, indicating France's still strong ties to its former colonies and protectorates. In reference to intra-EU migration, 33% of France's foreign population in 2010 (or 1.8 million) hailed originally from the EU – with Portugal, Italy and Spain making up 11%, 6% and 5% of the total immigrant population, respectively.<sup>15</sup> Overall net migration in France held steady over the last few years, hovering at around an adjusted surplus of 62,000. This would indicate lower net migration in France than what was experienced earlier in the 2000s when adjusted net migration averaged 163,000 per year from 2000 to 2007. However, some discrepancies in the data might suggest that this number is much higher.<sup>16</sup>

Austria, Belgium, the Netherlands and Luxembourg have all also seen net migration surpluses since the beginning of the crisis. Although they are small in comparison to the euro-area heavyweights, the impact of migration on their local populations is significant. Belgium, for example, has seen its foreign population go up 1.3 pp as a share of the total from 2010 to 2012.

### Skills migration in the euro area

The increase in migration flows in the EU has been accompanied by an increase in the migrants' education level.<sup>17</sup> According to a recent study, the percentage of intra-EMU migrants that were highly educated increased 7 pp

<sup>14</sup> OECD. International Migration Outlook 2013.

<sup>15</sup> INSEE. Étrangers – Immigrés. TEF, édition 2014.

<sup>16</sup> France's migration statistics have not been updated for the last couple of years, as they remain fairly static. Therefore, the approximations may not indicate the true magnitude of migration.

<sup>17</sup> One of the factors driving these shifts is the increasing aggregate education level over the last decade. The average population with a tertiary education rose from 19.5% in 2004 to 24.7% in 2013. Among the peripheral countries, Portugal has seen the largest increase in the number of graduates, rising 59% in the last decade, followed by Ireland and Italy at 44% and 43%, respectively.



## The dynamics of migration in the euro area

### English: Favourite foreign language 14

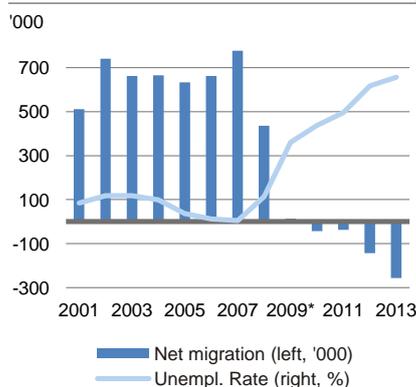
Pupils learning selected languages at ISCED-III level

As % of total, 2012

	English	French	German
Austria	99.6	42.7	-
Belgium	95.4	99.9	28.3
Cyprus	89.9	37.7	3.5
Estonia	95.8	6.5	31.8
Finland	99.6	16.7	24.8
France	99.7	-	22.1
Germany	94.7	26.3	-
Greece	94.1	4.4	2.1
Ireland	-	54.5	14.9
Italy*	97.6	18.2	6.5
Latvia	98.6	5.8	31.2
Luxembourg	97.9	100.0	100.0
Malta*	66.5	4.9	1.3
Netherlands	100.0	32.8	42.4
Portugal	53.1	3.2	1.0
Slovakia	98.8	15.9	59.9
Slovenia	98.1	10.9	66.0
Spain	97.7	22.3	1.2

\*2011  
Source: Eurostat

### Spain: Unemployment and net migration 15



\* 2001 to 2007 Eurostat data on adjusted net migration, from 2008 onwards INE data on net migration

Sources: Eurostat, INE, Deutsche Bank Research

between 2005-6 and 2011-12, from 34% to 41%.<sup>18</sup> Emigrants from the southern periphery in particular show higher educational achievement and skill levels. Highly educated migrants from the GIPS moving to other euro member countries went from 24% of the total in 2005-6 to 41% in 2011-12. Among these migrants, the highly skilled percentage of the total that found work rose from 27% to 49%.

Regarding east-west migration, the same research points out that the average emigrant from the EU-2 has tended to be less educated than his or her European counterparts – although being highly educated from these two countries increases the likelihood of emigration compared to those that are not. Highly educated emigrants from these two countries that moved between 2011 and 2012 accounted for 24% of the total emigrants.

