

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

VC/2007/0293

Deliverable 8

The Vienna Institute for International Economic Studies (wiiw)

Country Study: Romania

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Abstract

This study provides a summary on the extent and structure of Romanian permanent and temporary emigration since 1989, its institutional framework, and its economic consequences in Romania. Romanian out-migration has evolved dramatically in the past fifteen years, starting from low levels and the predominance of permanent migration, to assume diverse forms and targeting new destination countries, particularly Italy and Spain, by the new millennium. The stocks of Romanian nationals in these countries increased considerably between 2001 and 2003 in particular. The characteristics of the migrants have also changed, nowadays females provide almost two thirds and prime age individuals provide for half of all permanent migrants, against a higher share of both dependent minors and elders in the early 1990s. Existing evidence suggests the over-proportional participation of the better skilled in migration, pointing at the risk of brain drain. Other effects on the Romanian economy include the emergence of labour and skill shortages that may necessitate higher levels of immigration to Romania, as well as the inflow of large amounts of remittances, that are rarely used for investment though. Based on the existing characteristics of Romanian international out-migration, we do not expect a substantial decrease of migration outflows in the short run.

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1 Introduction

1.1 Overview of the economic situation and the labour market in Romania¹

After a hesitant start and uneven reform progress all through the 1990s, Romania speeded up its reform efforts after 2000. Getting anchored in the EU enlargement process in 2004 had a mobilizing effect and the country could join the EU at the beginning of 2007. Improvements of economic conditions reduced trade and investment risks and, as a result, credit ratings improved and foreign capital started to flow in massively. Economic growth over the past five years has fluctuated between 8 per cent in 2004 and 4 per cent in 2005 due to heavy dependence on agriculture and the vulnerability of the export structure. In 2007 the growth was 6 per cent and even more is expected for 2008. Growth has been driven primarily by private consumption and fixed capital formation.

The medium-term prospects of the Romanian economy depend on two main factors: restructuring and improving international competitiveness on the one hand, and the capacity to absorb EU funds after accession. If progress is slow in both respects, economic growth will be 4-5 per cent annually, while under favourable conditions it may climb to 6-7 per cent. The current overheated growth rate cannot be maintained for long. Romanian authorities are committed to joining the euro zone in 2014. Especially the inflation target will be hard to be achieved.

Romania has below-replacement fertility, unemployment is low, and at least one million persons of the 12 million labour force work abroad. In late 2007 the activity rate was 62 per cent of the working age population slightly increasing (Institutul National de Statistică, 2008b). It is higher in rural areas than in urban areas because of widespread agricultural self-employment of the population. In recent years unemployment declined from 8.0 per cent in 2004 to 6.4 per cent in 2007 (LFS data, registration is much lower, 6.3 and 4.1 per cent respectively). Also the unemployment rate is higher in urban than in rural areas except for the capital. The vacancy rate increased from 1.75 per cent in the first quarter of 2005 to 2.2 per cent in the first quarter of 2008 higher for high-skill jobs and in the capital (Institutul National de Statistică, 2008a). Labour shortages appeared in several sectors of the economy. Shortages go across all skills and occupation groups with the exception of trade. Most in demand are high skilled technical experts. The labour market is rigid, as despite strong demand, inactivity does not decline as there is a basic lack of skills and an educational deficiency in the rural areas. Migrants (estimated to about one tenth of the population) do not return home as foreign wages are still substantially higher than rapidly rising domestic wages.

Further economic growth is hampered by labour shortages as described above. Construction could reportedly employ an additional 300,000 people. Tight labour markets

¹ Section 1.1 has been kindly contributed by Gábor Hunya, wiiw.

are among the driving forces of wages and the wage drift is driving inflation. In April 2008 the average net real wage was 14.9 per cent higher than a year earlier (RON 1,282 or EUR 350) but unequally distributed among industries. Wage hikes were meagre in the automotive industry and in metallurgy thus export competitiveness could be maintained at least until recent strikes enforced some adjustment. Highest wage growth was in the banking sector, in construction, and in trade, sectors that are booming based on domestic consumption. In the coming years when economic growth may slow down a bit and the currency may again start appreciating, wage growth in euro terms can continue. This could be a higher stimulus for seeking a job at home and not abroad.

Aside from wage levels, opportunities of employment are an important dimension of the decision to migrate for work abroad or not. This dimension relates to the issue of labour market flexibility and the labour market institutions shaping the adjustment capability of labour markets. On this topic, Kotzeva (2008) provides a thorough analysis covering the past decade in Romania. She documents improved labour market flexibility in the 2000s that added to a better functioning of the labour market, among others due to a new labour code adopted in 2003 and changes in the tax and benefit systems offering higher incentives for activity. Nevertheless, she highlights that policy challenges remain in the area of increasing activity, reducing informal work and fostering non-standard forms of employment.

1.2 Institutions affecting migration in receiving countries and Romania

Romanian migration has been shaped – both in supporting and constraining ways – by various institutional arrangements on behalf of the receiving countries as well as Romania.²

As concerns long-term migration from Romania into the countries of the European Union, ethnic migration into Germany and Hungary constituted the largest flows over the 1990s. The out-migration of the Romanian citizens of German ethnic origin was generously supported by the repatriation policies of Germany. These policies had been pursued in the years of socialist Romania already, and were continued after 1989. However, conditions of eligibility and procedures of application and admission of the re-settlers were successively tightened in the 1990s (Locher, 2001; Schneider, 2005). Besides, since 1993, eligibility is conditional upon the proof of ethnic discrimination in the sending country, which is reflected in the sharp decline of permanent immigration to Germany in that year (see table 2). In contrast to Germany, as the country with the most numerous ethnic minority population in Romania, Hungary has not fostered the repatriation of its kin population either under socialism or thereafter.

The second half of the 1990s saw the substantial rise of flows of temporary work migration from Romania (see section 2.4). In this respect, the following regulations and institutions were relevant (see Stan, 2006). Until 1 January 2002, the Schengen

countries required Romanian citizens a visa for entry. This made travel for the search of work in the Western economies more difficult and expensive, and allowed easier control of overstays. Interested in preventing nuisance from illegal travel and work of Romanian nationals in the EU, Romania also installed measures to punish visa over-stayers in the late 1990s. Besides, in October 2001, the Romanian authorities introduced exit conditions on foreign travel in order to counter the destination countries' concerns about inflows of Romanian citizens to become involved in illegal work, beggary and criminal activities and thus support the abolition of the Schengen visa requirement.

With the EU entry of Romania on 1 January 2007, its citizens enjoy the right to free labour mobility in the European Union, by 2014 at latest. At the time of accession a number of incumbent EU members still made use of their right to apply transitional restrictions to labour mobility from Romania (as well as Bulgaria): in particular, Austria, Germany, Greece, Ireland, the Netherlands, Portugal and Spain maintained the pre-accession regulations on Romanian labour migration, while Belgium, France, Hungary, Italy and the United Kingdom admitted Romanian workers for specific sectors only, and Denmark, Finland, Sweden and the other new EU members of 2004 basically liberalised the entry to their labour markets of Romanian citizens. As of 1 January 2009 Greece, Spain, Hungary and Portugal have lifted restrictions on the access to their labour markets for both Romanian and Bulgarian workers, while restrictions remain in eleven member states. Denmark, which currently imposes some restrictions, has announced that it will open its labour market for Romanian and Bulgarian nationals together with those from the NMS-8 from 1 May 2009.³

As from the side of the sending country, the Romanian state has increasingly sought to support legal work migration abroad. Among others, in 2000 a law was adopted that stipulates measures to protect citizens working abroad. In 2001, the National Office for Labour Recruitment and Labour Placement Abroad was established to implement bilateral agreements of work migration. In 2000 this institution was transformed into the Office of Labour Migration, while in 2007 its tasks were taken over by the National Agency for Employment (Agenția Națională pentru Ocuparea Forței de Muncă, ANOFM)(Evenimentul, 2007). The agency is presently maintaining directorates for the implementation of bilateral agreements and for the protection of rights of Romanian citizens working abroad. In 2007 it provided for the placement of 37,639 workers in the context of bilateral agreements, mainly for short term agricultural employment (96 per cent) and overwhelmingly to Germany (74 per cent) and Spain (24 per cent)(Ministerul muncii, familiei și egalității de șanse, 2008c). The ministry of labour is maintaining structures to cover policies related to migrant workers. Briefly reviewing the public institutions to support migrant labour, Stan (2006) concludes that the grounds of stimulating legal and preventing irregular forms of work migration have been laid by them, but in practice the respective policies are still in their infancy.

² For an inventory of the source country institutions shaping Romanian migration abroad, refer to Serban and Stoica (2007).

³ For further details, see <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=442>

As a very recent phenomenon, the Romanian ministry of labour has engaged in fostering return migration by organising fairs in Spain and Italy with firms from Romania to lure workers back home, but also offering information on the institutions supporting the labour market and social re-integration of the potential returnees (pension rights, framework and support to establish SMEs, etc.) and surveying the characteristics and expectations of the participants (Ministerul muncii, familiei și egalității de șanse, 2008a, *ibid.*, 2008b). The success of these initiatives remains to be seen.

2 Patterns of migration from Romania

2.1 Introduction

In communist Romania, as any form of foreign travel, out-migration was heavily restricted. Citizens had to request passports from the authorities for each travel abroad. According to Romanian national statistics, 362,464 individuals have emigrated from Romania between 1975 and 1989. Emigration picked up from some 10,000 in the mid-1970s to 32,000 on average p.a. in the last five years of the rule of Ceausescu. Minority groups of citizens, namely those of German, Jewish and Hungarian ethnic origin, had privileged access to emigration. The German and Jewish migrants were heavily over-represented in the outflows in particular, and the Hungarians to a lesser extent (see table 1).⁴

Before the collapse of communism, the citizens of Eastern European countries used to be easily acknowledged as refugees by the Western receiving countries, while their migration was constrained by the source countries. After 1989, the source country restrictions were replaced by tightening legal constraints on long-term immigration on the side of the host countries. At the same time, increased facilities of temporary migration were bilaterally fostered and created by the host countries for specific types of migrants, such as seasonal workers (Baldwin-Edwards, 2005). Post-1989 Romania has experienced substantial migration of its population abroad, permanent, temporary, and circular.⁵ Due to the limited coverage of available data, it is difficult to quantify the magnitude of these migrations.

