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***COMPARABILITY OF STATISTICS ON
INTERNATIONAL MIGRATION FLOWS
IN THE EUROPEAN UNION***

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International Organization
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Institute of Geography and Spatial Organisation,
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COMPARABILITY OF STATISTICS ON INTERNATIONAL MIGRATION FLOWS IN THE EUROPEAN UNION

Dorota Kupiszewska and Beata Nowok**

* Central European Forum for Migration Research in Warsaw

Abstract: The paper reviews availability and comparability of international migration statistics in the EU based on the most recent information. The incomparability problems are demonstrated using data disseminated by national statistical institutes, including the most recent ones (2003) collected through the Joint Eurostat-UNSD-UNECE-CoE-ILO Questionnaire on International Migration Statistics. Double entry matrices for 2003 and 2002 have been presented as well as graphs illustrating changes in the magnitude of the incomparability of figures on migration flows over time. An attempt has been made to explain the observations by comparing the sources and definitions used in various EU countries. Finally, specific problems relating to the comparability of data published in international sources (Eurostat, CoE, OECD, DG JLS) have been discussed.

Keywords: international migration, migration flows, statistics, migration data, European Union

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1. Introduction

In recent decades there have been many collective efforts to improve the quality and comparability of international migration statistics. However, the results of these efforts are far from satisfactory. A direct comparison of data on flows between pairs of countries reported by countries of origin with those reported by countries of destination demonstrates the scale of the problem. This paper aims to present the sources of the discrepancies in the flow data produced by the 25 European Union countries. Generally, they relate to administrative and statistical systems used to produce international migration statistics, which differ across the Member States. There are differences in the legislation, in the efficiency of the registration systems and in the methodologies used when processing the data.

The paper reviews availability and comparability of international migration statistics in the EU based on the most recent information. In Section 2 the incomparability problems are demonstrated using data disseminated by national statistical institutes (NSIs), including the most recent ones (2003) collected through the Joint Eurostat-UNSD-UNECE-CoE-ILO Questionnaire on International Migration Statistics. Double entry matrices for 2003 and 2002 have been presented as well as graphs illustrating changes in the magnitude of the incomparability of figures on migration flows over time. Section 3 attempts to explain the observations presented earlier by comparing the sources and definitions used in various EU countries. Finally, specific problems relating to the comparability of data published in international sources (Eurostat, CoE, OECD, DG JLS) are discussed in Section 4. Tables and Figures accompanying the text are included in the Annex.

The material presented in the paper has been collected among others during two projects in which the Central European Forum for Migration Research (CEFMR) took part in 2003-2005: *Annual International Migration Statistics* and *Towards Harmonised European Statistics on International Migration* (THESIM). The former is a sub-project of the *Annual Demographic Statistics, Annual Migration Statistics and Annual Regional Statistics* project conducted by NIDI in co-operation with CEFMR on behalf of Eurostat. One of the tasks performed by CEFMR has been checking and processing the data supplied by European National Statistical Institutes (NSIs) in response to the Joint Eurostat-UNSD-UNECE-CoE- ILO Questionnaire on Migration Statistics (described in more detail further), which proved a good opportunity to get a comparative picture of the information supplied by different countries.

The THESIM project, co-ordinated by Prof. Michel Poulain from the Université Catholique de Louvain, has been funded by the European Commission's DG Research within the Sixth Framework Programme. One of the objectives of the project was to support the implementation of the forthcoming *Regulation of the European Parliament and of the Council on Community statistics on migration and international protection*, in particular to analyse the current functioning of migration statistics in the 25 EU countries and to identify the problems

that the countries might encounter in relation to the requirements of the new regulation. During the project, in which seven scientific teams¹ participated, meetings with experts from the NSIs and with the authorities responsible for the administrative procedures relevant to population registers and registration of migrants have been organised in all 25 EU countries. The meetings were a unique source of information, with explanations provided directly by a range of people involved in the statistics production process.

In addition to these two projects, the *Quality Review of MIGRAT in NewCronos* project, conducted in 2003 by NIDI and CEFMR on behalf of Eurostat, allowed us to gain an important insight into the problem of the quality of data on international migration flows and stocks.

It must be noted that despite all these efforts we were still not able to fully understand how statistics are produced in some countries and what their real content is. The explanations provided by some NSIs were sometimes unclear or even not internally consistent. However, we believe that we were able to make a significant step forward. Through this paper we would like to share our knowledge and we hope that in doing so we will help all those who are trying to discover the truth behind international migration statistics. We would be grateful if the readers could inform us of any mistakes spotted, so that we could correct them in future publications on similar subjects.

2. Empirical observations

2.1 Double-entry matrices

In order to illustrate the problems with data on international migration flows, we have constructed two double-entry matrices for the 25 EU countries. They contain the most recent available data: for 2003 (Table 1) and 2002 (Table 2). Most of the presented data have been provided by the NSIs in response to the two rounds of the Joint UNECE-Eurostat-CoE-UNSD-ILO Questionnaire on Migration Statistics. The data for 2004 are the subject of the current questionnaire and should be sent to Eurostat during the autumn 2005.

The idea of presenting international migration flow data in the form of double-entry matrices is more than thirty years old. Two main promoters of such matrices have been John Kelly (see the review paper Kelly 1987) and Michel Poulain (Poulain 1999). To the best of our knowledge the first such matrix was constructed for ECE countries for the year 1972 and presented at the Meeting on Migration Statistics organised by the Conference of European Statisticians in 1975. Matrices presented regularly at several subsequent Meetings reflected the first attempts to harmonise the definitions. It is not our aim here to analyse how the

¹ The following teams participated in the THESIM project: GEDAP UCL (Belgium), NIDI (The Netherlands), INED (France), ICMPD (Austria), CEFMR (Poland), ICStat (Italy), and A. Herm from Estonia.

contents of the double entry matrices evolved, but we will rather concentrate on presenting the current situation.

The idea of double-entry matrices is to present in one table the data on immigration, reported by the receiving countries and those on emigration, reported by the sending countries. Accordingly, in the matrices shown in Tables 1 and 2, the figures concerning the migration flow from Country A to Country B are shown in a pair of cells: the upper cell represents the immigration from Country A reported by Country B and the lower cell – the emigration to Country B reported by Country A. In order to better understand the data we have constructed additional matrices, further called R-S (Table 3), R/S (Table 4) and S/R (Table 5) matrices. In the R/S matrices each cell contains the ratios R/S, where R and S are the flows reported respectively by the receiving and by the sending country. The cells where S is equal zero and R is non zero are marked with the infinity sign (∞). The S/R matrices show the ratios S/R, while the R-S matrices present the differences R minus S.

A number of problems can be noticed when analysing the double entry matrices, the R/S, S/R and S-R matrices.

- There is no data in a number of cells of the double entry matrices.
- The figures reported by the receiving country are often several times (or even more) higher than those reported by the sending country (see Table 4). In the extreme case of the flow from Latvia to Spain in 2003, the Spanish data show 100 times higher flow than Latvian data. Particularly large differences (as measured by the R/S ratio) have been also observed for flows from Slovakia to the Czech Republic and Germany (R/S=54 in both cases), from Slovakia to Spain (R/S=41), and also from Poland to the Czech Republic (R/S=36) and Spain (R/S=25).
- The absolute differences between the flows reported by the receiving and sending countries (the values of R minus S), which might be more important for policy considerations or population projections, especially in the case of large flows, are also significant, sometimes huge (Table 3). This concerns in particular flows to and from Germany. The highest difference has been observed in 2003 for the flow from Poland to Germany – a difference of almost 90 thousand (R=104924, S=15013, R-S=89911). Other striking examples are the flows in 2003 from Slovakia to the Czech Republic – 24 thousand difference (R=24385, S=448), from Spain to Germany – 12.5 thousand difference (R=14647, S=2109) and from Slovakia to Germany – 10.5 thousand difference (R=10684, S=199).
- Despite the general belief that immigration data are better than those concerning emigration, the numbers reported by receiving countries are often smaller than those reported by sending countries. Cells with R<S constituted 40% of all non-zero cells in 2003 (41% in 2002). Some differences, both relative and absolute, are again striking. For example in the case of the flow from Germany to Slovakia in 2003, Slovakia reported 90 times smaller values than Germany (106 according to Slovakia, 9456 according to

Germany). The flow from Germany to Poland according to Poland was only 2261, almost 81 thousand less than the value of 82910 reported by Germany.

- Portugal reported zero emigration to individual countries more often than any other country.
- To assess which countries are performing worst in measuring migration, we have checked - for each sending country - which countries were least effective (in terms of R/S) in recording the immigration from this country (see the framed cells in Table 4). Slovakia and Poland, followed by Portugal, Luxembourg, Latvia and Slovenia, turned out to appear most often as countries recording much less incoming migrants than reported by the sending country.
- To measure which countries have recorded the highest proportion of immigration flow, we have checked - for each sending country – which receiving countries had the highest R/S ratio (see the greyed cells in Table 4). The “winner” was Germany (as expected), followed by Denmark and Spain.
- To assess the emigration statistics we have checked – for each receiving country – which sending countries had the lowest S/R ratios (the framed cells in Table 5) and which the highest ones (the greyed cells in Table 5). The countries recording the lowest proportion of emigration are Slovakia, Portugal and Poland, followed by Spain, Italy and Latvia. The highest proportion of emigration flows is recorded in Germany and Denmark, followed by Austria.
- Portugal reported non zero immigration from Portugal to Portugal (1850 in 2003 and 2683 in 2002)

2.2 Evolution of migration flows over time

Other interesting observations can be made by looking at the figures presenting the evolution of the flows between specific pairs of countries over time reported by each of both countries, as proposed by Poulain (Poulain 2001). Such graphs are very helpful when trying to understand international migration trends and prepare a forecast. Figures 1-10 present a selection of such graphs for 28 pairs of countries (56 graphs, out of $2 \times 25 \times 24 = 1200$ possible in the system of 25 countries). They have been chosen from amongst those with a reasonable number of data points and a significant level of flows to illustrate typical or interesting observations, listed below.

- There are cases where data reported by the receiving and the sending country indicate an opposite trend (e.g. flows from Latvia to Poland, Figure 1).
- There is a group of countries with exceptionally good agreement between their data. These are three Nordic countries: Denmark, Finland and Sweden (Figure 2).
- In most cases if we look at two graphs showing the flows from country A to B and from B to A, then the country reporting higher flows in one direction usually also reports higher flows in the opposite direction. Cases like the one presented in Figure 3, where the data

reported by the receiving country are higher both for flows from A to B and from B to A are much less frequent.

- Germany reports flows relatively comparable to those reported by Denmark, but higher than Sweden and Finland (Figure 4).
- Flows reported by the Netherlands are lower than according to the Danish and German data, but higher than Swedish and Finnish in the case of the flows to the Netherlands, and higher than according to Finnish data in the case of flows from the Netherlands to Finland (Figure 5).
- Figures reported by the United Kingdom oscillate much more strongly than flow data from other countries (Figure 6).
- Sudden jumps or increases with a larger gradient than in the data reported by the partner country might be observed in some time series (Figure 7 and 8).
- A very low level of both immigration and emigration is reported by Slovakia and Poland during the whole period for which the data are available and it does not allow the identification of the changes in the flow magnitude observed by the partner country (Figure 9 and 10).

3. How to explain the empirical observations: data sources and definitions

To explain the origin of the problems listed above one would have to understand how the NSIs (or other responsible bodies) produce their statistics. The relevant issues are among others the sources of data and the definitions of the terms *migration* and *migrant*, in particular the time criterion that might appear in the definition. When talking about the definitions we have here in mind the rules applied (explicitly or implicitly) in the migration measurement process to decide who is included and eventually counted as international migrant.

Statistics on international migration flows is conditioned by the procedures (including definitions) adopted by the country at three stages:

Stage 1 – Collection of raw data in the primary data source, e.g. in a population register, in statistical forms or in survey forms;

Stage 2 – Production of statistics;

Stage 3 – Dissemination of statistics.

