

# Working Paper

## **European Long-Term Migration Data: Overview and Evaluation of Existing Data Collection**

*Anne Babette Wils*

WP-93-28  
June 1993



International Institute for Applied Systems Analysis □ A-2361 Laxenburg Austria

Telephone: +43 2236 715210 □ Telex: 079137 iiasa a □ Telefax: +43 2236 71313

# **European Long-Term Migration Data: Overview and Evaluation of Existing Data Collection**

*Anne Babette Wils*

WP-93-28  
June 1993

*Working Papers* are interim reports on work of the International Institute for Applied Systems Analysis and have received only limited review. Views or opinions expressed herein do not necessarily represent those of the Institute, its National Member Organizations, or other organizations supporting the work.



International Institute for Applied Systems Analysis □ A-2361 Laxenburg Austria

Telephone: +43 2236 715210 □ Telex: 079137 iiasa a □ Telefax: +43 2236 71313

## ABSTRACT

The problems of defining long-term migration are discussed. Long-term migrants fall into different categories--e.g. legal, asylum seekers, and illegal--which are not centrally registered. Many countries define long-term migration differently. Thus, migration data collected by countries is often not comparable. An overview is given of the national definitions of long-term migration. Two international efforts are selected to collect national migration data--by the UN/ECE and by Eurostat--and their data from 1990 are evaluated.

It is often found that the measurement of any one flow by the immigrant country and by the emigrant country differs considerably. As a matter of fact, only about 20% of the flows are roughly equally measured by the sending and the receiving country. A list of countries in the order of relative overcount (having larger numbers than the country on the other end of the flow) shows that Germany, the Netherlands, Denmark and Switzerland have the largest relative overcount, while South and East Europe have the most relative undercount in the west.

The statistics indicate that there is a tendency in some West European countries to overcount immigration and undercount emigration.

## TABLE OF CONTENTS

1. Introduction	1
2. Definition of Long-Term Migrants	1
3. Registration of Migrants	3
4. Migration Matrices	8
4.1. Summary of Selected Research Efforts to Make Migration Matrices	9
4.2. UN/ECE Adjusted Migration Matrix	14
4.3. The Unadjusted Migration Matrix	14
4.4. Order of Undercount to Overcount	18
4.5. East-West and West-West Flows	19
5. Asylum Seekers	20
6. Illegal Migration	22
7. Conclusions	23
References	25
Appendix I-A	28
Appendix I-B	30

# EUROPEAN LONG-TERM MIGRATION DATA: OVERVIEW AND EVALUATION OF EXISTING DATA COLLECTION

*Anne Babette Wils*

## 1. INTRODUCTION

This paper is written in the context of a collaborative study on migration between the Population Research Center, University of Groningen, the Netherlands and IIASA. In this paper, European migration statistics are reviewed, as they are collected by international organizations and by national statistical offices.

Section 2 discusses the definition of long-term migrants and the problems connected with this definition. Section 3 examines whether all groups of long-term migrants are covered by statistical data, and how. Then the national definitions of long-term migrants and the sources of migration data are reviewed.

The fourth section of the paper reviews the data collected by various organizations in Europe. A closer look is taken at the data published by the UN/ECE, Eurostat and national statistical yearbooks, with a special section on data from Eastern Europe. The registered migration flows are organized into matrices in geographical order from north-west to south-east. The measurements of flows registered by the immigration and the emigration country are compared.

Sections 5 and 6 review selected data published on asylum seekers and undocumented migration. Some of the difficulties with registration of these two groups of migrants are discussed. The last, concluding section summarizes the evaluation of the data collected on migration in Europe.

## 2. DEFINITION OF LONG-TERM MIGRANTS

Of all population movements, migration is the most complex and the worst documented. There is good reason for this. When a person dies, or is born, there is no doubt about what has happened. When a person gets married or divorced, these are usually unequivocal events which require registration. When a person cohabitates--something like marriage without registration--the situation already becomes fuzzy. Migration is also one of these fuzzy events. A week-long visit in a country is tourism or temporary work. A ten-year stay is long-term migration. Somewhere in between, the movement turns from (work- or leisure-) tourism into long-term migration.