⁴ Considerable populations of German, Hungarian and Jewish ethnic origin historically settled on the post-war Romanian territory and were thus citizens of the Socialist Republic of Romania. The census of 1977 reports the following information on the ethnic composition of the population: Romanians – 87 per cent; Hungarians – 7.9 per cent; Germans – 1.6 per cent; Jews – 0.1 per cent; others – 3.3 per cent. On average over 1975 to 1989, the ethnic composition of Romanian emigration was as follows: Romanians – 35 per cent; Hungarians – 13 per cent; Germans – 44 per cent; Jews – 5 per cent; others – 2 per cent. The emigration of the citizens of German and Jewish origins, as well as their integration into the receiving countries, was strongly supported by Germany and Israel respectively. As a consequence of selective emigration *inter alia*, according to the census of 2002, only 0.3 per cent of the population of Romania were ethnic Germans, while the percentage of Hungarians fell to 6.6 per cent, and the number of Jews to below 6,000 persons.

⁵ Other than during communist rule in Eastern Europe, under unconstrained possibilities of return or repeated emigration, any migration decision can be revised so that permanent migration can be established as such only *ex post*. In this perspective, temporary migration is the norm rather than the exception, while permanent migration is in fact censored temporary migration where the optimum duration of stay exceeds the individual's

Excluding short term and illegal migrations, the following data sets are available on migration flows originating from Romania and stocks of migrants from Romania abroad: (1) the figures published by the national statistical institute of Romania, Institutul National de Statistică (INSSE), on the citizens who settled their permanent residence abroad; (2) the SOPEMI data of the Organisation for Economic Co-operation and Development (OECD) on the numbers of permanent migrants based on population registers, residence permit data, and other national sources of the host countries, and (3) the DIOC data of the OECD that compile census data of individuals aged 15 and older in the OECD members around the year 2000. Below, we report information from these above data sources on post-communist migration flows of Romanian nationals using INSSE and SOPEMI data (section 2.2), and on the respective stocks in the most important receiving countries, using the SOPEMI and the DIOC datasets (section 2.3). Discussing these items, we also highlight the specific limitations of the respective datasets below.

The SOPEMI datasets further contain data on migrant labour stocks in some OECD countries. For the sake of completeness, we show the respective figures in table 6 in the appendix. We disregard of discussing these data in the present paper however, since it is very difficult to compare them across countries and with the other datasets dealt with below, so that very little further insight is provided by them on our topic.

Short term and irregular migration flows have increasingly gained importance in post-communist Romania. As with such flows in general, no comprehensive data exist to allow for their quantification. We will also report existing survey evidence on the extent and nature of such migration (section 2.4). Finally, we will discuss existing knowledge on the characteristics of migrants of the aforementioned types (section 2.5).

2.2 Migration flows from Romania

The only comprehensive dataset on the emigration of Romanian citizens in the sense of consistency and coverage of any destination country is the data from INSSE. As these data build on acts of de-registration, however, they can measure migration only to the extent to which migrants terminate their residence status in Romania. The INSSE data are useful to give a lower bound of out-migration that is targeted to be of longer duration or permanent, and they offer insights on the shares to different destination countries in such migration outflows. The limitations of the INSSE data will become clear however when contrasted with other datasets. We will address these limitations below.

According to the INSSE data, emigration from Romania has more than doubled in 1990 against the previous years, to around 100,000 (see table 2). In the years to follow,

life horizon. For a theoretical model of migration supporting this perspective, see Dustmann (2003). From a statistical point of view, de-registration in the source country, which typically forms the basis for statistics of emigration, suggest that the underlying migration decision may be of longer term nature. In the context of such data, we will refer to long-term or permanent migration. Host country data on inflows are typically based on numbers of residence permits and other sources that are linked to a minimum duration of stay of some months or even up to one year in some countries (OECD, 2007). Such flows may be temporary or permanent.

migration recorded by the Romanian authorities substantially declined. After a much smaller peak of 25,000 in 1995, annual net migration outflows constantly diminished to just 8,000 in 2002. The most recent years showed a slight increase in the number of individuals who settled abroad to around 9,000-13,000.

The INSSE data reflect a change in the preferred destination countries of permanent Romanian out-migration in 1990 to 2007. The first half of the 1990s was dominated by the exile of citizens of minority ethnic origin (German, Hungarian) to the countries of the respective nation. In this phase, in each year migration to Germany and Hungary made up at least half of the INSSE total.⁶ Since the mid-1990s, flows to Canada and the United States increasingly gained importance: in all the years since 1995, migration to these two countries accounted for around one quarter to one third of migration outflows recorded in the INSSE data (in 2001 even more, 44 per cent). Besides, this second period also saw a de-concentration of migrants by destination countries. Finally, since 2000, Italy has been added to the most important host countries of permanent Romanian migration outflows. In the new millennium, Italy had become the most important target country of permanent Romanian migration, accounting for more than 20 per cent of the migration outflows 2002 to 2007. Germany still came very close, providing for just about 20 per cent of the outflows. In the same period, Canada and the United States accounted together for 30 per cent, while nine per cent of permanent Romanian migration was directed to Hungary and the remainder of 21 per cent to various other destinations.

The SOPEMI data collection shows Romanian migration inflows from the point of view of the receiving countries. We report the numbers of inflows from Romania to the OECD countries where such data are available between 1996 and 2006 in table 3.

Although the main receiving countries of Romanian migration are all members of the OECD, these data document the extent of Romanian migration only partially: figures on Romanian immigration are only published for those countries where inflows of Romanians are among the most extensive in relative terms. From among the most important countries of Romanian outflows as suggested by the INSSE data, inflows to the United States are not reported. Besides, the cross-country comparability of the SOPEMI data is impeded by the fact that this dataset is a compilation from national sources, the data definitions of which are not fully consistent across countries. E.g., the immigration flows to the Czech Republic refer only to the population holding permanent or long-term residence permits, while the Italian data also include short-term permits⁷ (OECD, 2007).

According to the data presented in table 3, the inflow of Romanian nationals to the countries covered amounted to around 80,000 in 2000, this figure rose to 192,000 in

⁶ Once the Romanian authorities lifted the barriers to emigration, members of the German minority in Romania relocated to Germany as so-called *Aussiedler* – that can be translated as resettlers – in large numbers. In 1990, according to German data, some 100,000 Romanian citizens migrated there (of which 60,000 are recorded by the Romanian statistics). In the next decade, another 75,000 persons followed. German migration from Romania phased out by the end of the 1990s (Locher, 2001).

⁷ These do not include seasonal workers, though.

2006. According to the OECD (2008: 41), the total sum of inflows of Romanians to all OECD countries amounted to 89,000 and 205,000 respectively in these years, which is eleven and five per cent respectively in addition to the totals of table 3 relating to countries such as the US and Germany. The sum of the inflows of table 3 increased especially sharply in 2002 against the previous year, by 63 per cent to 149,000. The annual inflows of Romanian nationals to the OECD countries peaked in 2004 at 202,000, thereafter it diminished slightly.

Within the limits to cross-country consistency mentioned above, the SOPEMI data also show for which OECD countries Romanian immigration was important relative to other inflows, and to what extent. As shown in the bottom part of table 3, Romanian immigration accounted to 2 to 5 per cent of total immigration in Austria, Belgium, Canada, the Czech Republic, Germany, Greece, and Portugal, while it rose to double-digit shares in Italy and Spain in the early 2000s – accounting for around one fifth of the inflows to Italy in 2004 –, and it increased from 30 to 55 per cent over 1996 to 2005 in Hungary (to drop to around one third in 2006). Romanian immigration had a tendency to over-proportionally increase in all countries where these data are available except the Czech Republic, Portugal and Canada. The increase was particularly rapid both in absolute and relative terms in Italy, where Romanian immigration inflows exceeded 50,000 and 60,000 respectively in 2002 and 2004.⁸ In the two years to follow, Romanian immigration to Italy abated somewhat, to around 35,000 p.a.

Comparing the SOPEMI and the INSSE data for those countries and years that are covered by both, on average, the INSSE outflows amount to 15 per cent of the SOPEMI inflows. There are, however, large variations, both across countries – between 43 per cent for France and 8 per cent for Italy – and across years for a single country. These differences relate to the fact that migrants may either de-register in Romania with delay after relocating to another country, or that they do not de-register at all but maintain legal residence in their country of origin, be it because this can be done at not cost, or because their migration is intended to be temporary. In any case, the INSSE data should be regarded as the lower bound of Romanian permanent or long-term migration, while the SOPEMI data show the legal inflows above the minimum duration for registration.

The SOPEMI data offer some further interesting facts to note. In the period considered, inflows of Romanian nationals steadily increased for almost all countries where time series are available. The increase was particularly strong in Spain and Italy. This contrasts with declining migration until 2002 as shown by the INSSE data. This may reflect that non-permanent but still longer-term forms of migration gained in importance, such as stays for the purpose of study, or that the migrants increasingly tend not to consider their migration definitive⁹ and

⁸ Inflow data are missing for Italy for the years 2003 and 2005. However, stocks of Romanian migrants in Italy increased extremely sharply in 2003 in particular (see section 2.1.3). The increases in 2004 and 2005 were again less dramatic (see table 4).