Differences between the countries occur at all the stages. Stage 1 is strongly dependent on the legislation and on the attitudes of migrants towards the legal rules. It determines the availability of data (through the recorded variables) and their coverage (for example the data collection might cover nationals or foreigners only). Stage 1 is also important for the definitions as it preconditions who might be potentially included in the migrant count. For example, generally only legal migrants are covered by the official statistics, the only

exception being Spain (theoretically, some illegal migrants may also be included in the passenger surveys carried out in Cyprus and the United Kingdom) (Nowok et al 2005). Stage 1 may be crucial for the reliability of the data, for example the reliability of the data in population registers depends to a large extent on the willingness of people to register and deregister. Generally, the under-registration concerning emigration is larger than in the case of immigration.

The methodologies applied in Stage 2 determine how the raw data are used to produce the statistics. Appropriate selection rules might help reach the compliance of the statistics with internationally agreed definitions. On the other hand, statistics are not always produced even though the underlying raw data are available.

In Stage 3 statistics are disseminated through various channels, and there are differences in terms of availability and quality between the statistics published in various sources. A particularly important aspect at this stage is the appropriate documentation. Unfortunately, the documentation is very often inadequate, for example information on data coverage and definitions are not provided.

The problems with statistics availability and comparability arising at Stage 1 are certainly more difficult to overcome than those related with Stages 2 and 3. Generally, major changes in statistics require changes in the legislation concerning the primary data sources. This is probably one of the main reasons why efforts to harmonise international migration statistics have not been successful.

3.1 Primary data sources

Table 6 presents the sources used in the EU countries to produce statistics on immigration and emigration, separately for nationals and foreigners. In almost all the countries the statistics on immigration and emigration, if both available, are produced using the same source. The exceptions are statistics on nationals in Malta and statistics on foreigners in Portugal. Also statistics on nationals and foreigners, if both available, come usually from the same source, with the exception of the Czech Republic, Hungary and Slovenia, where data on nationals come from population registers and data on foreigners from registers of foreigners, run separately.

In a majority of countries (16 countries), statistics on flows of nationals are compiled using data from population registers, either central or local. There are the following exceptions. Four countries - Cyprus, Ireland, Portugal and UK - base their statistics on data from sample surveys. These are passenger surveys conducted at the borders in the case of Cyprus and the UK, and household surveys in Portugal and Ireland. Poland and Slovakia implemented special statistical forms filled in at the time of registration or deregistration in local authorities. In

Malta immigrants fill in special forms at Customs when crossing the border. Maltese data on emigration of nationals used to be obtained from foreign embassies, but currently the only data are those concerning emigration to the UK, received from the British High Commission. Greece and France have data neither on immigration nor emigration of nationals. Portuguese statistics on immigration of nationals are used for internal purposes only and are not published.

In the case of statistics on flows of foreigners, population registers are also the most frequent source – they are used in 13 countries. Five countries - the Czech Republic, Hungary, Slovenia, France and Portugal (the latter two for immigration only) - use data from the registers of foreigners or the residence permit registers (the main difference between the two is that the latter are focused on documents issued). Slovakia used this source to provide data on flows by citizenship in 2003. Sample surveys are used, as for nationals, in Cyprus, Ireland, UK, and for emigration statistics in Portugal. Polish and Slovak² flow data, as well as Maltese data on immigration come from statistical forms, as used for nationals. France and Malta produce no statistics on emigration of foreigners, and Greece has no statistics on flows of foreigners at all.

Knowing the sources of statistics we may understand some of the peculiarities observed in Tables 1-5 and on the graphs. For example, the consequences of using sample surveys are clearly seen in Figure 6 presenting time series for flows to and from the UK: the immigration and emigration figures reported by the UK show strong fluctuations³, compared with much more smooth curves reported by Sweden and the Netherlands. We may also explain the specific observations for Portuguese data. Portuguese emigration statistics are based on data from household surveys, with the sample not large enough to catch relatively small flows to some countries – hence zero values are reported for these flows. As regards immigration, the Portuguese data cover foreigners only and refer to the number of residence permits. The figures reported for flows from Portugal to Portugal concern foreign children born in Portugal who received residence permits.

Missing sources on international migration flows, identified in Table 6, explain only a few empty cells in the matrix: the lack of Greek data and French emigration data. Other empty cells are related to the lack of information on the previous/next country of residence in the primary data source or to the lack of data in the secondary data sources; we will come back to both issues later.

² In Slovakia statistical forms are used to prepare statistics on flows by country of previous/next residence and were used till 2002 for the figures on flows by citizenship.

³ Due to the small sample size, the UK's Office for National Statistics would not normally publish migration estimates from the International Passenger Survey at this level of disaggregation.

3.2 Definitions

Differences in definitions are crucial for understanding the differences in the data reported by receiving and sending countries. The definitions specifying who is included in international migration statistics are usually not stated explicitly or are expressed in a very vague way. Generally, the definitions might be identified by analysing (i) the rules governing the collection of data in the primary data sources, for example the administrative rules for reporting changes of place of residence in population registers, and (ii) the selection rules applied to the raw data when preparing the statistics. These rules differ not only between countries, but also between statistics on nationals and foreigners and between immigration and emigration. Therefore, even if the same rules were applied in two countries and both countries had reliable statistics, the difference between criteria applied in the immigration and emigration statistics would mean that the flows reported by the receiving and sending country would be different.

The differences in the definitions are related to the different concepts of place of residence and to different duration of stay criteria relevant to migration statistics. Generally, the *de jure* approach is applied everywhere, which means that the legal place of residence is important, not the actual one. The law regarding the registration of place of residence might differ between nationals and foreigners and also between various groups of foreigners (EU and non-EU nationals).

The largest differences regard the time criterion which specifies the minimum duration of stay in the destination country required for the change of residence to be counted as international migration. Table 7 summarises the time criteria applied in the EU countries. This table was particularly difficult to compile and might be questioned, although its contents have been consulted with most of the countries concerned. The table indicates that there are very few countries that comply with the UN recommendations (United Nations 1998) and use the one year duration of stay criterion⁴. Analysing the table the following options might be distinguished:

- (i) Duration of stay is not taken into account; An example is Germany, where everybody taking up a residence as an owner-occupier, tenant or subtenant is counted. Irish data are based on the survey question about the place of residence one year ago and there is no question about the intended duration of stay or the time already spent in the country.
- (ii) A minimum period of stay criterion applies that might be 3 months, 6 months or 1 year. Specific time limits are in use in the Netherlands: 4 out of 6 months for

⁴ According to the UN recommendations a long – term migrant is a person “who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence.” (United Nations 1989, Box1)

immigration and 8 out of 12 months for emigration. Generally, in all the EU countries this time criterion refers to the intended duration of stay as opposed to the actual duration (the latter was taken into account in the immigration statistics for 2001 and 2002 in the Czech Republic). If the actual duration of stay concept was applied, the production of statistics would be systematically delayed by the period used as time criterion. The time limits presented in the table have various meanings. For example, they might refer to the period of stay related with the obligation to register (or deregister) as specified by law governing population registers, or to the duration of validity of residence permits. They might also refer to the selection rules applied when statistics are produced.

- (iii) The concept of “permanent migration” or migration for permanent stay is in operation. Temporary changes of residence are not counted, only those declared as permanent ones are included. This option applies to the former socialist countries: Poland, Slovakia⁵, and statistics on flows of nationals (as well as non-nationals till 2000) in the Czech Republic.
- (iv) In several countries, permit expiry is used as a criterion in the statistics on emigration of foreigners, in which case the duration of stay in the destination country is not taken into account. Usually, expired permits are counted in addition to the number of persons who deregistered from the population register. This measure is used in order to prevent the under-registration of emigration. The main problem of using this option is that it does not give any information on the country of destination. In the Czech Republic this problem is solved by assuming that the destination is the same as the country of citizenship. In Lithuania, the destination is assumed to be the same as the country of previous residence.

Apart from the differences in the duration of stay criterion, another time-related problem is that the date (year) to which a migration event is assigned might not be the one when the move took place. It concerns all four options listed above: e.g. there might be a delay between the arrival and the registration, between the arrival and the issuance of the permit that is counted in the statistics or between the departure and the date of permit expiry.

A specific situation exists in Denmark, Finland and Sweden due to the Inter-Nordic Migration Agreement, which covers these three countries, Norway and Iceland. Migration movement between these countries is first registered in the country of destination and then the information is transferred to the country of origin, so that statistics concerning emigration to each of these countries follow the rules governing immigration statistics in the partner countries.

⁵ In the case of 2003 data for Slovakia, the permanent migration concept refers to data on flows of nationals and data on flows of foreigners by previous/next country of residence, while data on flows of foreigners by citizenship cover also temporary migration of foreigners with permits for more than 3 months.

Having in mind the differences in the definitions one may attempt to explain further features in the double-entry matrix and flow time series. First of all the excellent agreement in the flows between the Nordic countries is no more a mystery. The relation between the figures reported by Germany, the Netherlands and the Nordic countries corresponds to the differences in the definitions. The German one is the widest, so German figures are usually the highest. The time criterion used in the Netherlands is longer than in Germany and Denmark, but lower than in Finland and Sweden, what is reflected in registered flow levels presented in Figure 5. Slovakia and Poland have the lowest levels of reported flows because they include migration for permanent stay only.

In several cases our expectations based on the definitions do not agree with the observed S/R ratios, for example for Luxembourg and Slovenia. In Luxemburg, it might be due to the fact that information on the country of previous residence was available only for a fraction (25% in 2003) of flows. In Slovenia, data disaggregated by previous/next country of residence refer to nationals only. A large percentage of flows with unknown origins or destinations was also recorded in Spain in 2003: 60% for emigration and 30% for immigration, which resulted in low S/R ratios, but the R/S ratios were still high thanks to a broad definition of migration used currently in this country.

As concerns the sudden jumps observed in the Spanish and Czech data (Figure 7 and 8), they might be explained by the changes in the definitions. In the Czech Republic until 2000 the statistics covered permanent migration only, as registered in the population register, similarly to Poland and Slovakia. Since 2001, data from the aliens register were used as well: immigration statistics covered persons who stayed over one year (the exact criteria varied over time) and emigration statistics included data on permits that expired, in addition to self-reported departures for permanent stay abroad⁶. In Spain emigration statistics until 2001 covered assisted emigration of nationals only. Since 2002 all emigration events registered in the population register are counted and the total emigration figure increased from 134 in 2001 to 36605 in 2002! As concerns Spanish immigration statistics, Figure 7 suggests that some changes in the administrative or statistical procedures must have taken place between 1996 and 2000, because the increases in immigration flows reported by Spain are much higher than those reported by the countries of origin, however we do not know the nature of these changes.

More information on sources and definitions used for international migration statistics in the 25 European Union countries may be found in Nowok and Kupiszewska (2005).

⁶ The increase in the level of registered flows in CZ is also due to the amendments in the Act on Residence of Foreigners in July 2001.

4. Secondary data sources and data availability

Statistical data available to the end users usually do not come directly from the primary data sources described earlier. Usually, the data are processed by the national statistical office or other body responsible for statistics production. The statistics are then disseminated in yearbooks and other publications either in a traditional printed form or, more and more frequently, through the Internet. Also, statistics are collected from individual countries and then disseminated by international organizations. The final effect is that a number of sources, differing in the scope of presented data, are available to the end user, including the following:

- Official websites of national statistical institutes,
- Eurostat electronic database and printed publications,
- Council of Europe publications "Recent demographic developments in Europe",
- SOPEMI reports,
- Annual report on asylum and migration prepared by the European Commission's Directorate General for Justice, Freedom and Security.

Recent statistics on international migration disseminated by Eurostat are taken from the annual Joint Eurostat-UNSD-UNECE-CoE-ILO Questionnaires on International Migration Statistics.

The data presented in various sources might differ and because of insufficient documentation it is difficult to understand the origin of these differences. We have compared figures on total immigration flows and total emigration flows in the period 1999-2002 given in the above listed sources and found out that the figures are fully consistent across the sources only for seven EU countries: the Czech Republic, Denmark, Finland, Poland, the Slovak Republic, Slovenia and Sweden. For the other countries some discrepancies have been identified, sometimes significant. Table 8 shows figures for selected countries, presenting various types of problems. In the table, the differences between the data coming from the same type of source (e.g. the CoE report) but published in different years are not shown: In the case of differences, the data from a more recent edition are presented. Similarly, the data collected for the DG JLS report 2002 are presented if different than those published in the Annual Report 2001.