Accordingly, the countries of destination have experienced an increase in the immigration of skills. In Germany, 29% of all immigrants aged 20 to 65 who arrived in the last decade or so (2001 to 2011) held a graduate degree while among the total population the respective figure was only 19% in 2011. Among the immigrants more than 10% had a degree in science, IT, mathematics or engineering compared to 6% among the rest of the population aged 25 to 65. These are key qualifications which Germany urgently needs to maintain its position as production location.

### Employment opportunities as a driving force

Obviously, the changes in the magnitude and direction of migration flows reflect the changes in macroeconomic conditions in the different EU countries. But migration is a complex phenomenon. Even labour migration tends to move along pre-existing paths. Emigrants prefer to choose those destinations where fellow countrymen have already settled down. Due to such network effects migration often increases only slowly at first and then intensifies when it has reached a critical figure. Language also influences emigrants' choice of a destination country. This factor is important for skilled workers searching for an adequate job abroad. Thus, language skills might have gained in importance. In contrast, geographic proximity has lost relevance. Last but not least, the temporary restrictions on labour migration within the EU have also led to distortions.

Most major forces, namely immigration rules, language and network effects have benefited the UK in the past decade. According to a study for the European Commission, about 90% of inward migration from the EU-8 to the UK in the years 2004 to 2009 is due to the EU enlargement, while in Germany only 10% of total immigration during this period can be attributed to this event.<sup>19</sup>

In the past few years, however, intra-EU migration and intra-eurozone migration have largely been driven by the economy. In the GIPS, decreasing immigration and surging emigration are clearly related to the deterioration in the labour markets there. It is also no coincidence that Germany has become the destination country no. 1 in the EU. Given the ongoing expansion in employment (Q1 2010 to Q1 2014: +4.3%) and the low unemployment rate (May 2014: 5.1%) Germany has become more and more attractive for jobseekers from the GIPS.

As crisis-triggered migration was initially clearly dominated by EU-8 and EU-2 nationals, doubts have emerged about the willingness to migrate of citizens from the old member countries. However, it is hardly surprising that foreign workers are more mobile and more prepared to leave their host country again when they become unemployed due to a labour market shock. Furthermore, the crisis in

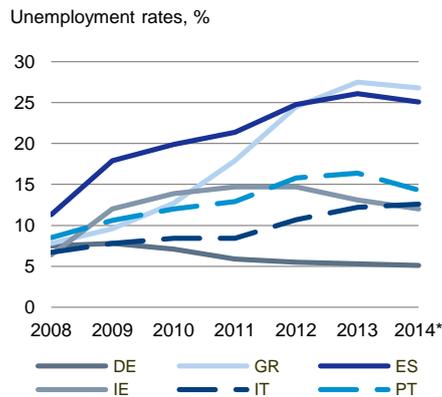
<sup>18</sup> Jauer, Julia et al. (2014). Migration as an Adjustment Mechanism in the Crisis? A Comparison of Europe and the United States. IZA Diskussion Paper No. 7921.

<sup>19</sup> Holland, Dawn et al. (2011). Labour mobility within the EU - The impact of enlargement and the functioning of the transitional arrangements. Final Report.



## The dynamics of migration in the euro area

### Unemployment in the eurozone 16

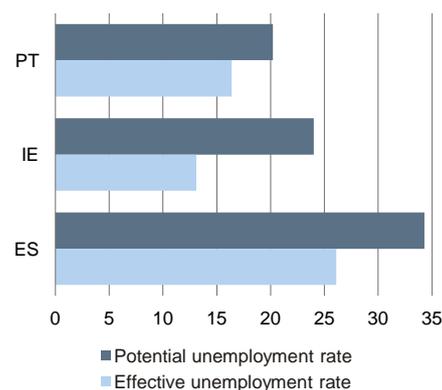


\* May s.a., Greece March

Source: Eurostat

### Migration as safety value for labour markets 17

Effective and potential\* unemployment rates; 2013, %



\* Rates under the assumption that migration flows did not change due to the crisis

Sources: Eurostat, national statistical offices, Deutsche Bank Research

the GIIPS has especially hit sectors like construction, retail, and the hotel and restaurant industry, which used to employ many migrants from eastern EU and non-EU countries. In the past two years more and more nationals have joined the trek away from the GIIPS.

Anyway, it is obvious that the economic situation has markedly influenced and altered migration patterns in the eurozone. But has migration likewise worked as an economic adjustment mechanism substituting for flexible currencies? To answer this question we first look at its potential labour market impact. Then we summarise the results of some recent studies on the macroeconomic impact.