⁹ This may be a matter of choice of the migrants but may reflect increasing difficulties to obtain permanent residence status in the host countries as well.

therefore keep their legal residence Romania. Besides, by the SOPEMI data, Spain emerged as the most important destination country of Romanian migration since 2003.¹⁰ However, migrants to Spain apparently tend to keep their Romanian residence status in particularly high numbers, as Spain did not show up as an important destination country of Romanian migration in the INSSE data at all. For those countries that where both sets are available (Austria, Canada, Germany, Italy, Hungary), the comparison of the SOPEMI and INSSE data further shows that flows to Italy are much stronger in relative terms according to the former than to the latter data, while the reverse is true for Canada. This obviously implies that Romanian migrants to Canada rather tend to consider their step as definite and therefore terminate their legal status in Romania, while many Italian migrants maintain the perspective of return or may find it hard to develop a permanent perspective to stay in Italy, and therefore keep their legal status of residence in Romania.

2.3 Stocks of migrants from Romania abroad

Table 4 shows the available SOPEMI data on the stocks of migrants from Romania (both in terms of country of birth and nationality where available) from 1996 to 2006. These data are based on residence permits and population registers, and are in the SOPEMI dataset available for those countries where such stocks are relatively numerous. Again, the caveat applies that data on important destination countries from the Romanian perspective: the United States and Germany¹¹ in particular, are not reported. These data show the following. Between 2000 and 2006, the number of Romanian populations at least doubled, both by the standards of nationality and place of birth, but increased in some countries by much more. The increase was particularly strong in Spain, where the stock of Romanian nationals rose from around 31,000 to 507,000. In the countries with time series on Romanian nationals,¹² the stocks increased most strongly between 2001 and 2003. The most affected countries were Italy and Spain, the new countries of Romanian immigration. The stock of Romanian nationals in Italy increased from 95,000 in 2002 to 245,000 in 2003, against the background of a large-scale regularisation programme in 2002. Spain also saw a surge of its Romanian population in the early 2000s that surpassed 10,000 in 1999 and amounted to 192,000 in 2005, and again a dramatic increase by 2007.¹³ In 2006, the countries covered in table 4 together hosted 970,000 Romanian nationals. Note, however, for comparison that the stock of Romanian nationals in the EU-15 reported in Deliverable 2 (table 6a) amounts to 1.1 million persons for that year. According to the data summarised in table 6a of Deliverable 2, in

¹⁰ Note that, although the figures on inflows of Romanians to the United States are not available, the reporting thresholds imply that inflows of Romanians to the United States could not exceed the flows from the Russian Federation, which fluctuated between around 10,000 to 20,000 in the decade considered, and were thus well below the inflows of Romanian nationals to Spain.

¹¹ Germany only reports data on stocks of foreigners by nationality instead of country of birth. However, the group of Romanian nationals in Germany is not among the first 15 largest groups of foreign nationals, since the ethnic Germans from Romania and their relatives were privileged in obtaining German citizenship.

¹² Namely: Belgium, the Czech Republic, Greece, Hungary, Italy, Portugal, and Spain.

¹³ The Spanish data exclude stays of less than six months. Spain carried out regularisation programmes in 2000, 2001 and 2005 (Sunderhaus, 2006).

2007 the stock of migrants from Romania in the EU-15 has sharply increased against the previous year to about 1.6 million people. The two datasets are not fully comparable, though, among others due to the different coverage of destination countries considered. In 2000, the SOPEMI figures on the stocks of Romanian nationals in those EU-15 countries for which time series are provided by this dataset (Belgium, Greece, Italy, Spain, Portugal) amounted to 50 per cent of the totals of Romanian nationals in the EU-15 reported in table 6a of Deliverable 2, while this share rose to 83 per cent in 2006, most likely because of the huge increase of the immigrants in Italy and Spain. In the absence of a country breakdown of the figures from the latter, detailed comparisons between the two datasets cannot be done.

The data of table 4 further show that Hungary and Austria are hosts to relatively large numbers of naturalised Romanian-born citizens. In Hungary, some 170,000 Romanian born persons lived in 2006, but only 67,000 were Romanian nationals, reflecting the migration of ethnic Hungarians from Romania.

A more complete picture of the stock of migrants from Romania in OECD countries can be obtained from the DIOC database of the OECD. Table 5 shows the magnitude of Romanian born populations aged 15 and above in the OECD countries at the time of the census round of 2000. The figures relate to populations of those born in Romania, so that naturalised persons are included. Therefore, its coverage is broader than that of the SOPEMI data discussed above on Romanian nationals. One important limitation of this dataset is that information for Germany and the Netherlands is missing.¹⁴ Another limitation to its usefulness is that it is somewhat outdated, given that Romanian immigration into some countries evolved very dynamically in the new millennium.¹⁵

According to the DIOC data, the EU-15 countries other than Germany and the Netherlands hosted around 0.25 million Romanian born persons aged 15 and older around the year 2000. Already in that year, Italy and Spain together provided for 50 per cent of these Romanian born in the above EU-15 countries. The next important hosts were Austria (15 per cent), Greece (10 per cent) and France (9 per cent). The data further show that, in addition to the Romanian born population of Hungary of some 135,000 persons (that is mainly composed of ethnic Hungarians) there were some 20,000 Romanian born persons in the other three Visegrád countries as well. Finally, another 220,000 Romanian born persons were found in the rest of the OECD, most importantly in the United States (124,000) and Canada (55,000).

¹⁴ According to national statistical sources, in 2000, the populations of Germany and the Netherlands contained 90,094 and 1,397 Romanian nationals respectively. These data are not comparable to the DIOC data though, since they are excluding the naturalised migrants.

¹⁵ An important advantage of the DIOC data is that they contain information on the education levels of the foreign population. We will come back to this issue in section 2.5.

2.4 Short term and irregular migration from Romania

The data discussed above refer to longer term migration of Romanian nationals abroad. Romanians nationals have been increasingly involved into moves that are not captured by the above data. In particular, these data typically do not cover short term migrants, tend to exclude seasonal workers, are inconsistent with regard to the coverage of certain categories such as students, and naturally fail to register illegal migration moves. It is commonly held that Romanian nationals participated in such forms of migrations in large numbers as well. We resort to survey findings to gain insights on these topics.

Sandu et al. (2006) is a recent study of temporary migration from Romania. Based on a national survey of 1,400 people, the authors find that ten per cent of the households with at least two members had at least one migrant gone for work abroad at the time of the survey in 2006, with the average number of migrants being 1.34.¹⁶ The authors extrapolate that these figures imply around 777,200 migrant workers for such households on the national level. According to the census of 2002, such households covered only 81 per cent of the population. The above average on migrant household members refers to a point of time instead of giving an average of absent household members during a period of time. In addition to the fact that migrant members of one-person households are necessarily excluded, the participation of the population of Romania in temporary migration abroad measured over, say, the period of one year is likely to be higher.

Horváth (2007) quotes a considerably higher estimate of Romanian nationals working abroad, namely 3.4 million for mid-2007, of which around 1.2 million are held to do so legally. Roughly comparing this number to the estimate of Sandu et al. (2006), such a figure would imply that around four fifth of the population living in one person households were migrants working abroad.¹⁷ Therefore, we consider that the figure of Horváth (2007) is at the higher end of the likely magnitude of Romanian temporary migration.¹⁸

Sandu et al. (2006) also derive conclusions on the dynamics of temporary migrations and their changing geographical patterns between 1990 and 2005. They first note that the intensity of departures for temporary migration has doubled in the second half of the 1990s as compared to the earlier five years, and again tripled since 2001. Different destination countries dominated these periods respectively: while in the early 1990s, Turkey and Israel were main destinations along with secondary destinations in Italy, Germany and Hungary, flows in the second half of the 1990s increasingly turned to Italy. In the new millennium, around half of the departures from the households sampled turned towards Italy, and another 25 per cent were directed to Spain. As a new tendency

¹⁶ Unfortunately, the time of the survey is not clear from Sandu et al. (2006). This matters insofar as the number of migrants is likely to vary during the year.

¹⁷ Here we assume that the two figures refer to the same point in time, while we disregard of other factors impeding comparison.

¹⁸ Kállai and Maniu (2007) quote mid-2007 information from the ministry of labour estimating the number of Romanians working abroad at 2 million, and from the trade unions putting this figure above 3 million. In this context, they draw the attention to the fact that in Romania 4.5 million social security cards are recorded.

in geographical patterns, recent field research in 2005 has found a new shift in destination countries from Italy to Ireland, motivated by labour market discrimination in the former and higher wages in the latter (Stan, 2006).

As said above, Romanian travellers to the Schengen territory were required an entry visa until end-2001. After the lifting of the visa requirement, the Romanian authorities introduced severe exit conditions (see section 1.2). In 2007, the EU entry of Romania has allowed for free travel and stay across the European Union, but stays exceeding three months still may be subject to the proof of subsistence. Finally, several members of the enlarged EU allow for the access of Romanian nationals to their labour markets only within strict limits. In sum, there are several legal constraints to Romanian nationals' travel and work abroad: attempts to circumvent these constraints produce irregular migrants of various sorts.¹⁹ Naturally, the major share of irregular migrations of any types is not recorded at all (Koser, 2005), which makes it very difficult to quantitatively assess such migrations. From the individual points of view of the migrants, irregularity is often found to be a stage in the migration process: migrants may shift in and out of irregularity during their migration spell(s) (Stan, 2006).

Stan (2006) reviews both the legal constraints constituting irregularity of migration in the Romanian context, the practices prompted to circumvent them,²⁰ and indicators of the efficiency of the constraints such as numbers of refused exit or of disclosed smuggling networks. He concludes that repressive migration policies do in fact foster irregular migration practices as well as permanent forms of migration, while the release of restrictions supports return migration inter alia. As on the extent of irregular migration in Romania, Stan (2006) quotes an IOM survey of 2005 finding that just 53 per cent of the migrant workers interviewed performed labour abroad under legal contracts. The author conjectures that the true percentage of legal work abroad may be even lower.