The examples presented in Table 8 indicate that the differences might have various origins. For Lithuania, the differences result from the post-census revisions, with the revised emigration figures much higher than non-revised ones (21816 versus 2616 in 2000). For the United Kingdom, either figures from the International Passenger Survey only are presented, or more complete TIM (total international migration) data. For the Netherlands some sources present emigration figures excluding administrative corrections. In Italy there are two sources of data (both based on the population register) differing in methodology. In the case of

Hungary there is a mixture of provisional and final data, as well as data concerning either total flow or flow of foreigners only. In Malta immigration data concern either total flow or migrants of Maltese origin only. In all the sources examined the footnotes which should give some explanation are often missing or are incorrect.

The official country statistics published by the national statistical institutes on their websites are usually the most recent and the most reliable data that are publicly available. The scope of the data, in particular on international migration, and the form of their presentation varies significantly among the EU countries. Very few countries provide comprehensive databases containing detailed data that can be consulted, printed and downloaded free of charge (e.g. Denmark, the Netherlands) and some do not present data on international migration (e.g. France, Hungary). In the majority of cases only short time series of total flows (international immigration and emigration) are disseminated on the official websites.

Eurostat – the Statistical Office of the EC, is potentially the most comprehensive source of data on international migration in the EU member states. For a number of years it has maintained the NewCronos database, with data available on-line and on CD-ROMs. Since 1 October 2004 the Eurostat data may be accessed free of charge using a new interface, at the address epp.eurostat.cec.eu.int. The part of the database dedicated to international migration is currently under review and not all data may be consulted. When fully updated, the website will provide an access to all or most of the data on international migration flows that are collected through the Joint Eurostat-UNSD-UNECE-CoE-ILO Questionnaire on International Migration. A relatively large amount of data on international migration may be found in Eurostat statistical yearbooks (Eurostat 2004, Eurostat 2002).

“Recent demographic developments in Europe” reports published every year by the Council of Europe (CoE) cover all member states of the CoE and some non-member states - 45 member states and Belarus in the 2004 edition (Council of Europe 2005). As regards international migration statistics, the hardcopy of the report contains figures on net migration rates only. Figures on emigration and emigration flows are provided in the country-specific tables on the CD-ROM. One of the problems is that it is not always clear which disaggregation has been provided: by citizenship or by country of previous/next residence, because the headers and footnotes are not consistent and sometimes misleading. For most countries, figures by citizenship have been presented, but in several cases they are accompanied by footnotes stating that “Nationality shown because country of origin and destination not available for international migration”, even though in fact both types of data are available. In the 2004 edition, the data in the International Migration table for the Netherlands have been mixed up: the 2002 columns contains data by country of previous/next residence while the 2003 columns – data by citizenship.

Each year the Organisation for Economic Co-operation and Development (OECD) publishes a report “Trends in International Migration” prepared within the OECD Continuous Reporting

System on Migration (SOPEMI). The SOPEMI reports cover the member states of the OECD as well as selected non-member countries - the Baltic States, Bulgaria and Romania in the 2004 edition (OECD 2005). The migration flow tables in the Statistical Annex refer to flows of foreigners, usually disaggregated by citizenship and are provided for selected countries only. Data provided in the SOPEMI reports are supplied by the SOPEMI correspondents appointed by the OECD Secretariat in each country, so they do not necessarily represent the official national statistics.

At the beginning of 2004, the European Commission's Directorate General for Justice, Freedom and Security (DG JLS) published on its website the Annual Report on Migration and Asylum 2001, covering 25 Member States, Bulgaria, Romania, Iceland and Norway. As concerns the flow data, the report presents only figures on total annual immigration and emigration in 1999, 2000 and 2001. The revised and more recent data have also been collected from the NSIs in order to prepare the second report, but it is not available yet.

As mentioned earlier, a comprehensive collection of data concerning international migration is conducted jointly by five organizations: Eurostat, United Nations Statistical Division (UNSD), United Nations Economic Commission for Europe (UNECE), Council of Europe (CoE) and International Labour Office (ILO). The Joint Questionnaire on International Migration Statistic is sent annually to 55 countries. As concerns Europe, Eurostat processes and disseminates data received from 37 countries. The questionnaire includes the following tables concerning long-term flow data (i) Immigration and emigration by sex and previous/next country of residence; (ii) Immigration and emigration by sex, citizenship and 5-year age group. There is also a table concerning aggregated figures on major categories of inflows and outflows, including visitors, diplomatic and military personnel, short-term migrants, border workers etc, but most countries either do not complete this table or provide only a few figures. In the collection conducted in 2005 (flow data for 2004) the table concerning long-term migration by previous/next country of residence has been extended to include the age dimension.

Table 9 presents which statistics concerning flows have been sent by the NSIs in response to the Joint Migration Questionnaires covering 2003 and 2002 flow data. Hungary and Italy provided their flow statistics with a one year delay. Austrian data have been delayed due to the implementation of a new system of population statistics based on a new population register. Provisional data have been sent by Hungary, Ireland and for immigration by Portugal. As regards Belgian and Hungarian data and French data on immigration, although data on flows are available, the statistics disaggregated by country of previous or next residence are not produced either because there is no information in the database or because of data quality problems.

It is worth to mention the latest United Nations Statistical Division (UNSD) data collection initiative. Till 2001 UNSD collected data on international migration flows through the annual

International migration and travel statistics questionnaire sent out within the preparation of the UN Demographic Yearbook. Selected data have been published on a very irregular basis, last time in the Demographic Yearbook 1989 (United Nations 1989). Recently the UNSD conducted a review of their data collection (UNSD 2004a) and proposed a new questionnaire that would comply with the latest *UN Recommendations* (UNSD 2004b). Compared with the previous UNSD questionnaire and the Joint Migration Questionnaire, the new questionnaire introduces a number of new tables: Inflows of foreigners disaggregated by reason for admission and duration of stay, Inflows of citizens by purpose and duration of stay abroad, Outflows of foreigners by current status in the country, Outflows of citizens by purpose of travel abroad and sex. It is worth noting an asymmetric treatment of citizens and non-citizens in the Inflows and Outflows tables: this asymmetry will make it difficult to compare data provided by receiving and sending countries. Moreover, in our opinion most countries will not be able to provide the requested data. Nevertheless, if at least some countries are able to present their short term and long term flow statistics separately, they might set an example for the others. Also, the exercise might help demonstrate the incomparabilities between the countries and help to understand the meaning of the statistics.

5. Conclusions

It is clear that a good comparability of international migration statistics will be very difficult to achieve, if at all possible. The legislation and administrative procedures concerning registration, that is the main source of information on migration flows in most of the EU countries, will continue to differ, but the data already collected in the registers should allow to compile the statistics on flows that would be more comparable. The Implementing Measures for the new *Regulation of the European Parliament and of the Council on Community statistics on international migration and asylum* should provide detailed guidelines in this respect. Furthermore, mathematical models are needed to provide consistent, internationally comparable estimates of flows. Much more attention should also be paid to the proper description of the statistics – first by the NSIs when providing the data, and later, when the statistics are disseminated. These conclusions seem obvious but we have to keep repeating them till the situation improves.

It should be noted that the incomparability of statistics on international migration flows is strictly linked with the incomparability of statistics on population stocks, therefore both problems should be addressed simultaneously.

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■

Annex. Tables and Figures

Table 1. Migration flows between the EU countries according to the receiving (r) and sending countries (s) in 2003.

FROM	TO	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI	SE	UK	
BE	r	.	80	587	4 291	.	.	3 037	.	.	.	44	11	10	804	.	.	5 348	267	64	105	19	2	184	399	.	
BE	s
CZ	r	.	.	232	9 258	.	.	388	.	.	.	79	2	11	3	.	.	333	1 201	46	9	7	650	47	123	.	
CZ	s	78	.	47	950	2	66	70	283	31	197	32	12	13	6	35	5	149	315	1 040	27	9	18 262	57	43	455	
DK	r	.	65	.	2 693	.	.	764	.	.	.	14	22	81	14	.	.	474	203	17	58	5	0	371	4 603	.	
DK	s	511	180	.	2 540	133	229	1 720	1 333	264	782	24	348	596	131	120	14	609	231	548	174	29	79	403	4 582	4 317	
DE	r	.	1 228	3 221	.	.	.	13 746	.	.	.	195	79	257	436	.	.	7 921	12 239	2 261	645	242	106	807	2 872	.	
DE	s	4 623	8 909	2 712	.	597	18 106	16 236	19 060	2 415	33 802	306	1 474	2 011	1 510	15 429	120	8 616	15 976	82 910	8 880	2 346	9 546	2 380	3 786	15 550	
EE	r	.	4	169	947	.	.	60	.	.	.	0	69	53	2	.	.	53	37	0	2	0	0	1 292	311	.	
EE	s
EL	r	.	57	278	12 959	.	.	273	.	.	.	4 971	4	8	5	.	.	882	465	58	15	6	2	63	585	.	
EL	s
ES	r	.	103	1 665	14 647	.	.	.	.	.	.	38	2	85	28	.	.	2 794	615	85	743	6	2	608	1 234	.
ES	s	647	34	130	2 109	4	38	.	2 474	487	801	1	1	31	89	41	6	600	93	144	627	12	16	102	164	2 335	
FR	r	.	462	1 488	18 133	.	.	8 847	.	.	.	99	12	40	987	.	.	2 919	741	191	458	23	9	312	931	.	
FR	s
IE	r	.	45	306	2 046	.	.	1 649	.	.	.	64	6	39	3	.	.	615	138	12	37	0	1	146	230	.	
IE	s
IT	r	.	274	895	23 702	.	.	5 796	.	.	.	11	17	47	68	.	.	1 661	1 460	229	312	49	14	209	473	.	
IT	s
CY	r	.	35	33	260	.	.	19	.	.	.	.	0	2	.	.	.	32	21	3	4	1	0	22	44	.
CY	s	22	16	14	80	0	604	14	59	0	16	.	0	0	0	19	15	19	19	15	0	0	0	0	21	261	
LV	r	.	17	381	1 966	.	.	207	.	.	.	12	.	177	.	.	.	74	68	4	11	0	0	63	182	.	
LV	s	0	3	40	170	44	2	2	28	11	32	1	.	80	1	0	0	19	10	15	37	0	3	33	45	40	
LT	r	.	27	701	3 457	.	.	1 401	.	.	.	15	146	.	1	.	.	173	120	60	11	0	1	44	232	.	
LT	s	51	53	158	1 204	34	15	465	143	276	184	2	192	.	1	7	0	95	41	123	55	0	3	112	191	980	
LU	r	.	3	196	1 728	.	.	89	.	.	.	0	0	1	.	.	.	166	57	3	10	2	0	34	78	.	
LU	s	1 119	7	119	747	3	22	73	1 254	44	208	.	2	1	.	17	5	97	22	11	521	3	7	33	74	171	
HU	r	.	58	170	14 965	.	.	271	.	.	.	125	2	5	8	.	.	498	2 595	20	17	6	25	76	244	.	
HU	s
MT	r	.	3	18	98	.	.	5	.	.	.	12	0	1	.	.	.	44	4	0	0	1	1	1	33	.	
MT	s
NL	r	.	245	820	13 015	.	.	3 567	.	.	.	65	8	40	25	.	.	.	655	72	264	8	11	239	707	.	
NL	s	9 284	172	430	9 822	18	482	3 365	3 373	459	1 274	37	21	41	150	242	33	.	470	622	666	40	65	292	648	7 022	
AT	r	.	339	262	13 456	.	.	554	.	.	.	17	4	14	7	.	.	510	.	140	33	55	48	92	333	.	
AT	s	177	837	100	4 422	17	340	300	426	68	852	13	25	70	44	1 752	6	295	.	1 904	180	295	1 329	196	396	668	
PL	r	.	1 653	995	104 924	.	.	3 498	.	.	.	123	15	113	10	.	.	2 106	2 974	.	36	2	36	89	1 134	.	
PL	s	138	46	68	15 013	0	56	139	251	20	311	0	4	7	14	6	0	275	355	.	5	0	10	11	117	282	
PT	r	.	31	170	7 699	.	.	5 505	.	.	.	0	2	13	512	.	.	1 619	330	13	1 850	3	2	56	143	.	
PT	s	0	0	0	955	0	0	0	849	0	0	0	0	0	770	0	0	0	0	0	0	0	0	0	0	2 187	
SI	r	.	16	31	2 053	.	.	71	.	.	.	0	2	1	.	.	.	60	372	1	1	.	1	6	22	.	
SI	s	40	12	4	463	0	8	12	47	2	127	4	0	0	17	5	0	14	188	7	3	.	4	1	24	32	
SK	r	.	24 385	84	10 684	.	.	324	.	.	.	63	5	5	5	.	.	191	2 330	19	1	5	.	12	56	.	
SK	s	7	448	0	199	0	2	8	17	0	38	0	0	0	5	18	0	8	134	10	0	0	.	1	6	52	
FI	r	.	55	421	2 204	.	.	802	.	.	.	11	38	32	2	.	.	362	251	6	15	0	0	.	3 395	.	
FI	s	245	34	397	761	311	56	792	284	110	210	19	21	20	57	96	2	217	76	23	26	2	4	.	3 428	1 070	
SE	r	.	83	2 705	3 397	.	.	1 537	.	.	.	46	40	58	11	.	.	638	474	91	31	18	7	3 438	.	.	
SE	s	411	77	2 585	1 580	99	510	1 356	946	205	441	54	58	38	66	127	19	499	238	216	92	10	23	3 366	.	3 676	
UK	r	.	488	3 707	13 197	.	.	34 177	.	.	.	2 870	35	122	37	.	.	5 872	1 180	261	947	16	33	914	3 022	.	
UK	s

Table 3. Differences between flow figures reported by the receiving and sending countries in 2003 and 2002.