The most generally accepted definition of a long-term migrant is that provided by the United Nations, which is broadly:

Long-term immigrants are those who enter a country for the first time or after an absence of a year or more with the intention of staying for a year or more.

Long-term emigrants are those who leave a country and intend to stay away for a year or more, who have been in the country for more than a year. (United Nations, 1980, p. 5)

This definition is used by the UN/ECE in Geneva and Eurostat in Luxembourg, which are the main offices of central migration data collection in Europe. These offices are encouraging national statistical offices to use this definition of a long-term migrant in their published migration statistics. However, at a recent meeting of the UN/ECE in February, 1993, there was a feeling among the participants that there was a need for a new, internationally accepted definition. Until this new definition is agreed upon, the UN definition will be used throughout this paper and throughout the project, of which this paper is a part.

The reader will note that this definition can lead to problems. For example, a migrant might declare at the border, or to the police, the desire to stay for two weeks when actually, the intention is to stay a number of years illegally to work. Also, a migrant might apply for asylum, or apply for a work- and residence permit, but the authorities of the receiving country might reject the application, at which stage that person can either leave the country or remain clandestine.

A figure will serve to illustrate how different groups of migrants relate to the actual migration flow. Three main groups of migration are defined: 1) short-term migration of less than a year, 2) applications for asylum (well-documented), and 3) long-term migrants. These three groups overlap. For example, although most of the short-term migrants return home as intended or declared, a portion of them stays on in the country of immigration, and legally or illegally becomes a long-term migrant. Or, a portion of them may apply for asylum at a date subsequent to their arrival. Then, the long-term migrants and the asylum seekers overlap either because the application for asylum happens after arrival (e.g. the Chinese students abroad after the tragedy at Tienanmen Square, or others in whose country a war breaks out or a regime changes). Or the asylum seeker may find another way to obtain residency--through work, study, marriage, or acceptance in another country. Thus, even though data may be available for one or more of these main groups, it is not known to what extent they overlap.

Figure 1 shows a number of small circles which indicate subgroups. A subgroup of the long-term migrants are, for example, those who receive work permits (counted e.g. by France), or those who receive permits for permanent residence or exit (counted e.g. by Poland, USSR until 1990). There is also the small circle of long-term residents who are not counted (e.g. nationals not counted in Switzerland or persons from a particular country, e.g. Irish to the U.K.). There is also a small (or maybe not so small) circle of unregistered or clandestine entrances and exits, that is, people who are not registered anywhere, who intend to stay either as short-term or long-term migrants. These are the people walking over the green borders (e.g. between Slovenia and Austria), crossing the Mediterranean in small boats (e.g. across the Strait of Gibraltar), or simply driving across the border without control (all over Europe).