2.5 Characteristics of Romanian migrants

To evaluate the characteristics of Romanian migrants abroad, we can resort to the above INSSE and DIOC datasets that offer breakdowns by age and education levels respectively, and to different survey studies on the topic, including the results of the Eurobarometer survey of 2002 on the willingness to migrate in the Eastern candidates of EU membership evaluated by Krieger (2004)²¹. As concerns the INSSE and DIOC datasets, we have

¹⁹ On the notion of irregularity in the context of migration and the related difficulties, see Koser (2005).

²⁰ Briefly reviewing irregular migration strategies, Lazaroiu et al. (2003: 20f.) mention an interesting new practice established under Romanian migrants to avoid punishment from overstaying, which consists in sharing long term jobs by several migrants who replace each other in turns of three months.

²¹ As a survey-based assessment, Krieger (2004) evaluates information on the intentions to migrate to the EU-15 from the Candidate Countries Eurobarometer dataset of April 2002. The study distinguishes three levels of intentions to migrate to the EU: a general interest in living in the EU in the next five years, a basic intention as a choice between target areas for migration (local, regional, international), and a firm intention that is cross-checked with the willingness to live in a country with a foreign language. Results are provided for groups of countries only. The study finds that 5 per cent of the Romanian and Bulgarian citizens have a 'general inclination' to migrate to an EU country, while 3.2 per cent show a 'basic intention', and again a considerably lower share, 2 per cent, show a 'firm intention' to do so. These migration intention rates are considerably

discussed their specific limitations above; the respective caveats apply below as well. On the results of Krieger (2004), note that this study portrays covariates of migration intentions at the specific time of the survey. It is unclear to what extent these characteristics are stable over time and to what extent migration intentions translate into acts of migration. A further shortcoming of the Krieger (2004) study in the present context is that only joint results are reported for Bulgaria and Romania, so that we can only resort to averages²² across these countries. Below, we review the characteristics of Romanian migrants looking at their age and gender, education and selectivity in this respect in particular, the labour market status of migrants before their move, the motives for seeking work and a living abroad, the spatial pattern of linkages between source and destination locations, and the migration of ethnic minorities from Romania. We complement the findings from these sources by other survey results where appropriate.

Age and gender: Looking at the age structure of migrants, the INSSE data show that the group of those aged between 26 and 40 has been most active to engage in permanent migration. This group provided for around 30 per cent of the “permanent” migrants from Romania in the 1990s, while it sharply increased to well above 50 per cent since 2001. The INSSE data also contain relatively large numbers of dependent minors, around a quarter of the flows in the 1990s, suggesting that those years saw the permanent migration of families with children from Romania. The share of minors dropped to around nine per cent most recently, while the share of those aged 51 and higher similarly dropped from around 22 per cent in 1990²³ and 15 per cent in the next five years on average to around 9 per cent after 2000: this again is likely to reflect the tightening of the conditions for the permanent migration of families.

In table 5, we report the distribution of the stocks of Romanian born populations aged 15 and more across age groups in the main destination countries except Germany from the DIOC dataset. Note that these data do not imply information on characteristics of migrants at the time of the move, but rather suggest implications on the presence of the diaspora groups in the respective countries. The relatively high percentages of those aged 65 and more in Austria, France and the United Kingdom thus suggest that these migrant stocks have originated from earlier flows, while the fact that flows to Spain and Italy are a more recent phenomenon is documented in the share of Romanian born populations aged between 25 and 64 of between 75 and 80 per cent.

The above patterns suggest that the migration of older citizens was characteristic of the earlier years of transition, when the lifting of very strict previous migration barriers

higher than in the NMS (3.1, 1.3 and 0.8 per cent respectively). With Romania’s population of 21.6 million in 2005, a share of 2 per cent with a firm intention to migrate to the EU within five years implies a migration potential of 432,000 persons.

²² Note that Eurobarometer surveys typically have comparable sample sizes across countries, and Krieger’s results are not weighted e.g. by country population size.

²³ The relatively high share of the elderly in Romanian emigration in the early 1990s is evidently related to ethnic migration and is likely to be supported by the generous pension provision rules to the *Aussiedler* migrants by Germany.

coincided with relative generous provisions for integration at least in the case of Germany, and with poor and uncertain economic conditions in Romania. Under present the conditions of relatively strict legal barriers to permanent migration but wide de facto possibilities of temporary labour mobility, mobility primarily concerns the younger generations. This has also been confirmed by Krieger (2004) who found that the general inclination to move is highest among people aged 15-24 and is sharply decreasing in the older cohorts. For Romanians and Bulgarians, this pattern is even more pronounced than among NMS citizens.

On the gender structure of Romanian migration, one can note the following. The INSSE data reported in table 7 shows that in longer term migration flows since 1990, females have been slightly dominating, in particular towards the end of the period considered, where the share of males declined to just above one third. This may reflect the increasing importance of family reunion as an entry mode of immigration under conditions of tightening immigration constraints on behalf of the host countries. On the gender structure of temporary work migration, Sandu et al. (2006) have found that almost nine in ten working migrants of the first stage of such migrations were males, while after 2001, the share of females improved to 45 per cent.

Education: The DIOC data presented in table 5 show that around the year 2000, the stock of Romanian born populations aged 15 and more in the main destination countries except Germany had the following composition by education: low levels (ISCED 0 to 2): 34 per cent; medium levels (ISCED 3 and 4): 40 per cent; high levels (ISCED 5 and 6): 25 per cent. There are considerable differences across destination countries, though, reflecting immigration policies of the hosts among others. Most visibly, there is a difference between the EU (plus Turkey) and overseas destinations (plus Switzerland) insofar as the former host larger populations with medium and lower levels of education, while the Romanian born populations of the latter have considerably higher shares of individuals with higher education. But there are considerable differences across Romanian born populations in European countries as well. For example, Austria and France host such populations with comparable age structures, but with very different education levels: in the former, average education levels are considerably below those in the latter.

The DIOC data on education levels are particularly interesting when compared with the distribution of the population aged 15 and more at the time of the census round in Romania. In 2002, 49.1 per cent of the respective Romanian population had up to lower secondary education, 43.1 per cent had upper secondary and post-secondary (non-tertiary) education, while 7.7 per cent possessed tertiary education. In this perspective, one can see that the percentage of those with tertiary education is higher in the stocks of Romanian born populations in any of the destination countries of Romanian migration. This cannot be attributed to brain drain to the full extent, because some human capital investment of the migrants is likely to have taken place in the destination country, and the propensity to do so may have been different in the source and host country Romanian born populations. Further, a simple comparison of education levels in the different populations fails to account for the differences in the age structure of these populations

and the fact of increasing average education in the younger generations. Still, it can be seen that the average education level of the stocks of Romanian born persons abroad is considerably higher than that of the population in the source country. The difference is not so large between the education levels of the source country population and that with rather recent Romanian immigration, such as Italy. Still, the data indicate that some brain drain may be taking place from Romania.

The presumption of brain drain is also strengthened by the findings of Krieger (2004). Evaluating the Eurobarometer data of 2002, this study finds the following distribution of education levels among those Romanians and Bulgarians with a general inclination to move: 37 per cent possess secondary education, 14 per cent have completed tertiary education, 31 per cent are still studying, and 19 per cent have only primary education.²⁴ Among those with a firm intention to migrate, the better educated are more strongly represented than among those with a general inclination. Although the distribution of education levels among the potential migrants surveyed in the Krieger (2004) context is not fully comparable with the distribution in the stocks of Romanian-born populations as reported in the DIOC dataset (since in the latter, there is no category for ongoing education), it appears that there is a tendency towards increased migration of the better skilled relative to the stocks of migrants already residing in the EU-15 countries.²⁵

Focusing on longer term migration from Romania, Radu (2004) offers an interesting econometric assessment of the issue of selectivity with respect to education, with a somewhat different conclusion than the above. Based on the INSSE data and arguing that permanent migration as captured by these data is most relevant with respect to the problem of brain drain and using matched source and host country datasets, he confirms both the higher skill content of Romanians' migrations to overseas as against EU destinations, and the trend towards increasing shares of higher education in Romanian migration. Besides, the author shows that migrant outflows from Romania are polarised towards the upper or lower end of the human capital distribution. Finally, the econometric results of Radu (2004) confirm the hypothesis that Romanian permanent migration shows positive selectivity in the second half of the 1990s, based on both observable and unobservable characteristics.

Labour market status: A matter of high relevance to evaluate the economic effects of migration in both the source and host countries is the labour market status of the migrants prior to the move. On this issue, only survey information is available. Still with the data of 2002 and in combination with Bulgarian data, Krieger (2004) has found that about one third of those with a general inclination to move are employed and students each. Even though the share of students among those with firm migration intentions is

²⁴ This latter figure is considerably higher than the percentage of the low-skilled would-be migrants from the NMS of 2004 reported in Krieger (2004), 5 per cent.

²⁵ Still, Krieger (2004) finds a considerable negative gap in terms of education levels of the potential migrants in the accession countries of 2007 against those of the NMS of 2004, which leads him to conclude that the labour market integration of migrants from Romania and Bulgaria may be more difficult than of those from the earlier new EU members.

much lower, the latter draws the attention to the potential risk of youth/brain drain. In addition, a particularly high number of the non-studying inactive (13 per cent) express their general interest to migrate to the EU according to Krieger (2004). These could be discouraged unemployed who have temporarily withdrawn from the national labour market but would seek re-entry abroad. Data on firm intentions to move suggest that a major part of the migrants are likely to be students and persons seeking escape from unemployment. Recent investigations also confirm the tendency that labour migration abroad is an option particularly for those with relatively weak labour market attachment in Romania. Horváth (2008) highlights the widespread inclination towards temporary labour migration among the rural youth, for which this possibility has become a mode of choice for the transition to adulthood. From a nationally representative survey among Romanian households in 2007, Pirciog et al. (2008a) summarize that the willingness to undertake work migration is comparatively high among housewives, unpaid family workers, long term unemployed, self employed and undeclared workers, as well as young people with lack of domestic career development perspectives (see also *ibids.*, 2008b).