## Impact of intensified migration

### Relief for labour markets through migration

Given that most of the recent upswing in intra-EU and intra-eurozone migration resulted from increased labour mobility, migration should have brought some relief for the crisis-ridden labour markets. Without migration the imbalances in these markets would be even more pronounced. To ascertain the extent of relief we have run a simplified model calculation, although the absence of suitable data meant we were unable to include Greece. We assume that during the recent crisis years just as many immigrants would have entered the respective country and just as many emigrants would have left it as they did in the five years before the crisis, i.e. from 2003 to 2007. On the basis of these potentially extra people we can calculate the additional potential size of the working-age population. For Ireland, Portugal and Spain it works out at total of 297,000, 205,000 and 2.67 m respectively, in 2013. We further assume that this additional working-age population would not have found work owing to the crisis and inflexible labour markets and that they would have been recorded as additional jobless persons in the national unemployment statistics. So had these workers arrived in or not left the country even during the crisis, in the case of Ireland this would have made a difference of nearly 11 percentage points in the jobless rate (2013: 24% instead of 13.1% effectively). For Spain it would have added 8.2 percentage points. That would have put considerably more pressure on the respective job markets.

By reducing unemployment, migration should have a positive impact on the social and economic conditions in the peripheral countries. At least it reduces the demand for public transfers, i.e. unemployment benefits, and thus contributes to the necessary consolidation of public budgets.

In Germany the migration has helped to reduce the bottlenecks on the market for qualified labour. Among last decade's immigrants to Germany 23% worked as specialists or managers in 2011. The importance of skills immigration can be demonstrated from the example of a profession which is said to be vital for Germany's industry, namely engineers. Among Germany's 1.66 m engineers one out of seven is an immigrant. All in all, in Germany the number of employees from the EU-8, the EU-2 and the GIIPS has increased by 25%, 30% and 6.4% per year in the past 4 years from March 2010 to March 2014. During the same period the share of employees from the three regions among all employees has increased by 1.3 pp to 3.3% and the immigration has contributed about one-fifth to the increase in the total number of employees in this period.

### Positive impact on economic growth in the host countries

To get an idea of the immigrants' contribution to economic growth in Germany a rough calculation on the basis of a Solow decomposition using the employment



## The dynamics of migration in the euro area

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figure mentioned above and some simplified assumptions might help.<sup>20</sup> According to this calculation the migrants contributed about 0.18 pp to the average rate of German economic growth (2.1%) in the past four years. Assuming that the capital stock efficiently adjusts to the increase in the labour supply the impact on growth was higher.

Yet much depends on the immigrants' productivity. At present, lower wage levels indicate that they are less productive than the established labour force. In so far as this results from language problems and insufficient recognition of qualifications this might be a temporary problem. Furthermore, in today's network structures of production immigration of skilled labour might have positive external effects not reflected in individual wages. The more (qualified) migrants contribute to the emergence of such network effects the higher will be the long-term impact on growth.

Empirical studies report a slightly positive impact on growth. In their report for the European Commission Holland et al. found that the immigration from the EU-8 and the EU-2 in the years 2004 to 2009 (which amounted to 0.9% of the EU-15 population in 2004) will possibly raise the long-run level of potential output in the EU-15 by about ½%, with marked differences among the individual countries.<sup>21</sup> The UK and Ireland were expected to benefit more. More recently, Brücker has estimated a stronger impact. According to his research, a 1% increase in the EU-15 labour force due to immigration from the EU-8 and the EU-2 will lift GDP in the EU-27 by 0.5-0.6%.<sup>22</sup> For Germany the impact is slightly higher.

While immigration fosters economic growth and has even slightly increased per capita income in the immigration countries the impact on wages and income distribution is debatable. In a traditional scenario, immigration results in lower wages at least for some groups of established workers. In case of labour market rigidities unemployment can also increase.

However, the implicit assumption here that migrants exhibit the same economic characteristics as similarly skilled domestic workers is questionable. Young people who migrate to grasp opportunities in the jobs market are often highly motivated. In their search for work they also display great occupational and geographic mobility. This includes the willingness to accept jobs that domestic workers would not take on at all, or only for much higher pay. Furthermore, skilled work is in short supply in Germany. However, if migrants do not replace native workers as traditional theory assumes but complement them instead, migration triggers different, more positive effects than those traditionally observed.