2003		Receiving country																
		CZ	DK	DE	ES	IT	CY	LV	LT	LU	NL	AT	PL	PT	SI	SK	FI	SE
Sending country	CZ	-	185	8 308	318	:	47	-10	-2	-3	184	886	-994	-18	-2	-17 612	-10	80
	DK	-115	-	153	-956	:	-10	-326	-515	-117	-135	-28	-531	-116	-24	-79	-32	21
	DE	-7 681	509	-	-2 490	:	-111	-1 395	-1 754	-1 074	-695	-3 737	-80 649	-8 235	-2 104	-9 440	-1 573	-914
	ES	69	1 535	12 538	-	:	37	1	54	-61	2 194	522	-59	116	-6	-14	506	1 070
	IT	:	:	:	:	-	:	:	:	:	:	:	:	:	:	:	:	:
	CY	19	19	180	5	:	-	0	2	:	13	2	-12	4	1	0	22	23
	LV	14	341	1 796	205	:	11	-	97	:	55	58	-11	-26	0	-3	30	137
	LT	-26	543	2 253	936	:	13	-46	-	0	78	79	-63	-44	0	-2	-68	41
	LU	-4	77	981	16	:	:	-2	0	-	69	35	-8	-511	-1	-7	1	4
	NL	73	390	3 193	202	:	28	-13	-1	-125	-	185	-550	-402	-32	-54	-53	59
	AT	-498	162	9 034	254	:	4	-21	-56	-37	215	-	-1 764	-147	-240	-1 281	-104	-63
	PL	1 607	927	89 911	3 359	:	123	11	106	-4	1 831	2 619	-	31	2	26	78	1 017
	PT	31	170	6 744	5 505	:	0	2	13	-258	1 619	330	13	1 850	3	2	56	143
	SI	4	27	1 590	59	:	-4	2	1	:	46	184	-6	-2	-	-3	5	-2
	SK	23 937	84	10 485	316	:	63	5	5	0	183	2 196	9	1	5	-	11	50
FI	21	24	1 443	10	:	-8	17	12	-55	145	175	-17	-11	-2	-4	-	-33	
SE	6	120	1 817	181	:	-8	-18	20	-55	139	236	-125	-61	8	-16	52	-	
2002		CZ	DK	DE	ES	IT	CY	LV	LT	LU	NL	AT	PL	PT	SI	SK	FI	SE
Sending country	CZ	-	146	10 063	378	119	69	0	-14	:	234	686	-1 083	0	-14	-13 706	8	94
	DK	-92	-	189	-999	-486	19	-342	-593	:	-148	-54	-561	-89	-30	-77	-16	-87
	DE	-8 704	569	-	-2 924	-25 159	132	-1 302	-2 101	:	-1 377	-6 526	-76 404	-10 623	-2 170	-9 734	-1 804	-1 177
	ES	-8	1 491	12 116	-	1 060	26	0	22	:	1 917	380	-36	-90	4	-19	347	951
	IT	225	817	19 466	4 118	-	26	9	21	:	1 275	854	-208	111	-80	4	78	322
	CY	-9	13	218	-45	-52	-	0	0	:	8	17	-17	0	0	2	-16	38
	LV	-3	403	1 985	212	117	0	-	21	:	78	48	-23	3	0	1	-7	129
	LT	-8	707	3 318	1 829	68	-3	40	-	:	87	84	-88	-8	0	-1	-31	142
	LU	:	:	:	:	:	:	:	:	-	:	:	:	:	:	:	:	:
	NL	17	346	3 154	123	-217	41	-2	-21	:	-	93	-409	-378	-16	-93	-71	121
	AT	-291	176	10 796	344	201	69	-10	-47	:	296	-	-1 382	-120	-192	-1 002	-48	49
	PL	1 641	867	83 162	3 703	3 584	27	16	122	:	1 985	1 989	-	26	3	18	86	1 012
	PT	23	171	8 030	3 554	453	0	3	0	:	1 453	296	4	2 683	2	0	52	178
	SI	3	31	1 472	43	111	-1	2	-1	:	21	106	-10	2	-	-2	-2	-30
	SK	12 877	69	11 381	402	377	-1	3	1	:	237	2 034	-1	1	0	-	13	66
FI	4	12	1 473	151	70	-14	-1	74	:	138	139	-33	-4	-2	-3	-	-59	
SE	2	147	1 822	446	-99	-18	-20	29	:	129	201	-120	-52	-9	-12	44	-	

Table 4. Immigration statistics – R/S ratios in 2003 and 2002.

2003		Receiving country																
		CZ	DK	DE	ES	IT	CY	LV	LT	LU	NL	AT	PL	PT	SI	SK	FI	SE
Sending country	CZ	-	4,94	9,75	5,54	:	2,47	0,17	0,85	0,50	2,23	3,81	0,04	0,33	0,78	0,04	0,82	2,86
	DK	0,36	-	1,06	0,44	:	0,58	0,06	0,14	0,11	0,78	0,88	0,03	0,33	0,17	0,00	0,92	1,00
	DE	0,14	1,19	-	0,85	:	0,64	0,05	0,13	0,29	0,92	0,77	0,03	0,07	0,10	0,01	0,34	0,76
	ES	3,03	12,81	6,94	-	:	38,00	2,00	2,74	0,31	4,66	6,61	0,59	1,19	0,50	0,13	5,96	7,52
	IT	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	CY	2,19	2,36	3,25	1,36	:	-	0/0	∞	:	1,68	1,11	0,20	∞	∞	0/0	∞	2,10
	LV	5,67	9,53	11,56	103,50	:	12,00	-	2,21	:	3,89	6,80	0,27	0,30	0/0	0,00	1,91	4,04
	LT	0,51	4,44	2,87	3,01	:	7,50	0,76	-	1,00	1,82	2,93	0,49	0,20	0/0	0,33	0,39	1,21
	LU	0,43	1,65	2,31	1,22	:	:	0,00	1,00	-	1,71	2,59	0,27	0,02	0,67	0,00	1,03	1,05
	NL	1,42	1,91	1,33	1,06	:	1,76	0,38	0,98	0,17	-	1,39	0,12	0,40	0,20	0,17	0,82	1,09
	AT	0,41	2,62	3,04	1,85	:	1,31	0,16	0,20	0,16	1,73	-	0,07	0,18	0,19	0,04	0,47	0,84
	PL	35,93	14,63	6,99	25,17	:	∞	3,75	16,14	0,71	7,66	8,38	-	7,20	∞	3,60	8,09	9,69
	PT	∞	∞	8,06	∞	:	0/0	∞	∞	0,66	∞	∞	∞	∞	∞	∞	∞	∞
	SI	1,33	7,75	4,43	5,92	:	0,00	∞	∞	:	4,29	1,98	0,14	0,33	-	0,25	6,00	0,92
SK	54,43	∞	53,69	40,50	:	∞	∞	∞	1,00	23,88	17,39	1,90	∞	∞	-	12,00	9,33	
FI	1,62	1,06	2,90	1,01	:	0,58	1,81	1,60	0,04	1,67	3,30	0,26	0,58	0,00	0,00	-	0,99	
SE	1,08	1,05	2,15	1,13	:	0,85	0,69	1,53	0,17	1,28	1,99	0,42	0,34	1,80	0,30	1,02	-	
2002																		
Sending country	CZ	-	3,61	10,26	6,91	1,56	3,88	1,00	0,30	:	2,47	2,82	0,03	1,00	0,26	0,05	1,21	2,65
	DK	0,36	-	1,07	0,42	0,37	1,54	0,08	0,13	:	0,76	0,77	0,05	0,30	0,00	0,01	0,96	0,98
	DE	0,10	1,19	-	0,82	0,31	1,55	0,06	0,08	:	0,85	0,59	0,03	0,06	0,13	0,01	0,32	0,70
	ES	0,84	13,22	4,66	-	1,84	7,50	1,00	2,57	:	3,11	3,84	0,64	0,92	5,00	0,14	2,95	5,42
	IT	9,04	7,48	3,62	5,85	-	∞	5,50	6,25	:	3,65	2,61	0,55	1,71	0,46	1,25	1,52	2,73
	CY	0,57	∞	6,19	0,27	0,17	-	0/0	0/0	:	1,38	∞	0,19	0/0	0/0	∞	0,62	2,81
	LV	0,73	8,75	10,45	36,33	11,64	0/0	-	1,12	:	6,57	3,53	0,18	2,50	0/0	2,00	0,88	3,15
	LT	0,71	6,52	5,06	11,51	2,06	0,00	1,33	-	:	2,26	6,60	0,31	0,27	0/0	0,50	0,68	2,19
	LU	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	NL	1,08	1,64	1,29	1,04	0,82	2,28	0,82	0,46	:	-	1,19	0,17	0,47	0,38	0,07	0,76	1,18
	AT	0,54	2,21	3,99	2,76	1,27	7,90	0,17	0,13	:	2,10	-	0,10	0,24	0,32	0,06	0,68	1,18
	PL	44,18	10,13	5,67	23,31	12,87	14,50	3,29	31,50	:	7,84	4,79	-	5,33	∞	2,64	10,56	6,82
	PT	∞	∞	11,35	9,80	∞	0/0	∞	0/0	:	8,27	∞	∞	∞	∞	0/0	∞	∞
	SI	1,17	6,17	2,62	4,07	1,77	0,00	∞	0,00	:	1,47	1,38	0,00	1,33	-	0,50	0,50	0,32
SK	29,68	24,00	52,97	21,10	11,47	0,00	∞	∞	:	13,47	10,59	0,91	∞	1,00	-	∞	7,60	
FI	1,13	1,03	3,02	1,21	1,38	0,36	0,96	3,64	:	1,51	2,60	0,11	0,86	0,00	0,00	-	0,98	
SE	1,03	1,07	2,10	1,35	0,79	0,72	0,57	2,26	:	1,23	1,70	0,37	0,48	0,63	0,43	1,01	-	

Table 5. Emigration statistics – S/R ratios in 2003 and 2002.