Motives for migration: Krieger (2004) further offers interesting insights on the motives of those who considered migrate abroad for doing so at the time of the survey, 2002. For Romania, the data show that the predominant motivation for a move were bad economic conditions. In particular, financial reasons were the predominant motive for 54 per cent of the Romanians and Bulgarians with a general inclination to migrate.²⁶ For the new EU members of 2004, the share of those intending to move for financial reasons was considerably lower, at 24 per cent: the importance of the economic motive thus decreased with increasing country wealth. The more recent survey evaluation of Pirciog et al. (2008b) confirms that insufficient income and the lack of appropriate jobs constitute the most important motives for international mobility in the Romanian population.

Regionalised migration patterns: As another characteristic of Romanian temporary migration abroad, it has been found that migration flows are very much tied by settlements and regions. More specifically, migrants from one village tend to migrate to the same settlement, and the importance of the destination countries varies across regions of Romania. Sandu et al. (2006) find that flows to Italy were particularly strong from the north-western region of Moldova,²⁷ while Transsilvania in the west of the country showed higher shares of flows to Hungary²⁸, south-eastern Oltenia was dominated by flows towards Canada, south-western Muntenians revealed stronger preferences for Turkey, and migrants from Bucharest tended to predominantly choose Greece. These spatial patterns of migration are related to distance among others (Hungary vs. Greece), but first and foremost they appear to support the hypothesis that

²⁶ The other reasons offered in the survey were: dissatisfaction with housing conditions, dissatisfaction with the local community, work-related reasons, and family and other private reasons.

²⁷ Lazaroiu et al. (2003) attribute this to the presence of Italian investors in this part of the country after 1990.

²⁸ This is not surprising insofar as the settlements of the Hungarian minority in Romania are in Transsilvania and other western regions of the country (Banat, Crisana).

social networks play an eminent role to shape migration flows by providing access to information, funds to finance the move, etc.

Ethnic/national background: One important dimension of Romanian migration abroad has been its ethnic and nationality structure respectively. We have highlighted above that permanent migration in the first period after 1989 was driven by the exodus of the ethnic minorities from the country. In the latter years, the migration of two distinct groups deserves attention: the Romanian citizens of Roma ethnic origin, and Moldavian citizens who acquired Romanian citizenship after 1989.

There is very little research information on both groups as concerns their migration to the old EU member states. ICMPD (2001) quotes from reliable estimates the figures of 1.8 and 2.5 million as the lower and upper bound of the Roma population in Romania. It is not known whether this population has participated in international migration above or below average. In its account of the Roma migration in the late 1990s, ICMPD (2001) underlines the attempts of Roma migrants of entry into the asylum systems of the EU member states. At present, Roma migration from Romania to Italy in particular is associated with problems of irregularity, lack of labour market and social integration, and perceptions of criminal activities being countered by xenophobia culminating in violence.²⁹

Turning to the issue of Moldavian migration, this is relevant in the context of Romanian migration because of the possibility for the Moldavians to obtain Romanian citizenship that considerably facilitates their travel and stay in the EU.³⁰ In fact, from 1991, Romania offered easy access to Moldavians to Romanian citizenship as a form of repatriation. The extent of Moldavian migration (irrespective of dual citizenships) is estimated between 260,000 and 570,000, but unofficial sources put this number even higher. Around 32 per cent of the migrants are held to be in the countries of the EU (Guțu, 2006). According to Horváth (2007) some 250,000 Moldavian citizens have obtained Romanian citizenship in the 1990s. As Guțu (2006) notes, under the conditions of mass migration of Moldavians with double citizenship, one cannot distinguish between Romanians on one side of the river Prut³¹ and the other.

3 Effects of migration on the Romanian labour market and economy

In the following, we will review the effects of migration on the Romanian economy along some important lines, namely as concerns the under-supply of labour, remittances sent from migrants abroad, potential immigrant labour to Romania, effects of migration on the

²⁹ In early November 2007, harsh measures of the Italian authorities against illegal migrants followed a rape and murder committed by a Roma illegal immigrant from Romania. These measures, that included the possibility of expulsion of EU citizens, were held to be tailored against the Roma migrant community from Romania.

³⁰ Note that a part of today's Moldavia has historically been part of the principality of Moldova that was a predecessor of today's Romania, and that the difference between the two languages is small, which facilitates flows of information and helps the Moldavians integrate in Romania.

³¹ The river Prut separates Romania and Moldavia from each other.

formation of human capital, and macroeconomic effects, based on existing data and evidence.

Labour and skill shortages: Recently, the new EU member states have seen increased employment, declining unemployment and increased job vacancy rates, which gave rise to worries about labour and skill shortages (Rutkowski, 2007). Romania is no exception in this respect: from 2005 to 2007, the employment rate increased by 0.8 percentage points to 58.4 per cent, while unemployment fell from 7.5 to 6.8 per cent, and the job vacancy rate rose from 1.7 to 2.1 per cent. However, with these values, the Romanian labour market still under-performs in comparison to the average of the EU-27 (Iara et al., 2008). Nevertheless, in Romania too, increasing concerns about labour shortages were voiced in the public (Ciutacu, 2007, Eghbal, 2007, Tanasescu, 2007). Together with the general worry about the undersupply of labour, concerns are expressed in particular about the shortage of specific skills and highly skilled workers. From a recent nationally representative survey, Serban and Toth (2007) have confirmed difficulties of hiring personnel in the construction, textiles and catering and hotel sectors. According to a recent international employer survey, Romania is the country where employers have the most difficulty finding the right people to fill jobs world-wide, with 73 per cent of the employers interviewed reporting such difficulties (Manpower, 2008).

Indeed, among the new EU member states, according to official data, Romania is most affected by migration, in particular of the younger cohorts (Iara et al., 2008). In addition, as discussed in section 2.5, the available evidence suggests that Romanian migration is polarised towards the ends of the distribution of human capital. Yet, labour and skill shortages should not be interpreted as being exclusively caused by international migration. Other factors contributing to difficulties of firms with filling jobs may be business cycle effects, longer years of education, insufficient inter-regional mobility within the country, demographic patterns of ageing populations, and skill biased technological change (Iara et al., 2008).³² In the framework of the present project, the simulation of the macroeconomic effects of emigration of around 3.2 per cent of the labour force from Romania has resulted in the decrease of the unemployment rate by 0.4 percentage points in the short run and 0.1 percentage point in the long run (Brücker et al., 2008, Table 5.5).

³² In the case of Romania, the demographic patterns will be specifically relevant in the medium term. In the years to follow, the generations born immediately after the end of communism are about to enter the labour market. In Romania, the contraction of the generation born after 1989 in comparison with those of the previous years was especially sharp however, against the background of the hardships of transition as well as the cessation of the pro-natalist policies pursued under Ceausescu. In 1989, the rate of live births per inhabitant was at 16.0 per thousand. This rate fell to 11.9 per thousand in 1991 and further declined since to below 10 per thousand in the early 2000s (data from INSSE). Note for comparison that in Hungary this rate declined from 12.1 per thousand in 1985s to 11.0 in 1995 (data from the Central Statistical Office of Hungary). Romania has recorded negative population growth since 1992. As Serban and Toth (2007) argue, the entry of these reduced cohorts into the labour force coincides with the retirement of relatively small cohorts of those born before and after WWII. However, more sudden supply shifts are to be expected when the relatively large cohorts of those born around 1967-68, the time of the introduction of some sharp demographic policy measures, will retire.

Remittances: Among the source country effects of work migration, most important are economic effects channelled via migrants' remittances. According to the IMF balance of payments statistics, in 2006, remittances received by Romania amounted to 7 per cent of the country's GDP. In the whole region of the new EU member states and the Western Balkans, this share is only exceeded by remittance receipts in Albania and Bosnia and Herzegovina. The importance of remittances in Romania is put into perspective when compared with FDI inflows: in 2006, these amounted to 9.3 per cent of the GDP.³³ Considering that official figures can only comprise remittances sent via official channels, the total volume of remittances is likely to have exceeded that of FDI inflows.³⁴

Data from the National Bank of Romania offer a breakdown of remittance inflows by source countries for the period of 2005 to 2007.³⁵ This source of information documents some very interesting features of remittance inflows to Romania. First, it underlines the economic importance of Italy for Romanian work migration, as 38 per cent of the inflows in the period considered stem from this country. Next is Spain, with 23 per cent of the remittances on average. The share of remittances from the United States has increased from 10 per cent in 2005 to 20 per cent in 2007. Remarkably, remittances from Germany accounted for just 7.6 per cent in 2005, and their share dropped to 4 per cent in the next years. In absolute terms, the remittance receipts have increased from all countries with very few exceptions³⁶ in the period considered, by an average of 45 and 59 per cent against the previous year respectively in 2006 and 2007.³⁷

Kallai and Maniu (2007) offer a survey based analysis of both the individual characteristics of the remitting migrants, and the use of the remittances in Romania. This study finds that the propensity to remit is negatively related to education, but point at strong country differences in this respect. Besides it is found that around 80 per cent of the remittances from Spain and Italy are predominantly used for consumption purposes. Remittances from Germany are found to be less used for consumption, at 73 per cent, while 27 per cent are channelled into investment. Lazaroiu et al. (2003) similarly state that migrant remittances are predominantly used for long term and everyday consumption goods, arguing that migrants give up ideas of entrepreneurship due to the lack of incentives offered by the Romanian authorities.

³³ Data from the wiiw Annual database.

³⁴ For a comparative perspective, see the section on remittances as part of the draft report on the impact of labour mobility on public finances and social cohesion, Workpackage 5.