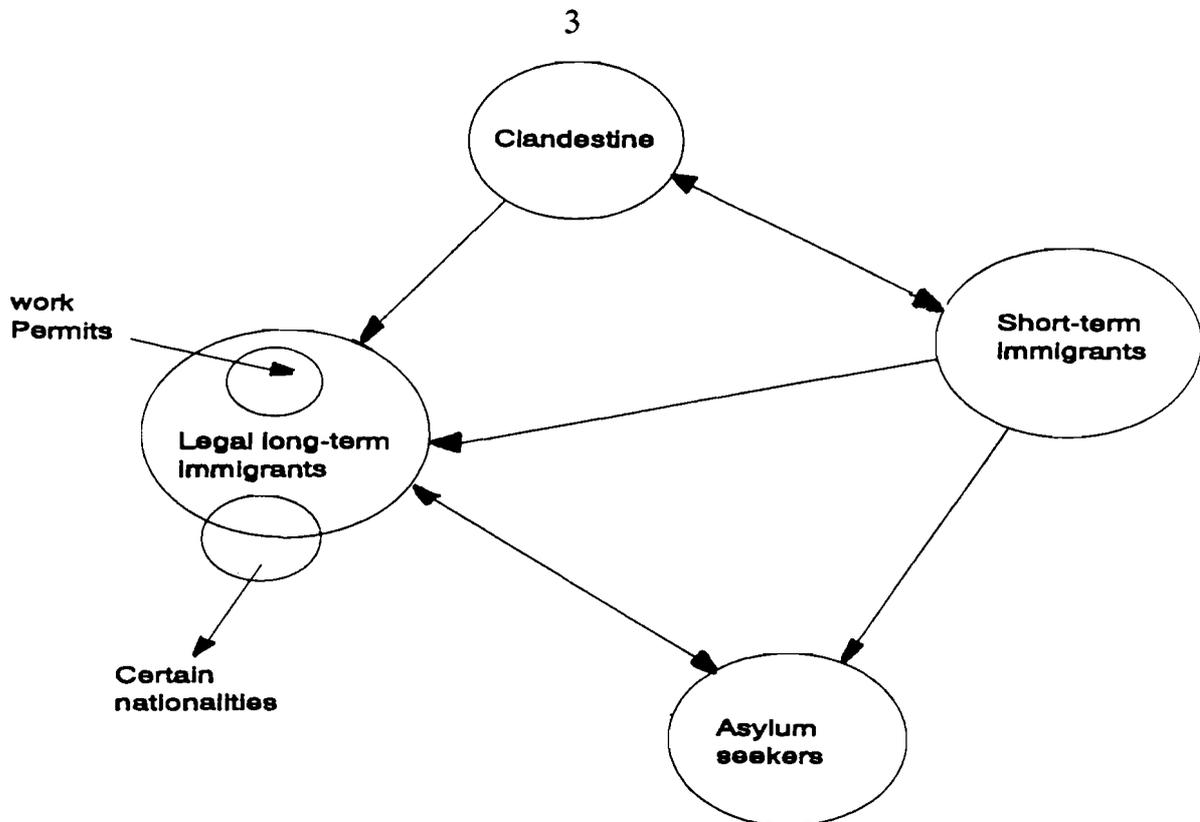


Figure 1. Schematic view of types of migration flows and the interchange.

### 3. REGISTRATION OF MIGRANTS

There is the problem of registration. Where do these immigrants, who intend to stay for a year, or the emigrants who intend to leave, register? Does the country require all those residing in the country to register with the police? And do they record the length of intended stay, or can one only find out ex-post by counting all of those who entered or exited a year or more ago and have since then remained or left? If this is not possible, does the country count the number of issued work-permits with a length of more than a year? If so, how are the other, non-working migrants counted, the children and the spouses?

One imagines that since in all countries there are elaborate systems of population registration (with the police, magistrates, social security, tax collectors, etc.), it should at least be possible to give information on how many new registrations there are, and how many have been removed. However, whether for reasons of politics or practicability, in many countries these registration data are not compiled. After all, just because there is registration--for residency, work, etc.--does not mean that the registrations are **counted**. What happens is that each country selects the migration data that it chooses to count. This choice is based on national considerations, not on UN comparability, and most countries differ in their choice from each other.

Thus, migration data includes such categories as: registered or deregistered with the housing police; obtained work permit; obtained permanent residence; declared in a survey at the border the intent to stay or leave for more than a year; asylum seekers; emigrants who receive "aid to assist them to reintegrate in their home societies"; persons who intend to stay more than 3 months only; and others. The data may exclude certain groups; for example, U.K. data excludes Irish, and many countries exclude nationals from their migration statistics (or include nationals only). A list of the available definitions used for migration data in European countries is shown in Table 1.