Several studies for Germany conclude that immigration has little impact on the labour market.<sup>23</sup> Although various researchers have identified a negative correlation between the share of foreign workers and the wages in the low-skilled sector, the effect is rated relatively low. This also holds for the employment effects, with recent research suggesting that immigration does not significantly influence the employment of low-skilled native workers. In contrast, low-skilled former immigrant workers face a higher risk of becoming unemployed. In the UK the impact on wage distribution seems to be slightly stronger: there, low-wage workers lose while medium and high-paid workers gain from immigration.<sup>24</sup>

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<sup>20</sup> Assumptions: a simple Solow decomposition is applicable, migrants have contributed to the increase in the total hours worked to the same extent as to the increase in the number of employees, the immigrant workers' productivity is the same as the average per capita productivity in the whole economy, and the wage share was constant at 65%.

<sup>21</sup> Holland, Dawn et al. (2011).

<sup>22</sup> Brücker, Herbert (2014). Ein Plädoyer für die Arbeitnehmerfreizügigkeit. Wirtschaftsdienst 2014/3. P 177.

<sup>23</sup> See Brücker, Herbert (2014); see also Schäfer, Holger (2014). Zuwanderung: Chance und Herausforderung, Wirtschaftsdienst 2014/3.p 168f, and the literature quoted by these authors.

<sup>24</sup> See Ruhs, Martin and Carlos Vargas-Silva (2014). The Labour Market Effects of Immigration. The Migration Observatory at the University of Oxford Briefing. March 2014, and the literature there.



## The dynamics of migration in the euro area

Why migration could fail as an adjustment mechanism in the euro area

18

According to research by two Harvard and MIT economists, the impact of migration on a depressed economy within a currency union very much depends on the nature of the slump. If it is caused by a shortfall in external demand, i.e. a setback in exports to partner countries, migration can help to overcome the recession. But if the downturn results from a shortfall in demand within the sector of non-tradable goods as a consequence of a housing and real estate market crash, for example, migration might not contribute to improving the situation.

Both results reflect different needs for adjustment. To reduce unemployment resulting from weak exports, a country has to improve its price competitiveness. That means (real) wages have to go down, which can be a lasting procedure in a country with rigid labour markets. Under these circumstances emigration of labour can be helpful and alleviate adjustment needs. Wage reductions necessary to restore labour market equilibrium are generally smaller. This is all the more true as exports to the partner country will increase due to the arrival of the migrants there. The immigrants will strengthen the partner country's economy and its demand for imports.

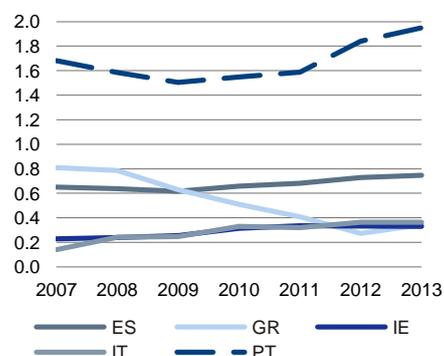
In the second case, which might have some explanatory power especially with regard to the situation in Spain, the stabilisation and improvement of domestic demand for non-tradable goods play the key role. Therefore migration will not help if migrants take away purchasing power. In this case migration reduces the supply of labour but also the demand for non-traded goods which, in turn, lowers the demand for labour.

Source: Farhi, Emmanuel and Iván Werning (2014). Labor Mobility within Currency Unions, NBER Working Paper No. 20105.

Inflow of remittances

19

% of GDP



Source: World Bank

### Ambiguous impact on the GIIPS

As discussed earlier, in the GIIPS emigration reduces the excess supply in the labour market and thus works like a safety valve. In principle, this should be beneficial for these countries. It improves the prospects for those unemployed who have stayed at home. What is more, the emigration specifically reduces the risk of persistent structural unemployment in problem sectors like construction, as many emigrants once worked in this industry which experienced an unsustainable expansion in the boom before the crisis. The emigration of recipients of social transfers, e.g. unemployment insurance benefits, helps rein in public spending. Higher emigration can also contribute to the reduction of current account imbalances as it reduces the demand for imports in the GIIPS and fosters their exports. This effect will be all the greater the more the intra-eurozone migration triggers economic growth and thus additional import demand in the core countries.