³⁵ The data have been used for empirical analysis by de Sousa et al., 2008. The author thanks José de Sousa and his research team to have obtained insight into the dataset. It is not available for public dissemination, though.

³⁶ In particular, Germany in 2006, and Canada, the Czech Republic and Israel in 2007 against the previous year, respectively.

³⁷ Certainly, these data do not give a full picture of remittances as they still exclude exchange and goods brought by the migrants themselves or sent via informal channels. Besides, there may be a certain bias in the economic importance of the originating countries of the remittances insofar as the above data may not consider flows related to the compensation of employees abroad that are not statistically counted as migrants, such as seasonal workers. This form of temporary work abroad may be more common in Germany and Spain.

Immigration: Labour and skill shortages are likely to constrain the growth potential of the Romanian economy in the next years as pointed out above. Migration is one among several causal factors of such shortages. In the light of probably sustained work migration abroad, similar problems of an ageing population as the Western European countries, and improving standards of living, immigration appears inevitable for Romania. At present, the prospect of Romania becoming a host country to labour migration is at its very beginning. For 2005, the INSSE data show only 3704 immigrants, of which almost 2,000 were from Moldavia. In 2002, the census has found a stock of foreigners in Romania including around 28,000 individuals, which is around 0.1 per thousand of the total population. Around a quarter of these immigrants were found to stay less than one year within the country. So far, longer-term immigration into Romania has focused on small-scale entrepreneurship, and, in the case of Moldavian citizens, on study and seasonal work (Lazaroiu et al., 2003). The professional and public discourse on the need for labour immigration, as well as the creation of the respective institutions, has recently commenced and is still in its infancy.³⁸

Human capital formation, children left behind: In the context of international work migration, an important issue is how such migration affects the human capital levels in the source country.³⁹ The famous brain gain hypothesis stipulates that the opportunity to obtain higher returns to education by migration increases human capital investment in sending countries so that a surplus of better educated remains even in spite of the out-migration of the higher skilled (Mountford, 1997, Docquier and Rapoport, 2007). Empirical evidence on the effect of migration on children left behind shows the complex relationship between migration and human capital formation, and also bears some implications as concerns the brain gain hypothesis (Toth et al., 2007).⁴⁰ It is found that the inability of a working migrant to fulfil his or her parental role reduces school performance of the child. In addition, according to this study, children of migrants indeed tend to value education higher because of the widening of their horizons by the migration experience of the parents, but a countervailing effect is that many of them wish follow the parents to assume low skilled jobs abroad soon instead of continuing their education. On the other hand, examining the Romanian trend of increasing participation in higher education in the presence of continued mass migration, Baldwin-Edwards (2005) argues that Romania appears to show just the sort of link between education and migration that is posited by theory deriving a beneficial brain gain from migration.

³⁸ For a recent study on the need for immigrant labour to counter the labour shortages expected to become more severe, see Serban and Toth, 2007. Romania has established an Office for Immigration in June 2007 (Oficiul Român pentru Imigrări, see <http://aps.mai.gov.ro> / (20.09.2008) and OECD (2008)).

³⁹ Another important dimension of the source country effects concerns the well-being of minors. This latter aspect has received increased public attention in Romania recently, following a case of a child's suicide obviously related to the psychological effect of abandonment by the migrating parent.

⁴⁰ Toth et al. (2007) have discovered that at least one parent of up to 18 per cent of the schoolchildren aged 11 to 14 is working abroad. In one fifth of the cases, both parents are working migrants who leave their children to relatives. Toth et al. (2007) also find positive effects of parents abroad on the well-being of the children in particular in terms of material wealth. Besides, it is found that the negative effects of the absence of a parent are not different from the lack of a parent due to other circumstances such as divorce.

Macroeconomic effects: The overall macroeconomic effects of the emigration of labour in the case of Romania are widely under-explored. The simulations of the macroeconomic effects of east to west European migration and the transitional arrangements on the European economies carried out in the framework of the present project contain specific results for Romania as well (Brücker et al., 2008). In particular, the effects of the migration of around 3.2 per cent of the labour force in the period from 2004 to 2007 on GDP, natives' factor income, unemployment and wages are explored in the short run – assuming only partial adjustments of the capital stock to the change in labour supply – and the long run – that allows for the full adjustment of the capital stock. Factor incomes to natives are calculated under the assumption that migrants do not take capital abroad. The results as concerns unemployment are referred to above. As concerns the other macroeconomic aggregates, the negative labour supply shock is simulated to reduce GDP by 2.5 per cent in the short run. The long run response is even stronger, 3.3 per cent. In per capita terms, GDP is expected to increase first (by 0.8 per cent) but decline slightly once the capital stock adjusts (0.1 per cent). The factor income accruing to the resident natives is simulated to change at the same magnitude as GDP per capita. Finally, the country is to expect a wage increase of 0.6 per cent in the short run, but wages will return to their levels before the negative labour supply shock in the long run.

The simulation exercise of Brücker et al. (2008) considers as well a situation where the transitional restrictions would be maintained as long as possible. Once the restrictions were lifted – in the case of Romania, this is scheduled at 2014 at latest –, the following macroeconomic effects are simulated to be observed: the labour force would decline by 0.4 per cent, resulting in a decline of GDP by 0.3 per cent but a very moderate increase of GDP per capita and natives' factor income (0.1 per cent). Unemployment is expected to decline by 0.05 percentage points, while wages will rise by 0.06 per cent. All in all, both the expected migration upon liberalisation of the labour market and its macroeconomic effects are small.

4 Conclusion

Romanian migration has commenced in more substantial numbers only after 1989. Since then, large numbers of Romanian nationals have sought a living abroad. Permanent migration was particularly high in the first years of transition and rapidly decreased thereafter, due to constrained possibilities of obtaining long term residence and work status in the host countries. In contrast, temporary migration has been found to evolve very dynamically, with shifting countries of destination. Romanian citizens still participate in temporary work migration in very high numbers, and other than in some new EU member states, there is no evidence that such migration has reached its climax.

What can be expected about Romanian migration in the future? Will the migration flows continue at their present pace? Will return migration intensify? Will new spatial patterns establish? What implications are to be expected for the Romanian economy? Existing survey and anecdotal evidence suggests that, irrespective of the legal constraints, large numbers of Romanian citizens already take the chance of labour migration at present,

and be it only under the premises of irregularity. Therefore, we do not expect that the level of participation in labour migration among the Romanian households will substantially increase. Turning now the factors that may decrease Romanian migration flows abroad, the Romanian economy is presently witnessing a period of rapid growth. Still, wages in Romania are well below the earnings available from unskilled work in Western Europe. Wage increases in the near future will not be able to reduce the earnings gap enough to substantially reduce temporary migration, although they can be expected to have some mitigating effect on migration outflows. However, as existing evidence suggests, those who are most likely to engage in temporary work migration are those with rather weak domestic labour market attachment. Romania has still a long way to go to increase domestic labour force participation to European averages, let alone to Lisbon targets. Although skill shortages exist, the education and vocational training systems have so far proven insufficient to foster a better match of supply and demand. The correction of these structural issues cannot be expected overnight, so that young labour market entrants in particular are still likely to encounter difficulties in their career development, which may sustain flows of temporary migration abroad. Besides, in the Romanian society there exist widespread experiences with work migration, which may encourage potential migrants to explore new destinations. There is one factor, however, that can be expected to mitigate labour outflows from Romania: the fact that the numbers of newborns per year have massively declined after 1989. This will lead to declined supply of potential migrants, bearing in mind that it is predominantly the younger cohorts who are inclined to migrate. All in all, improving economic conditions and demographic factors can be expected to contribute to some moderation in the numbers of potential migrants. We do not, however, expect a substantial decline of Romanian migration soon, as the Romanian economy will still fail to provide sufficiently attractive employment and earnings perspectives for considerable parts of the population and of those living in the countryside and the youth in particular.

As concerns the receiving countries of Romanian migration, there have recently been changes in the situation in the two most important destinations. In Italy, xenophobia against Romanian migrants has increased. Although it is mainly targeted at migrants of Roma ethnic origin, it may have some deterring effect to other migration from Romania as well. The other important receiving country of Romanian labour migration, Spain, is experiencing an economic downturn at present, where the construction industry is particularly affected. Therefore, we can expect decreasing demand for temporary migrant labour in Spain. As other potential receiving countries of Romanian migration, most EU member states have not yet opened up their labour markets to the EU entrants of 2007. Anecdotal evidence from the United Kingdom reports decreasing inflows from and rising return flows to Poland, the most important sending country of labour to date. For the western European receiving countries, opening up the labour markets for Romanian migrants may be an option once the supply from the nearer source countries declines, certainly conditional upon demand for migrant labour. Romanian migration has proven flexibility in terms of exploring new destinations and establishing respective migrant networks. Therefore, depending on the economic and institutional conditions set for

Romanian migrant labour, some shift in its geographical pattern could be expected in response to institutional and economic conditions.

In summary, we expect sustained levels of migration from Romania irrespective of the conditions on the side of the receiving countries' institutions and the Romanian economy, and perhaps a shift in the destination countries in response to institutional and economic changes. There is one respect by which a change in the regulatory conditions on behalf of the receiving countries could make a substantial difference, through: namely, the length of migration spells. Changing legal conditions may not increase the *de facto* number of migrants, but they may induce the shift of migrants from irregularity to lawful conditions of work and stay, and family reunifications in the host country. It is known that irregularity represents just one of different modes of more complex individual migration processes. Little is known, to date, about the distribution of Romanian labour migrants across various forms of migration such as one-off temporary migration, repeat and circular migration, return, and permanent migration. We could expect that opening up possibilities of lawful stay and more stable work relationships may increase the number of labour migrants heading for a longer term and perhaps even permanent stay in the host country. This would imply the increase of the stocks of such migrants in the respective receiving country, as witnessed in the wake of the regularisation programmes and relatively liberal admission policies in the southern European hosts of Romanian migration. Certainly, the extent of long term Romanian migration depends on a number of other issues as well, such as linguistic and cultural proximity (here, Spain and Italy have advantages from the Romanian point of view against, say, Nordic countries), the prospects of durable labour market and social integration of migrant labour, the economic conditions and alternatives in the source country, to name a few. Therefore, in the medium term and upon the admission of Romanian nationals to the labour markets of the incumbent EU members, we expect increasing stocks of populations of Romanian origin in the more western European countries. Available information, however, does not enable us to quantify the range of such an increase to date.