2003		Receiving country																	
		CZ	DK	DE	ES	IT	CY	LV	LT	LU	NL	AT	PL	PT	SI	SK	FI	SE	
Sending country	CZ	-	0,20	0,10	0,18	:	0,41	6,00	1,18	2,00	0,45	0,26	22,61	3,00	1,29	28,10	1,21	0,35	
	DK	2,77	-	0,94	2,25	:	1,71	15,82	7,36	9,36	1,28	1,14	32,24	3,00	5,80	∞	1,09	1,00	
	DE	7,25	0,84	-	1,18	:	1,57	18,66	7,82	3,46	1,09	1,31	36,67	13,77	9,69	90,06	2,95	1,32	
	ES	0,33	0,08	0,14	-	:	0,03	0,50	0,36	3,18	0,21	0,15	1,69	0,84	2,00	8,00	0,17	0,13	
	IT	:	:	:	:	-	:	:	:	:	:	:	:	:	:	:	:	:	:
	CY	0,46	0,42	0,31	0,74	:	-	0/0	0,00	:	0,59	0,90	5,00	0,00	0,00	0/0	0,00	0,48	
	LV	0,18	0,10	0,09	0,01	:	0,08	-	0,45	:	0,26	0,15	3,75	3,36	0/0	∞	0,52	0,25	
	LT	1,96	0,23	0,35	0,33	:	0,13	1,32	-	1,00	0,55	0,34	2,05	5,00	0/0	3,00	2,55	0,82	
	LU	2,33	0,61	0,43	0,82	:	:	∞	1,00	-	0,58	0,39	3,67	52,10	1,50	∞	0,97	0,95	
	NL	0,70	0,52	0,75	0,94	:	0,57	2,63	1,03	6,00	-	0,72	8,64	2,52	5,00	5,91	1,22	0,92	
	AT	2,47	0,38	0,33	0,54	:	0,76	6,25	5,00	6,29	0,58	-	13,60	5,45	5,36	27,69	2,13	1,19	
	PL	0,03	0,07	0,14	0,04	:	0,00	0,27	0,06	1,40	0,13	0,12	-	0,14	0,00	0,28	0,12	0,10	
	PT	0,00	0,00	0,12	0,00	:	0/0	0,00	0,00	1,50	0,00	0,00	0,00	-	0,00	0,00	0,00	0,00	
	SI	0,75	0,13	0,23	0,17	:	∞	0,00	0,00	:	0,23	0,51	7,00	3,00	-	4,00	0,17	1,09	
	SK	0,02	0,00	0,02	0,02	:	0,00	0,00	0,00	1,00	0,04	0,06	0,53	0,00	0,00	-	0,08	0,11	
FI	0,62	0,94	0,35	0,99	:	1,73	0,55	0,63	28,50	0,60	0,30	3,83	1,73	∞	∞	-	1,01		
SE	0,93	0,96	0,47	0,88	:	1,17	1,45	0,66	6,00	0,78	0,50	2,37	2,97	0,56	3,29	0,98	-		
2002																			
Sending country	CZ	-	0,28	0,10	0,14	0,64	0,26	1,00	3,33	:	0,40	0,35	32,85	1,00	3,80	19,30	0,83	0,38	
	DK	2,80	-	0,93	2,38	2,67	0,65	12,40	7,82	:	1,32	1,30	21,78	3,28	∞	78,00	1,04	1,02	
	DE	9,82	0,84	-	1,21	3,21	0,65	18,13	12,12	:	1,17	1,69	33,72	16,35	7,54	114,19	3,11	1,44	
	ES	1,19	0,08	0,21	-	0,54	0,13	1,00	0,39	:	0,32	0,26	1,57	1,09	0,20	7,33	0,34	0,18	
	IT	0,11	0,13	0,28	0,17	-	0,00	0,18	0,16	:	0,27	0,38	1,83	0,59	2,18	0,80	0,66	0,37	
	CY	1,75	0,00	0,16	3,65	5,73	-	0/0	0/0	:	0,72	0,00	5,25	0/0	0/0	0,00	1,62	0,36	
	LV	1,38	0,11	0,10	0,03	0,09	0/0	-	0,89	:	0,15	0,28	5,60	0,40	0/0	0,50	1,13	0,32	
	LT	1,40	0,15	0,20	0,09	0,48	∞	0,75	-	:	0,44	0,15	3,20	3,67	0/0	2,00	1,47	0,46	
	LU	:	:	:	:	:	:	:	:	-	:	:	:	:	:	:	:	:	:
	NL	0,92	0,61	0,77	0,96	1,22	0,44	1,22	2,17	:	-	0,84	5,93	2,14	2,60	14,29	1,31	0,84	
	AT	1,86	0,45	0,25	0,36	0,79	0,13	6,00	7,71	:	0,48	-	9,86	4,24	3,13	16,66	1,48	0,85	
	PL	0,02	0,10	0,18	0,04	0,08	0,07	0,30	0,03	:	0,13	0,21	-	0,19	0,00	0,38	0,09	0,15	
	PT	0,00	0,00	0,09	0,10	0,00	0/0	0,00	0/0	:	0,12	0,00	0,00	-	0,00	0/0	0,00	0,00	
	SI	0,86	0,16	0,38	0,25	0,57	∞	0,00	∞	:	0,68	0,73	∞	0,75	-	2,00	2,00	3,14	
	SK	0,03	0,04	0,02	0,05	0,09	∞	0,00	0,00	:	0,07	0,09	1,10	0,00	1,00	-	0,00	0,13	
FI	0,88	0,97	0,33	0,83	0,72	2,75	1,04	0,27	:	0,66	0,38	9,25	1,17	∞	∞	-	1,02		
SE	0,97	0,94	0,48	0,74	1,26	1,39	1,77	0,44	:	0,81	0,59	2,71	2,08	1,60	2,33	0,99	-		

Table 6. Sources of data on international migration flows in the EU countries.

		Population registers (central or local)		Register of foreigners or residence permit register		Sample survey		Statistical forms and other types of sources	
		Nationals	Foreigners	Nationals	Foreigners	Nationals	Foreigners	Nationals	Foreigners
BE	Immigration	x	x						
	Emigration	x	x						
CZ	Immigration	x			x				
	Emigration	x			x				
DK	Immigration	x	x						
	Emigration	x	x						
DE	Immigration	x	x						
	Emigration	x	x						
EE	Immigration	[x]	[x]						
	Emigration	[x]	[x]						
EL	Immigration				[x]				
	Emigration								
ES	Immigration	x	x						
	Emigration	x	x						
FR	Immigration				x		[x]		
	Emigration								
IE	Immigration					x	x		
	Emigration					x	x		
IT	Immigration	x	x						
	Emigration	x	x						
CY	Immigration					x	x		
	Emigration					x	x		
LV	Immigration	x	x						
	Emigration	x	x						
LT	Immigration	x	x						
	Emigration	x	x						
LU	Immigration	x	x						
	Emigration	x	x						
HU	Immigration	x			x				
	Emigration	x			x				
MT	Immigration							x	x
	Emigration							x	
NL	Immigration	x	x						
	Emigration	x	x						
AT	Immigration	x	x						
	Emigration	x	x						
PL	Immigration							x	x
	Emigration							x	x
PT	Immigration				x	[x]			
	Emigration					x	x		
SI	Immigration	x			x				
	Emigration	x			x				
SK	Immigration				x			x	x
	Emigration				x			x	x
FI	Immigration	x	x						
	Emigration	x	x						
SE	Immigration	x	x						
	Emigration	x	x						
UK	Immigration					x	x		
	Emigration					x	x		

[] Information referring to data currently not disseminated, but potentially available in future.

Table 7. Duration of stay criteria in the international migration definitions in the EU countries.

		None		3 months		6 months		Other below one year		One year		Permanent		Permit expiry	
		NAT	FOR	NAT	FOR	NAT	FOR	NAT	FOR	NAT	FOR	NAT	FOR	NAT	FOR
BE	IMMI			x	x										
	EMI			x	x										p
CZ	IMMI				x ^{EEA}					x ^{non-EEA}		x			
	EMI				x							x	x		p
DK	IMMI	x			x ^{non-EEA}			x ^{EEA}							
	EMI*					x		x							
DE	IMMI	x	x												
	EMI	x	x												
EE	IMMI	[x]			x										
	EMI	[x]	[x]												
EL	IMMI											[p]			
	EMI														
ES	IMMI	x	x												
	EMI	x	x												
FR	IMMI											p ¹			
	EMI														
IE	IMMI	x	x												
	EMI	x	x												
IT	IMMI	x	x ^{EEA}					x ^{non-EEA}							
	EMI									x	x				
CY	IMMI									x	x				
	EMI									x	x				
LV	IMMI	x	x									x			
	EMI					x	x								p
LT	IMMI					x	x					x			
	EMI					x	x								p
LU	IMMI	x	x												
	EMI	x	x												
HU	IMMI			x	x ^{EEA}							x ^{non-EEA}			
	EMI			x									x		p
MT	IMMI											x	x		
	EMI											x			
NL	IMMI							x ²	x ²						
	EMI							x ³	x ³						
AT	IMMI			x	x					[x]	[x]				
	EMI			x	x					[x]	[x]				
PL	IMMI											x	x		
	EMI											x	x		
PT	IMMI														
	EMI									x	x				
SI	IMMI			x ⁴	x								x		
	EMI			x										x	p
SK	IMMI				p								x	x	
	EMI												x	x	p
FI	IMMI	x													
	EMI*									x	x				
SE	IMMI									x	x				
	EMI*									x	x				
UK	IMMI									x	x				
	EMI									x	x				

[] Information referring to the data that might be available in future

p Migration data based on issued or expired residence permits

EEA Refers to EEA citizens

non-EEA Refers to non-EEA citizens

* Registration of emigration to the Nordic countries follows the rules applied for registration of immigration in the receiving country

¹ Only foreigners with right of long-term settlement are included

² 4 out of 6 months

³ 8 out of 12 months

⁴ Refers to nationals holding permanent residence status

Table 8. Migration flows in selected countries according to various sources.

	1999	2000	2001	2002
Immigration to Hungary				
Eurostat Population Yearbook 2004	:	20 184	21 233	:
Eurostat Migration Yearbook 2002	<i>18 456</i>	:	:	:
CoE	<i>18 216</i>	20 184	22 079	17 558
DG JLS	20 151	20 184	20 308	15 675 ^(p)
SOPEMI 2004	<i>20 200</i>	<i>20 200</i>	<i>20 300</i>	<i>15 700</i>
(p) = provisional data <i>italic</i> = non-nationals only				
NSI – total (final data)	21 422	21 726	22 079	:
NSI – total (provisional data)	:	:	21 233 ^(p)	17 558 ^(p)
NSI – non-nationals (final data)	<i>20 151</i>	<i>20 184</i>	<i>20 308</i>	:
NSI – non-nationals (provisional data)	<i>18 456^(p)</i>	<i>14 484^(p)</i>	<i>19 462^(p)</i>	<i>15 675^(p)</i>
Emigration from Italy				
Eurostat Population Yearbook 2004	:	56 601	:	:
Eurostat Migration Yearbook 2002	76 500	:	:	:
CoE	:	:	:	41 756
DG JLS	56 707	76 483	66 821	49 383
SOPEMI 2004	:	:	:	:
ISTAT balance survey	76 483	66 821	67 125	49 383
ISTAT individual survey	64 873	56 601	56 077	41 756
Emigration from Lithuania				
Eurostat Population Yearbook 2004	:	21 816	7 253	:
Eurostat Migration Yearbook 2002	1 369	:	:	:
CoE	1 369	2 616	7 253	7 086
DG JLS	:	2 616	:	:
SOPEMI 2004	:	:	:	:
NSI (yearbook)	23 418	21 816	7 253	7 086
Immigration to Malta				
Eurostat Population Yearbook 2004	:	965	1 002	915
Eurostat Migration Yearbook 2002	339	:	:	:
CoE	339	450	472	535
DG JLS	708	965	1 002	:
SOPEMI 2004	:	:	:	:
<i>italic</i> = non-nationals only				
NSI website – Maltese origin	339	450	472	382
NSI website – Non-Maltese nationals	369	515	530	533
Emigration from the Netherlands				
Eurostat Population Yearbook 2004	:	78 977 ⁽¹⁾	82 566 ⁽¹⁾	96 918 ⁽¹⁾
Eurostat Migration Yearbook 2002	59 023	:	:	:
CoE (tables)	59 023	:	63 318	66 728
DG JLS	78 779	78 977	82 566	96 918
SOPEMI 2004	78 800 ⁽¹⁾	79 000 ⁽¹⁾	82 600 ⁽¹⁾	96 900 ⁽¹⁾
⁽¹⁾ Including corrections				
NSI – Emigration	59 023	61 201	63 318	66 728
NSI – Emigration including net administrative corrections	78 779	78 977	82 566	96 918
Immigration to the United Kingdom				
Eurostat Population Yearbook 2004	:	483 400	479 600	512 800
Eurostat Migration Yearbook 2002	354 077 ⁽¹⁾	:	:	:
CoE	354 077 ⁽¹⁾	364 370 ⁽¹⁾	:	:
DG JLS	453 800 ⁽²⁾	483 400 ⁽²⁾	479 600 ⁽²⁾	512 800 ⁽²⁾
SOPEMI 2004	453 800 ⁽³⁾	483 400 ⁽³⁾	479 600 ⁽³⁾	512 800 ⁽³⁾
⁽¹⁾ International Passenger Survey				
⁽²⁾ Total International Migration (data from IPS, adjusted for asylum seekers and flows from Ireland)				
⁽³⁾ Data from IPS (flows from Ireland not included), adjusted for asylum seekers and visitors switchers				
NSI website (Total International Migration: data from IPS, adjusted for asylum seekers, visitors switchers and flows from Ireland)	453 800	483 400	479 600	512 800

Table 9. Joint Migration Questionnaire 2002 and 2003: tables delivered by the NSIs.