In contrast to such reasoning, some economists are afraid that an ongoing outflow of people will prevent or at least impede a sustained recovery in the GIIPS. They argue that the exodus weakens domestic demand as emigrants take away purchasing power. Especially Spain would suffer, given the enormous swing in the country's migration balance.<sup>25</sup> To underpin the argument, the sceptics point to the Spanish housing market problems. In their view, intensified shrinking of the population resulting from low birth rates and more emigration will make it even more difficult to fill the large number of vacancies. Recent research by two Harvard and MIT economists supports this view (box).

The risks on the demand side would be mitigated if emigrants who have found work in a core country sent some of their earnings back to their home countries. However, worker's remittance inflows in the periphery have not increased at the same rate as emigration. Thus, the role of remittances is limited. These only amount to a small portion of total GDP (IE 0.33%, GR 0.34%, ES 0.75%) – with the exception of Portugal (1.95%). In Spain, however, it is expected that the inflows of remittances from Spaniards living abroad have surpassed the outflows from the shrinking number of migrants living in Spain for the first time since 2003.

### Fear of a brain drain overstated

As more and more qualified young nationals have left the peripheral countries, commentators have expressed concerns on the risk of a brain drain. Although it is estimated that more than 100,000 university graduates have left Spain in the past few years, complaints about an exodus of skills are misleading. Given the ongoing high unemployment even for qualified young people in the periphery, taking a job abroad is obviously better for the youngsters than inactively staying at home. Longer periods of unemployment, especially at the start of their career, are frustrating for young people, as they see their qualification devalued. What is more, in the GIIPS the young generation's incentives to invest in education and qualification would be even more impaired if the youngsters even missed the opportunity to try their chances abroad. Instead, a period of work experience abroad can boost career opportunities, especially for university graduates. And, of course, a substantial number of today's emigrants are likely to move back home when the labour market situation has improved.

However, it is obvious that a lasting exodus of skills from the southern periphery would entail serious structural problems and undermine the growth potential there. With a lasting migration deficit Greece, Spain and Portugal would soon be among the most rapidly ageing populations on the globe and their workforce would shrink substantially. However, such a scenario is unlikely, given the stabilisation of these economies.

<sup>25</sup> Buck, Tobias (2014). Migration: The drain from Spain. Financial Times. Feb 20, 2014.



## Outlook

After a marked surge, intra-eurozone migration is likely to have peaked in 2013. As the gradual recovery in the peripheral countries is very likely to continue, the growth of emigration from there should have come to a halt. The same can be concluded from the drop in bond yields, which have proved to be a good proxy for potential emigrants' expectations with regard to their home country's future economic situation. However, immigration will remain low in the periphery as long as the labour market situation there does not change fundamentally.

In the core countries, especially Germany, immigration from Central and Eastern Europe is likely to remain high for the time being. In Germany, the number of registered foreigners from the EU-2 grew by 40,000 from January to April 2014 (Jan-Apr 2013: 29,000), but bear in mind, of course, that the freedom of movement restrictions were abolished at end-2013.

Germany should leverage the opportunity at hand. All those involved should play their part in enabling the immigrants to find a suitable job and efficiently contribute to the creation of wealth. The strengthening of Germany as the growth engine of the eurozone is also beneficial for the peripheral countries.

Even though the peak might have been reached, intra-eurozone migration is likely to remain high as so many young Europeans have successfully dared to seek work abroad and thus may become role models for others. This is good news as intensified labour mobility can foster stability and growth in the EU and promote European integration. In the euro area, migration is a welcome adjustment mechanism that contributes to the ongoing rebalancing, albeit especially in Spain this mechanism might work only partially at present, as it could be a drag on the recovery of the housing market. Last but not least, young people who work in partner countries can be ambassadors of their home countries and foster mutual understanding among the citizens of the EU, even if the decision to migrate results from economic constraints.

From a demographic point of view, however, the intra-eurozone mobility is a zero-sum game. Beside France, almost the entire euro area faces a period of rapid population ageing. Therefore, Europe needs more immigration of labour from outside the continent. However, in the global race for talent Germany, as an example, still has to catch up.

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