As concerns the implications for the Romanian economy, remittances have so far been found to bear little effect on investment and entrepreneurship. Still, large numbers of households could improve their housing and equipment with durable goods among others. Nevertheless, we think that the positive direct effects for the Romanian economy of remittances have been rather small.⁴¹ As concerns labour and skill shortages, the need for migrant labour in Romania seems inevitable, but the legislation and the society in Romania appear insufficiently prepared. Therefore, it appears likely that continued labour shortages are going to constrain the functioning of the Romanian economy to some extent.

⁴¹ As another potential positive effect of temporary migration, one could expect that inflows of return migration 'grease the wheels' of the source economy just as it has been hypothesised for the host countries by Borjas (1999), i.e. that it contributes to labour market adjustment by improving the spatial allocation of labour. We have doubts, however, that return migration could fulfil its role, since target savings from temporary migration

Drawing up a balance of the effects of migration on the Romanian economy and society would require the consideration of a number of other effects that are difficult to assess, such as the implications of migration on public finances. Drawing up such a balance is beyond the scope of the present report. Having drawn the attention to some of the controversial effects of labour migration on the Romanian economy, we would like to conclude with pointing at an area where positive effects can be expected from migration experiences: namely, the acquisition of new skills and values by returning migrants, and their broadened horizons. It can be hoped that via this channel, that is very hard to assess empirically, large scale migration will make a contribution to the development of the Romanian economy and the development of its social and political institutions.

are often used for the construction of owner-used housing in the sending regions of migration, which obviously contributes to reduced domestic labour mobility.

5 References

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6 Appendix

Table 1: Emigration of Romanian citizens by ethnicity, 1975 to 2007

year	total	% Romanian	% German	% Hungarian	% Jewish	% other
1975	10701	30.60	40.11	6.55	20.33	2.41
1976	9336	34.29	34.28	8.13	21.41	1.90
1977	17810	26.83	55.08	7.96	7.88	2.26
1978	19780	29.61	55.58	6.88	6.07	1.87
1979	17084	35.90	50.44	6.19	5.72	1.74
1980	24712	33.49	55.07	5.62	4.40	1.43
1981	20886	39.55	47.63	6.36	4.83	1.63
1982	24374	40.00	44.94	7.61	5.75	1.70
1983	26300	36.47	51.11	6.45	4.51	1.46
1984	29894	35.68	48.25	8.50	5.78	1.78
1985	27249	37.70	47.01	8.93	4.25	2.11
1986	26509	35.50	41.62	15.63	4.10	3.14
1987	29168	39.35	39.90	13.18	4.37	3.20
1988	37298	34.53	28.79	31.44	2.81	2.43
1989	41363	35.65	35.29	24.42	2.44	2.21
1990	96929	24.64	61.98	11.39	0.77	1.22
1991	44160	43.72	35.25	16.97	1.17	2.89
1992	31152	58.12	28.42	11.31	0.72	1.44
1993	18446	47.78	32.23	17.38	1.20	1.41
1994	17146	59.17	23.71	14.63	1.03	1.45
1995	25675	72.86	11.32	14.05	0.51	1.26
1996	21526	77.89	10.75	9.78	0.89	0.69
1997	19945	84.65	6.38	7.32	0.68	0.97
1998	17536	86.69	4.42	6.94	1.13	0.82
1999	12594	89.59	3.10	5.53	0.88	0.91
2000	14753	91.09	2.54	5.34	0.45	0.59
2001	9921	90.95	1.44	6.52	0.73	0.36
2002	8154	91.55	0.82	6.00	0.34	1.29
2003	10673	92.63	0.19	6.19	0.22	0.77
2004	13082	90.89	0.28	8.12	0.28	0.44
2005	10938	94.18	0.85	4.21	0.44	0.33
2006	14197	93.65	0.60	4.88	0.38	0.49
2007	8830	97.27	0.14	1.89	0.24	0.46

Source: Institutul National de Statistică.

Table 2: Emigration of Romanian citizens by country of destination, 1990 to 2007

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<i>Numbers of Romanian citizens who settled their permanent residence abroad</i>																		
Austria	3459	4630	3282	1296	1256	2276	915	1551	941	468	270	167	293	326	491	421	581	313
Canada	1894	1661	1591	1926	1523	2286	2123	2331	1945	1626	2518	2483	1437	1444	1445	1220	1655	1787
France	1626	1512	1235	937	787	1438	2181	1143	846	696	809	463	233	338	436	343	529	372
Germany	66121	20001	13813	6874	6880	9010	6467	5807	3899	2370	2216	854	1305	1938	2707	2196	3110	1902
Greece	576	354	143	80	87	193	274	232	316	214	328	105	60	64	97	114	134	72
Italy	1130	1396	528	645	1580	2195	1640	1706	1877	1415	2142	1486	1317	1993	2603	2731	3393	1401
USA	4924	5770	2100	1245	1078	2292	3181	2861	2868	2386	2723	1876	1356	2012	2049	1679	1982	1535
Hungary	10635	4427	4726	3674	1779	2509	1485	1244	1306	774	881	680	903	984	1553	1013	900	266
Other	6564	4409	3734	1769	2176	3476	3260	3070	3538	2645	2866	1807	1250	1574	1701	1221	1913	1182
Total	96929	44160	31152	18446	17146	25675	21526	19945	17536	12594	14753	9921	8154	10673	13082	10938	14197	8830
<i>Destination country's share in total</i>																		
Austria	3.6	10.5	10.5	7.0	7.3	8.9	4.3	7.8	5.4	3.7	1.8	1.7	3.6	3.1	3.8	3.8	4.1	3.5
Canada	2.0	3.8	5.1	10.4	8.9	8.9	9.9	11.7	11.1	12.9	17.1	25.0	17.6	13.5	11.0	11.2	11.7	20.2
France	1.7	3.4	4.0	5.1	4.6	5.6	10.1	5.7	4.8	5.5	5.5	4.7	2.9	3.2	3.3	3.1	3.7	4.2
Germany	68.2	45.3	44.3	37.3	40.1	35.1	30.0	29.1	22.2	18.8	15.0	8.6	16.0	18.2	20.7	20.1	21.9	21.5
Greece	0.6	0.8	0.5	0.4	0.5	0.8	1.3	1.2	1.8	1.7	2.2	1.1	0.7	0.6	0.7	1.0	0.9	0.8
Italy	1.2	3.2	1.7	3.5	9.2	8.5	7.6	8.6	10.7	11.2	14.5	15.0	16.2	18.7	19.9	25.0	23.9	15.9
USA	5.1	13.1	6.7	6.7	6.3	8.9	14.8	14.3	16.4	18.9	18.5	18.9	16.6	18.9	15.7	15.4	14.0	17.4
Hungary	11.0	10.0	15.2	19.9	10.4	9.8	6.9	6.2	7.4	6.1	6.0	6.9	11.1	9.2	11.9	9.3	6.3	3.0
Other	6.8	10.0	12.0	9.6	12.7	13.5	15.1	15.4	20.2	21.0	19.4	18.2	15.3	14.7	13.0	11.2	13.5	13.4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Institutul National de Statistică.

Table 3: Inflows of Romanian population to selected OECD countries, 1996 to 2006

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>Inflows of Romanian population, thousands</i>											
Austria			1.5	1.8	1.9	2.4	4.2	5.1	5.3	5.3	4.8
Belgium	0.3	0.4		0.6	0.7	1.0	1.0	1.0	1.4	2.3	3.1
Canada	3.7	3.9	3.0	3.5	4.4	5.6	5.7	5.5	5.7	5.0	4.4
Czech Republic	0.2	0.2	0.2	0.1	0.0	0.2	0.3	0.4	0.3	0.4	0.4
France		0.6	0.9	0.9	1.2	1.5	1.5	1.6	1.8	1.7	1.8
Germany	17.1	14.2	17.0	18.8	24.2	20.3	24.0	23.8	23.5	23.3	23.7
Greece			2.1								
Hungary	4.2	4.0	5.5	7.8	8.9	10.6	10.3	9.6	12.1	10.3	6.8
Italy			5.9	20.9	20.7	18.7	50.2		62.3	37.2	32.5
Portugal						7.8	3.2	0.9	0.8	0.8	2
Slovak Republic									0.1	0.1	0.4
Spain			0.5	1.8	17.5	23.3	48.3	55.0	89.5	94.0	111.9
<i>Share of Romanians in total migrant inflows, per cent</i>											
Austria			2.5	2.5	2.9	3.2	4.5	5.2	4.9	5.2	5.6
Belgium	0.6	0.8		1.0	1.2	1.5	1.4	1.5	1.9	3.0	3.7
Canada	1.6	1.8	1.7	1.8	1.9	2.2	2.5	2.5	2.4	1.9	1.7
Czech Republic	2.7	2.0	2.5	1.5	0.0	1.8	0.7	0.7	0.6	0.7	0.6
France		0.8	0.8	1.1	1.3	1.4	1.2	1.2	1.3	1.3	1.3
Germany	2.4	2.3	2.8	2.8	3.7	3.0	3.6	4.0	3.9	4.0	4.2
Greece			5.5								
Hungary	30.7	30.1	34.2	38.6	44.1	52.2	57.2	49.5	54.5	54.8	35.1
Italy			5.3	7.8	7.6	8.0	12.9		19.5	18.0	17.9
Portugal						5.2	4.4	2.8	2.3	2.8	4.7
Slovak Republic								0.0	1.3	1.3	3.5
Spain			0.9	1.8	5.3	5.9	10.9	12.8	13.9	13.8	13.9

Source: OECD.