Country	Code	Immigration by sex and country of previous residence	Immigration by sex, citizenship and age	Emigration by sex and country of next residence	Emigration by sex, citizenship and age
Belgium	be	na	03	na	03
Czech Republic	cz	02, 03	02, 03	02, 03	02, 03
Denmark	dk	02, 03	02, 03	02, 03	02, 03
Germany	de	02, 03	02, 03	02, 03	02, 03
Estonia	ee	na	na	na	na
Greece	el	na	na	na	na
Spain	es	02, 03*	02, 03	02, 03*	02, 03
France	fr	na	02f ⁽¹⁾ , 03f ⁽¹⁾	na	na
Ireland	ie	02p ⁽²⁾ , 03p ⁽²⁾	02p ⁽³⁾ , 03p ⁽³⁾	02p ⁽²⁾ , 03p ⁽²⁾	02p ⁽⁴⁾ , 03p ⁽⁴⁾
Italy	it	02	02	02	02
Cyprus	cy	02, 03	02, 03	02, 03	02, 03
Latvia	lv	02, 03	02, 03	02, 03	02, 03
Lithuania	lt	02, 03	02, 03	02, 03	02, 03
Luxemburg	lu	03*	02, 03	03*	02, 03
Hungary	hu	na	01p, 02p	na	01p, 02p
Malta	mt	02 ⁽⁵⁾	02 ⁽⁶⁾	02n ⁽⁷⁾	na
Netherlands	nl	02, 03	02, 03	02, 03	02, 03
Austria	at	-	-	-	-
Poland	pl	02, 03	na	02, 03	na
Portugal	pt	02fp, 03fp	02fp, 03fp	02 ⁽⁸⁾ , 03 ⁽⁸⁾	na
Slovenia	si	02n, 03n	02, 03	02n, 03n	02 ⁽⁹⁾ , 03 ⁽⁹⁾
Slovak Republic	sk	02, 03	02, 03	02, 03	02, 03
Finland	fi	02, 03	02, 03	02, 03	02, 03
Sweden	se	02, 03	02, 03	02, 03	02, 03
United Kingdom	uk	02, 03	02 ⁽¹⁰⁾ , 03 ⁽¹⁰⁾	02, 03	02 ⁽¹⁰⁾ , 03 ⁽¹⁰⁾

- na data not available
yy data received for the year yy
- data for 2002 and 2003 not received by Eurostat
n data for nationals only
f data for foreigners only
p provisional data
* large proportion of unknown origin/destination
(1) no disaggregation by sex and age, no data on EU-15 citizens
(2) data on flows from the UK, the EU-15 aggregate and the Unites States only
(3) data on flows of citizens of Ireland, the UK, the EU-15 aggregate and the Unites States only; data by broad age groups only
(4) no disaggregation by citizenship; broad age groups
(5) persons of Maltese origin only; flows from/to selected countries only
(6) selected countries of citizenship only
(7) emigration to the UK only
(8) no disaggregation by sex
(9) data disaggregated by age for nationals and total only
(10) no disaggregation by age.

Figure 1. Migration flows between Poland and Lithuania: r - data according to the receiving country, s – data according to the sending country.

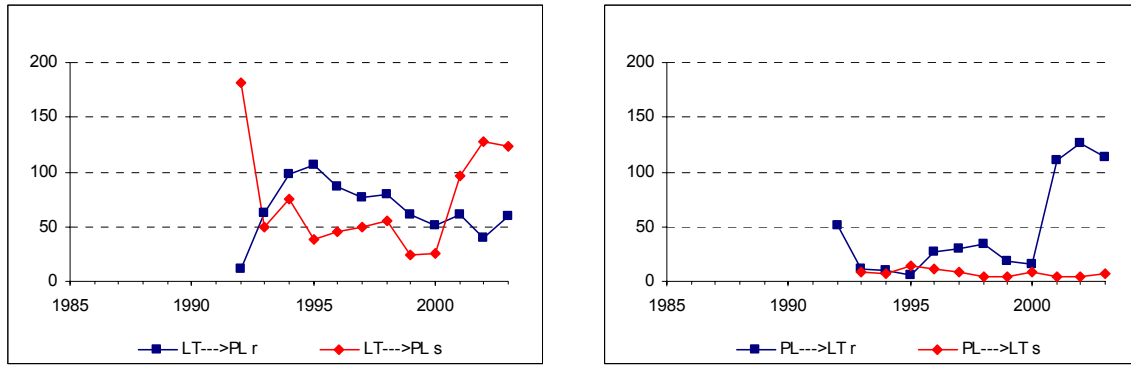


Figure 2. Migration flows between Denmark, Sweden and Finland: r - data according to the receiving country, s – data according to the sending country.

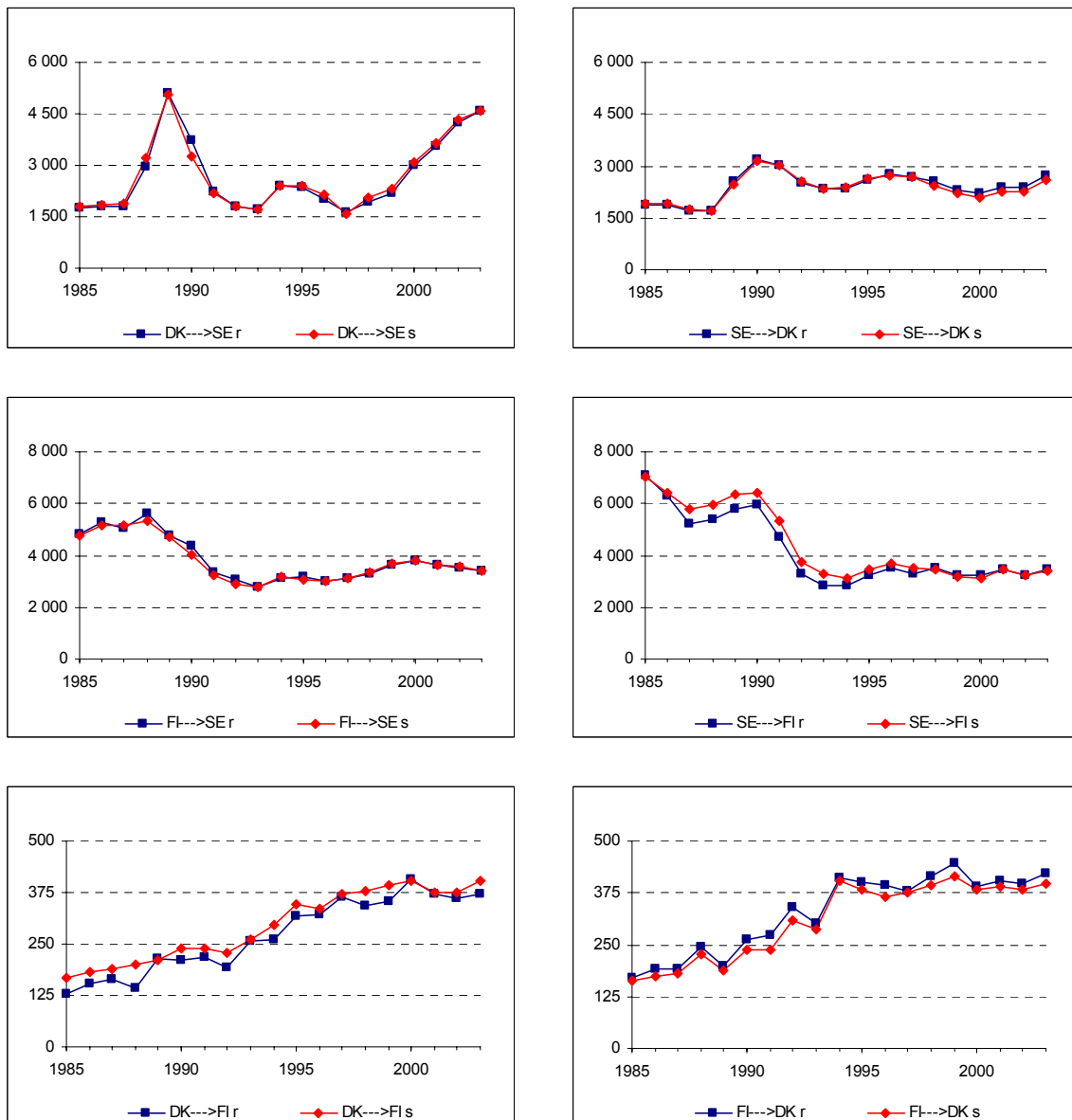


Figure 3. Migration flows between Slovakia and Poland: r - data according to the receiving country, s – data according to the sending country.

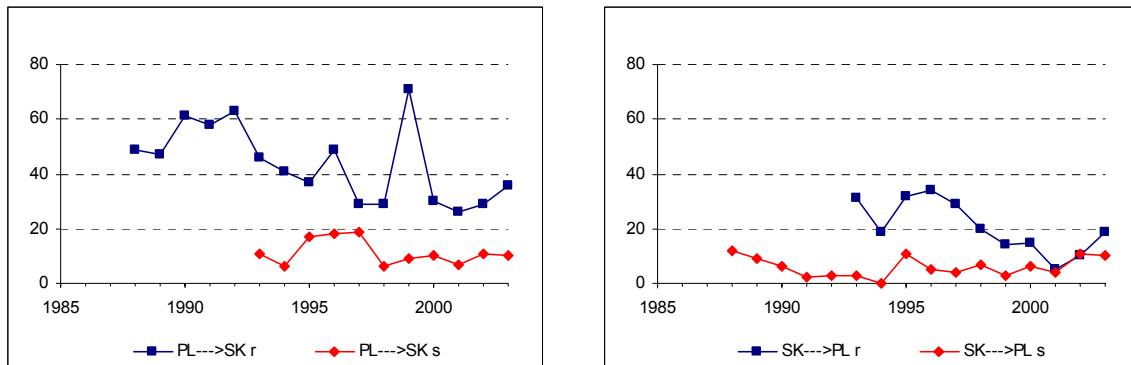


Figure 4. Migration flows between Germany and Denmark, Sweden and Finland: r - data according to the receiving country, s – data according to the sending country.

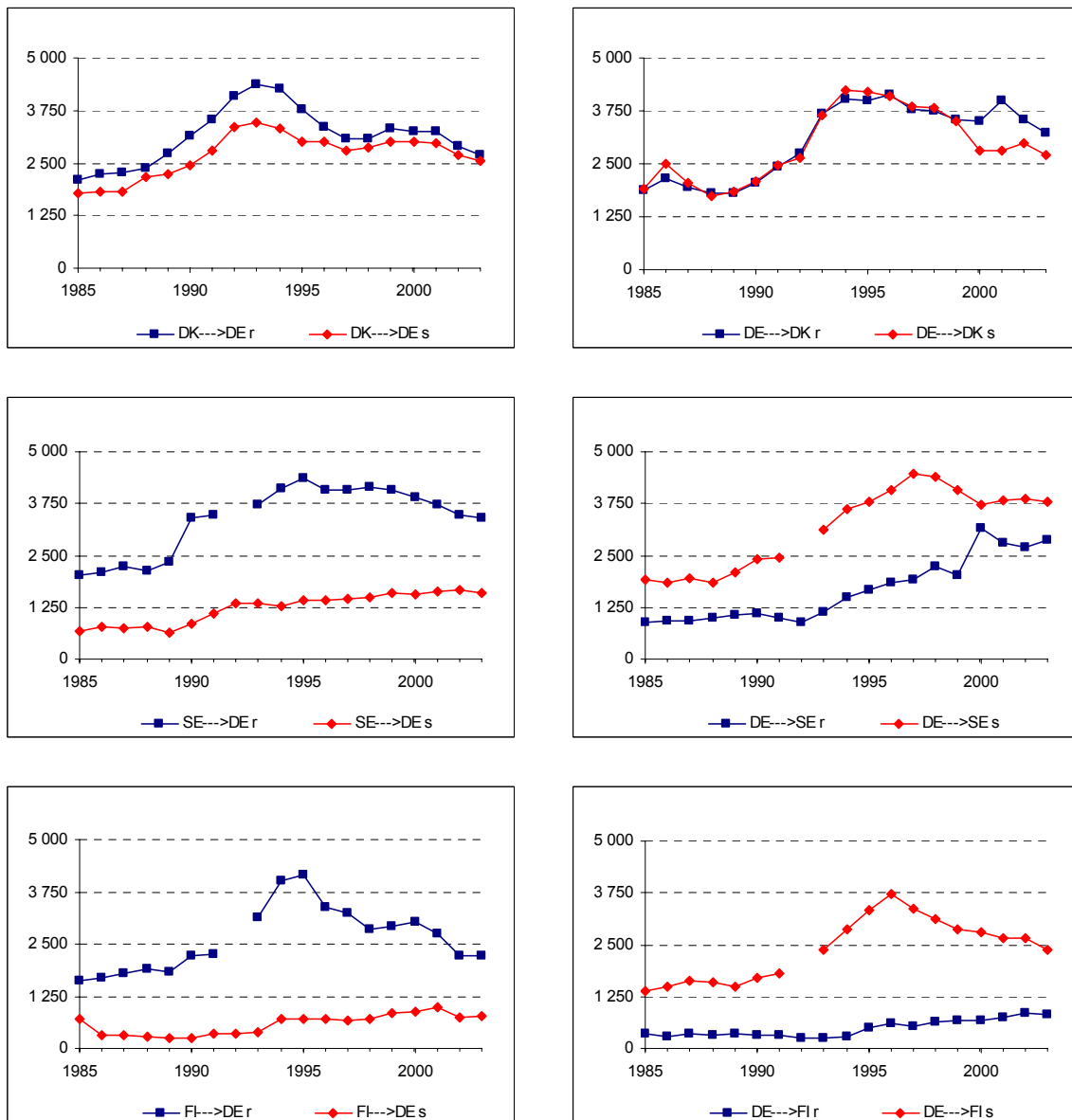


Figure 5. Migration flows between the Netherlands and Denmark, Germany, Sweden and Finland: r -data according to the receiving country, s – data according to the sending country.

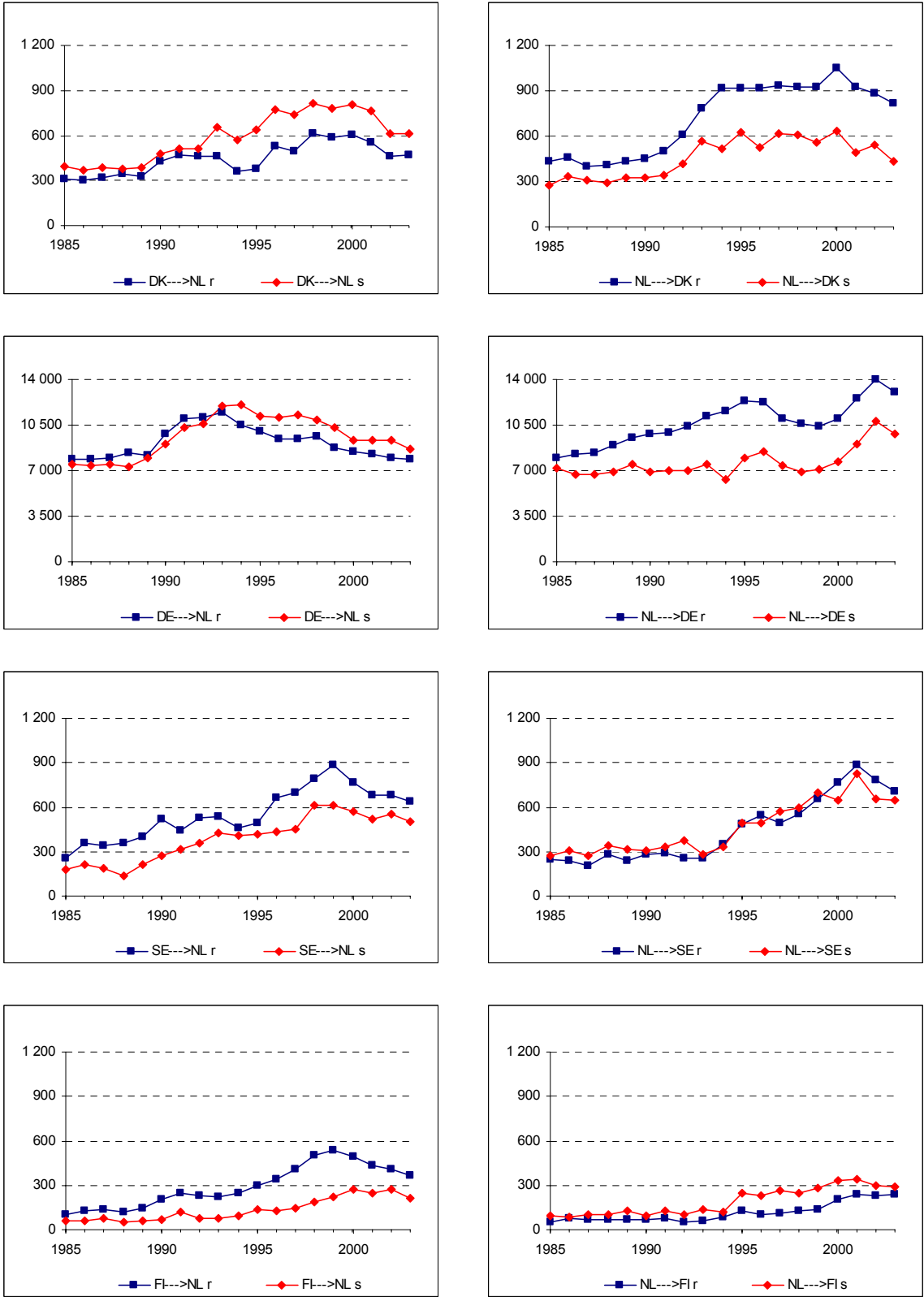


Figure 6. Migration flows between the UK and selected countries: r - data according to the receiving country, s – data according to the sending country.

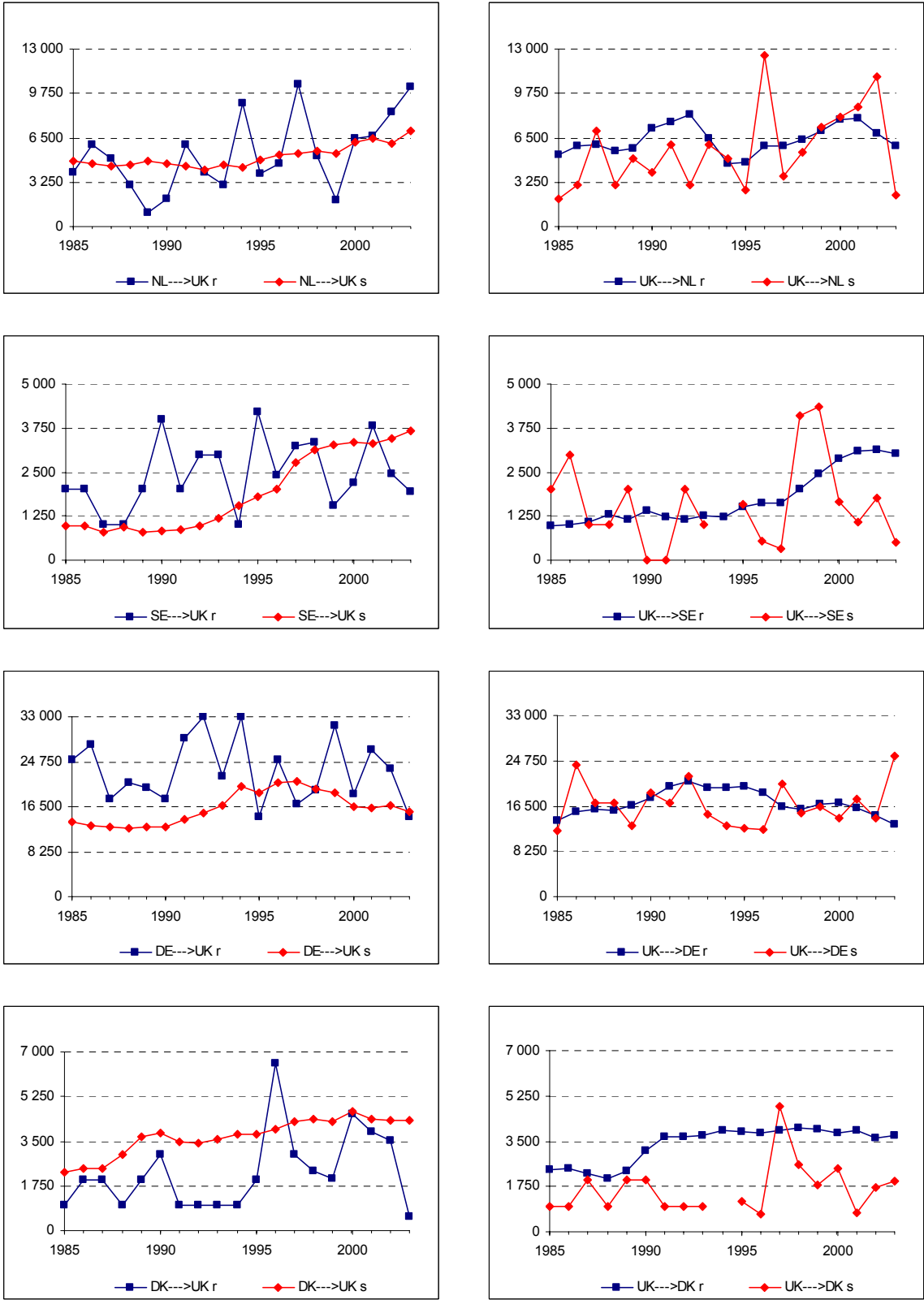


Figure 7. Migration flows between Spain and selected countries: r - data according to the receiving country, s – data according to the sending country.