Table 4: Stocks of Romanian population in selected OECD countries, 1996 to 2006

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>Romanian-born population and Romanian nationals respectively, thousands</i>											
Austria ¹			40.5	34.0	31.2	36.9	38.0	41.0	42.6	49.4	47.9
Belgium ¹					6.2	7.7	8.7	9.5	10.6	12.6	15.3
Belgium ²	2.2	2.2	2.1	2.3	2.4	3.3	4.0	4.6	5.6	7.5	10.2
Czech Republic ²	1.8	2.4	2.7	2.6	2.4	2.3	2.3	2.3	2.6	2.7	2.9
Greece ¹						26.5					
Greece ²			4.3	6.0	5.2	7.2	13.8	14.6	16.2	18.9	18.9
Hungary ¹	141.5	141.7	142.0	142.3	144.2	145.2	146.5	148.5	152.7	155.4	170.4
Hungary ²	61.6	62.1	57.4	57.3	41.6	45.0	47.3	55.7	67.5	66.2	67.0
Ireland ¹							5.8				8.5
Ireland ²							4.9				7.6
Italy ²	26.9	28.8	33.8	61.2	70.0	83.0	94.8	244.4	248.8	297.6	342.2
Poland ¹							3.4				
Portugal ²		0.1	0.2	0.2	0.4	8.4	11.3	12.0	12.5	11.1	11.9
Slovak Republic ¹						3.0			4.4		
Slovak Republic ²										0.4	0.7
Spain ¹		3.1	4.0	7.5	33.0	68.6	137.8	206.4	312.1	397.3	511.0
Spain ²	1.4	2.3	3.2	6.3	31.3	66.2	134.8	203.2	308.9	394.1	507.7
<i>Share of Romanians in total foreign-born population and foreign nationals respectively</i>											
Austria ¹			4.5	3.9	3.7	4.1	4.4	4.4	4.0	4.5	4.2
Belgium ¹					0.6	0.7	0.8	0.8	0.9	1.0	1.2
Belgium ²	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.8	1.1
Czech Republic ²	0.9	1.1	1.2	1.1	1.2	1.1	1.0	1.0	1.0	1.0	0.9
Greece ¹						2.4					
Greece ²			1.5	2.2	1.7	2.0	3.2	3.1	3.0	3.4	3.3
Hungary ¹	49.8	49.9	49.6	49.2	48.9	48.4	48.4	48.2	47.9	46.9	49.4
Hungary ²	43.2	41.9	38.2	37.4	37.8	38.7	40.8	42.8	47.5	42.9	40.3
Ireland ¹							1.5				1.4
Ireland ²							2.2				1.8
Italy ²	2.7	2.8	3.1	4.6	5.1	5.7	6.3	11.0	10.4	11.1	11.6
Poland ¹							0.4				
Portugal ²		0.1	0.1	0.1	0.2	2.3	2.7	2.7	2.7	2.6	2.7
Slovak Republic ¹						2.5			2.1		
Slovak Republic ²										1.6	2.2
Spain ¹		0.3	0.3	0.5	1.7	2.6	4.2	5.6	7.1	8.2	9.7
Spain ²	0.3	0.4	0.4	0.7	2.3	3.3	5.1	6.7	8.3	9.5	11.2

¹ Romanian-born population, ² Romanian nationals.

Source: OECD.

Table 5: Population born in Romania in OECD countries, and Romanian population, aged 15 and more, total, shares of age groups, and of education levels, census data from the 2000 round

	persons	% 15-24	% 25-64	% 65+	% ISCED 0/1/2	% ISCED 3/4	% ISCED 5/6	% Unknown
<i>EU-15 countries</i>								
Austria	36188	12.5	65.1	22.4	38.2	50.7	11.1	
Belgium	6244	16.3	72.8	11.0	21.2	24.7	36.5	17.6
Denmark	1859	22.1	71.2	6.8	16.6	37.7	27.1	18.6
Finland	635	11.8	86.6	1.6	52.0	31.5	16.5	
France	21997	14.1	63.0	22.9	24.1	29.1	46.7	
Greece	25348	22.7	72.3	4.9	30.2	54.2	13.2	2.3
Ireland	4377	23.6	76.0	0.3	25.9	33.3	23.4	17.3
Italy	74103	17.1	78.9	4.0	35.4	54.7	9.8	
Luxembourg	419	11.9	80.4	7.6	10.5	43.2	36.0	10.3
Portugal	2706	25.5	73.9	0.6	43.6	39.0	17.4	
Spain	50660	23.1	76.1	0.8	61.6	24.5	12.8	1.1
Sweden	10900	15.9	77.1	7.0	13.9	48.5	32.9	4.6
United Kingdom	6660	16.7	66.4	16.9	17.2	19.2	46.5	17.1
Sum	242096	18.1	73.4	8.5	37.7	42.6	17.6	2.1
<i>NMS-8</i>								
Czech Republic	11677	3.5	54.9	41.6	62.1	34.0	3.0	0.8
Hungary	136318	12.3	62.6	25.1	39.2	44.2	16.6	
Poland	3333	1.3	41.7	57.1	52.8	36.6	9.9	0.6
Slovak Republic	3023	8.7	57.2	34.1	46.3	45.5	7.4	0.8
Sum	154351	11.3	61.5	27.2	41.4	43.3	15.3	0.1
<i>Other OECD countries</i>								
Australia	11941	13.2	66.3	20.5	26.1	33.6	24.9	15.4
Canada	54795	11.7	68.8	19.6	19.0	27.2	53.8	
Japan	964	46.2	52.3	1.6	6.3	41.9	24.3	27.5
Mexico	232	9.9	59.9	30.2	12.5	22.0	60.8	4.7
New Zealand	702	8.1	59.8	32.1	9.0	44.9	36.8	9.4
Norway	1225	21.3	74.6	4.1	2.4	28.6	22.9	46.0
Switzerland	6490	11.5	68.0	20.5	13.2	30.0	50.2	6.6
Turkey	20315	6.9	27.7	65.4	61.2	19.0	6.1	13.8
United States	123938	12.1	66.2	21.7	22.1	39.4	38.5	
Sum	220602	11.7	63.3	24.9	24.7	33.8	38.8	2.7
All above countries	617049	14.1	66.8	19.1	34.0	39.6	24.6	1.8
Romania	17860462				49.1	43.1	7.7	0.1

Source: OECD; Romania: Eurostat.

Table 6: Stocks of Romanian labour in selected OECD countries, thousands, 1996 to 2006

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Austria	9.3	9.1	9.1	9.3	9.7	9.9	10.1	10.7	11.0	11.3	11.7
Czech Republic	0.9	1.2	1.1	0.7	0.9	0.8	0.7	0.7	0.6	0.9	1.2
Greece			3.5	4.8	3.8	4.8	10.0	10.7	12.1	13.4	13.6
Hungary	8.5	9.5	10.6	14.1	17.2	22	25.8	27.6	35.2	30.9	29.4
Ireland							3.0				
Italy	17.6	17.8	19.2	41.5	47.0	52.7	56.6	194.4	183.8	186.2	190.9
Portugal						7.8	10.8	11.1	11.3	9.7	
Slovak Republic									0.1	0.2	0.2
Spain	1.1	1.5	2.4	3.0	8.3	18.2	38.2	46.3	60.8	156.0	168.9

Source: OECD.

Table 7: Emigration of Romanian citizens by gender and age groups, 1990 to 2007

year	persons	% males	% aged 0-17	% aged 18-25	% aged 26-40	% aged 41-50	%aged 51-60	% aged >60
1990	96929	47.8	26.1	14.0	26.4	10.1	11.7	11.7
1991	44160	48.0	33.6	18.0	24.6	8.0	7.6	8.2
1992	31152	51.6	17.8	25.1	32.7	9.2	7.2	8.0
1993	18446	47.4	22.3	19.6	30.8	9.9	7.6	9.8
1994	17146	46.0	26.8	17.7	34.4	9.2	5.6	6.3
1995	25675	44.7	20.0	16.3	42.4	10.9	4.8	5.6
1996	21526	46.8	19.5	16.0	38.8	12.5	6.2	7.0
1997	19945	47.2	20.8	12.8	40.6	12.5	5.7	7.6
1998	17536	48.2	36.3	10.2	30.7	9.6	4.9	8.2
1999	12594	46.5	34.1	10.8	33.7	9.8	5.3	6.4
2000	14753	46.1	29.6	10.3	38.8	10.5	4.5	6.4
2001	9921	50.5	28.8	9.5	40.5	10.2	4.3	6.7
2002	8154	45.4	15.1	12.6	48.7	11.2	5.1	7.2
2003	10673	41.3	15.7	13.4	51.0	10.9	4.2	4.9
2004	13082	37.7	10.8	14.7	54.8	10.8	4.4	4.4
2005	10938	37.6	7.0	12.9	58.1	12.4	5.0	4.6
2006	14179	37.7	6.8	12.2	57.8	12.6	5.9	4.9
2007	8830	35.0	11.4	12.0	56.4	11.1	5.2	3.9
1990-2005	372630	49.1	24.9	16.2	37.8	10.9	7.8	8.6
1991-1995	136579	47.9	25.1	19.5	31.9	9.2	6.7	7.6
1996-2000	86354	47.0	27.1	12.4	36.8	11.2	5.4	7.2
2001-2005	52768	42.0	15.1	12.7	51.1	11.1	4.6	5.4
2006-2007	23009	36.6	8.5	12.1	57.3	12.0	5.6	4.5

Source: Institutul National de Statistică.