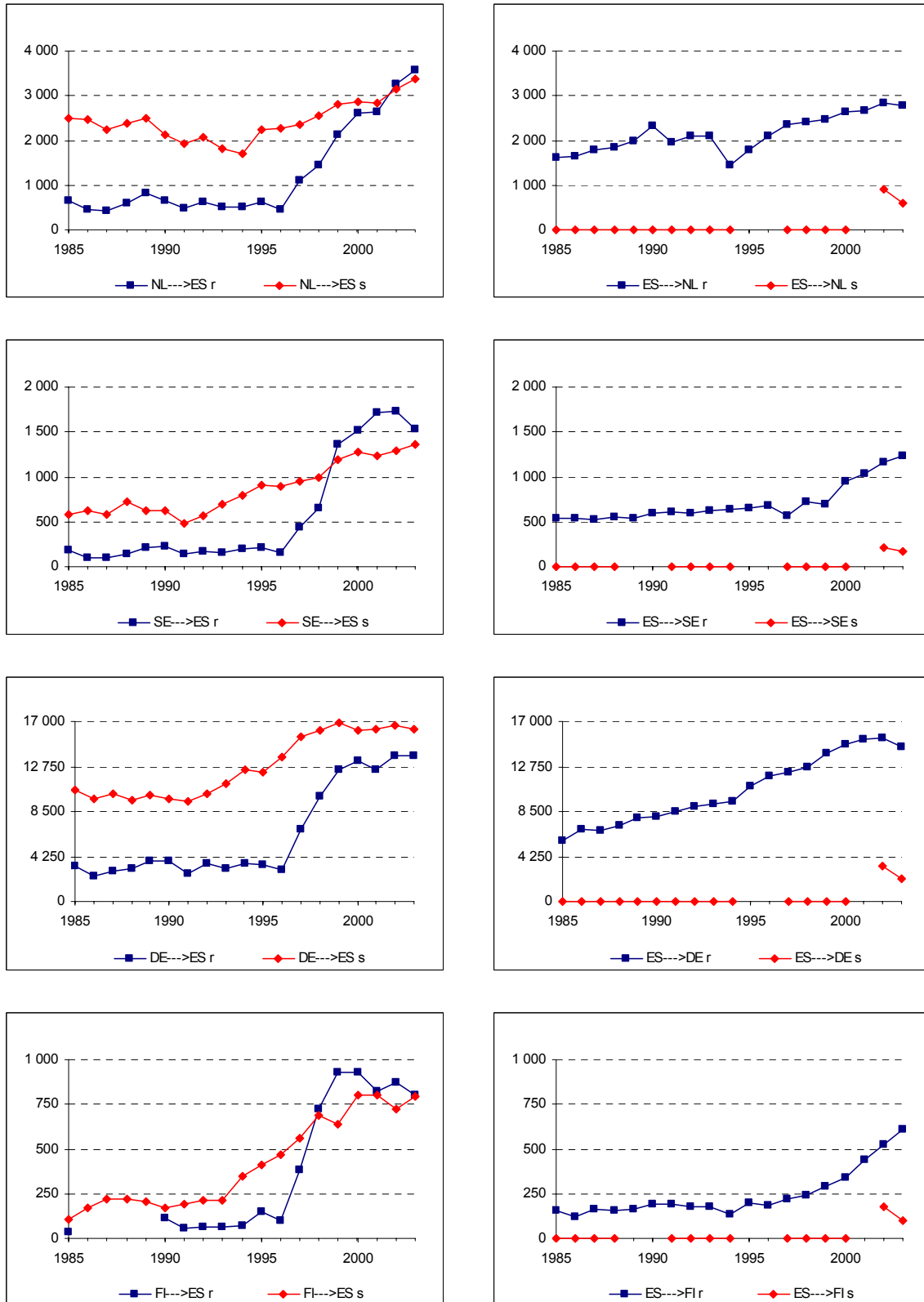


Figure 8. Migration between the Czech Republic and selected countries: r - data according to the receiving country, s – data according to the sending country.

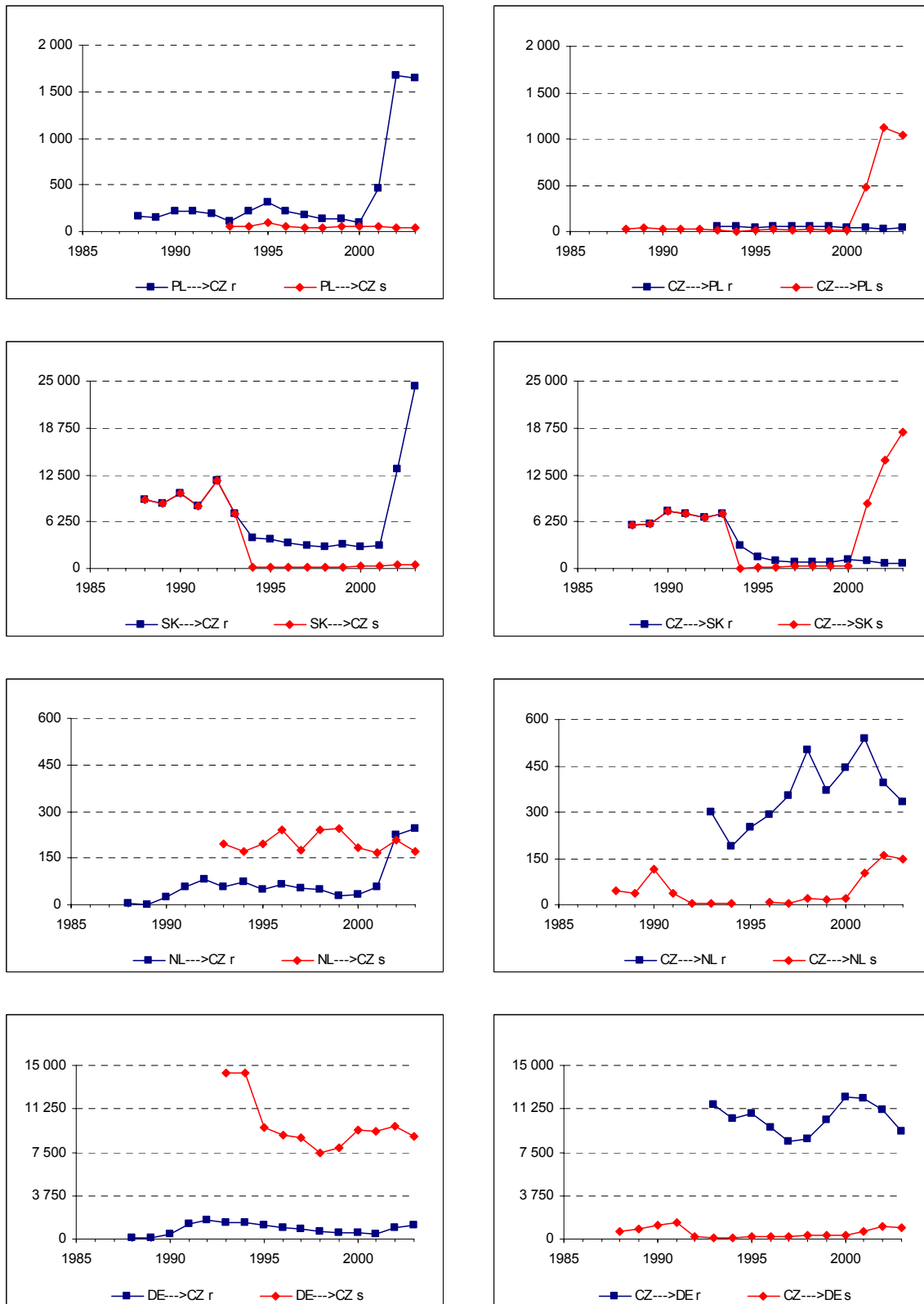


Figure 9. Migration flows between Slovakia and Germany and the Netherlands: r - data according to the receiving country, s – data according to the sending country.

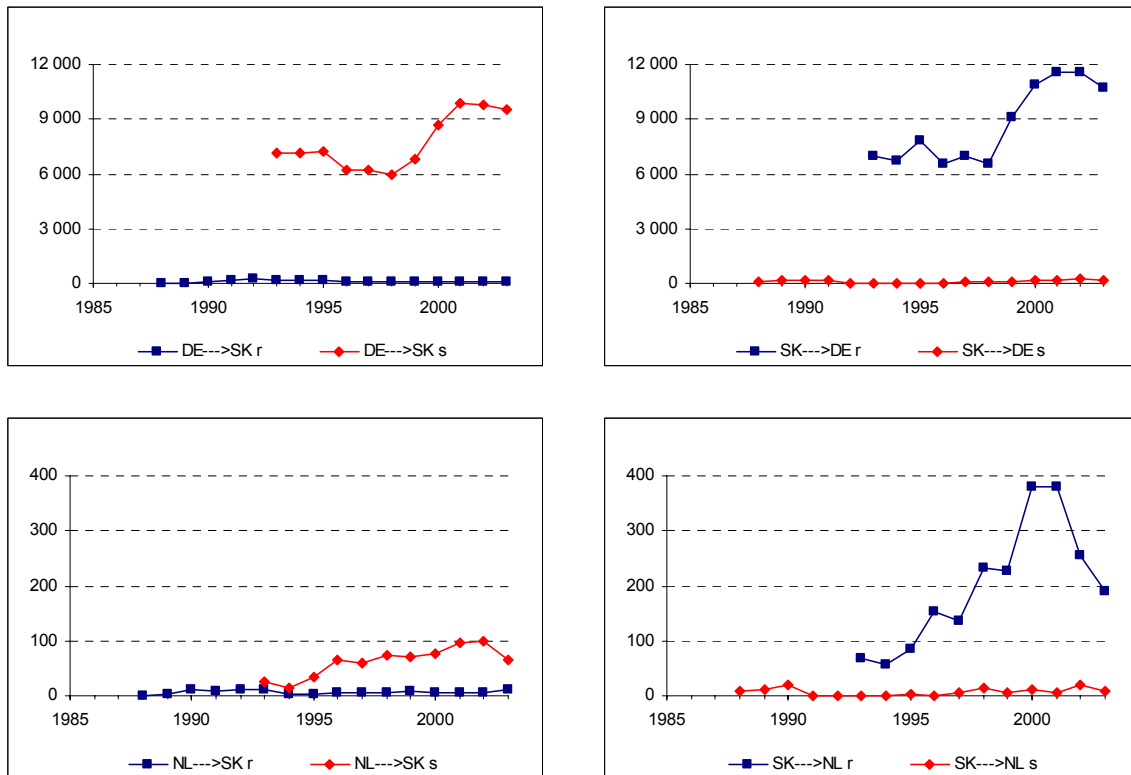
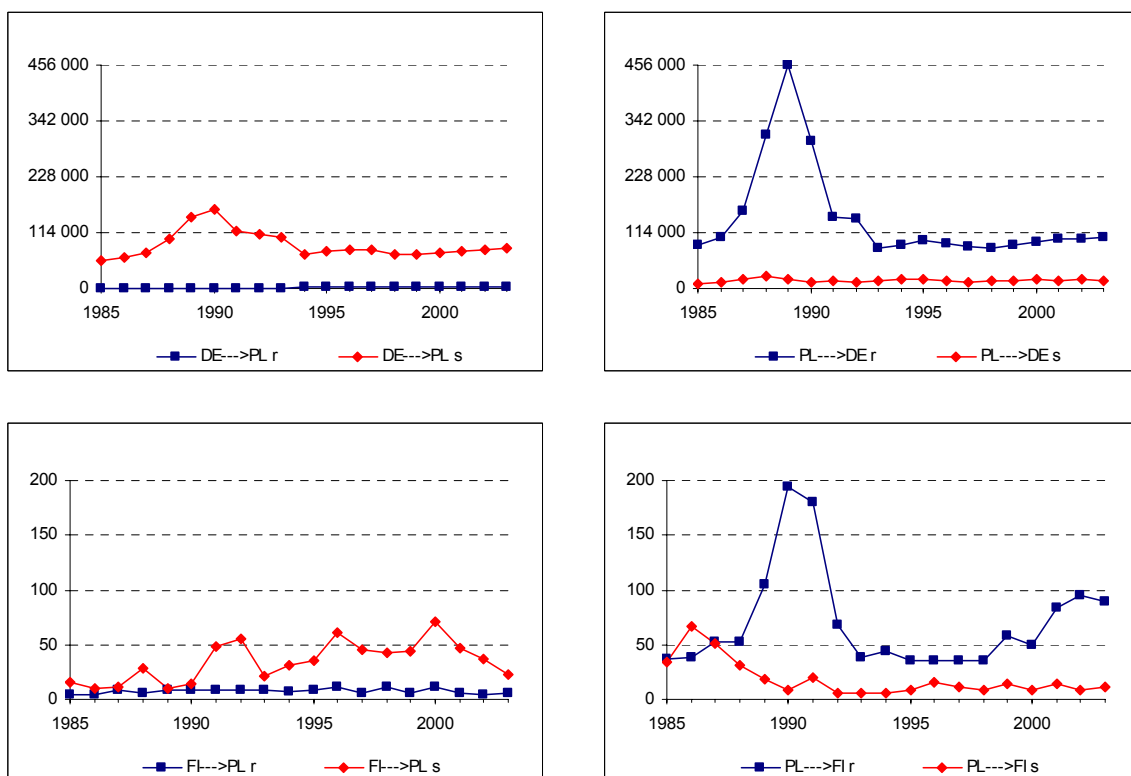


Figure 10. Migration between Poland and Germany and Finland: r - data according to the receiving country, s – data according to the sending country.



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