One interesting data collection method is applied by the United Kingdom, which, taking advantage of its island position, carries out the so-called International Passenger Survey. Annually, a random sample of about 200-250,000 passengers arriving or departing by sea or air are asked for a short two-minute interview. In the survey, passengers are asked about their nationality and "intended period of stay" or "absence", and how long they had previously been abroad or in the United Kingdom. The person can answer "less than 12 months", "more than 12 months", or "unsure" (United Nations, 1986, Chapter 10).

If each person was honest, this would not be a bad way to count migrants, as the question fits to the UN definition. If a migrant has to leave, or returns before the intended 12 months have passed, that person is still a long-term migrant because the definition refers to **intent**. The migration exchange with the rest of Europe thus obtained in 1990 was 1.6 per thousand coming in and 1.2 per thousand leaving, and almost no persons from Eastern Europe.

In comparison with other registration data in EC and EFTA countries, the results from the Passenger Survey differ substantially from those of other countries in almost all cases for immigration and emigration. The bias was not to overcount or undercount the migrants relative to other countries' registration, but more a seemingly random pattern.

A common way to collect migration data in other countries is via residence: immigrants are those who set up residence and emigrants are those who give it up. Just as people are required to register births, deaths, marriages, and divorces in the population register, so they are also requested to inform the registrars of setting up residence or leaving. This data is available in the Scandinavian countries, Belgium, Luxembourg, Germany, Spain, Italy, the Netherlands. It has the advantage that it applies to the whole population--working migrants, children of migrants, etc.--but it has a number of disadvantages. One is that people tend to be more judicious about registering when they arrive, because they know they have to deal with the authorities in this place as long as they stay. When they leave, they are off to a new life, and the old authorities have nothing more to say, and an under-registration of departures occurs. Another is that establishing or giving up residence in a place does not indicate anything about the intended length of stay. For example, in Germany, anyone who moves into an own or rented apartment is required to register within a week. But this will include thousands of people who are in or out of Germany for very short periods of time (e.g. one or two months).

Table 1. Definitions and sources of the migration statistics provided by 15 European countries (1990 borders). Sources: National statistical yearbooks and Economic Commission for Europe (1992a).

Country	Source	Criteria
Norway	Population register	Emigrant: persons who have been in Norway for six months or more and leave Norway for over 6 months.
Sweden	Population register	Long-term migratory movement defined as persons who intend to stay or leave for more than one year and who have a residence permit.
Finland	Population register	Long-term migratory movement defined as persons who intend to stay or leave for more than one year and who have a residence permit.
Denmark	Population register. Central annual compilation.	Immigrants: persons entering Denmark for 3 or more months. Emigrants: those leaving for more than 6 months.
United Kingdom	International Passenger Survey	Long term migration defined according to UN definition. Excludes movement between UK and the Irish Republic.
Ireland	Labour Force Survey	
Netherlands	Non-central population register. Central annual compilation	Immigrants: nationals who intend to stay in the Netherlands for more than 30 days and foreigners for more than 180 days. Emigrants: persons leaving Netherlands for more than 360 days.
Belgium	Population register. Central annual compilation.	Persons who establish residence.
France	Office of International Migration (OIM)	Immigration: Data recorded through medical check-up for persons over 18 years. Emigration: Persons who are recipients of aid to assist them to reintegrate in their societies.
Germany	Non centralized population register.	Those who establish or give up residence. No minimum time limit.
Switzerland	According to nationality	Foreigners who were issued permits authorizing them to establish residence in the country.
Spain	Population register	Immigration: According to UN definition. Emigration: Exclusively Spanish citizens who receive assistance from the Spanish Institute of Emigration.
Italy	Non central population register.	Change of residence reported to statistical office.
Poland		Emigration data refer to persons allowed to legally emigrate. That is, persons who apply for exit passports to the Polish authorities.
Former USSR		Data on long-term immigration and emigration refer to persons who have received authorization to leave the country or to enter it for permanent residence.

In some countries, the registrant is asked about intended period of residence or absence (e.g. Belgium, Denmark, the Netherlands). In Denmark, a person is classified as an immigrant if he/she intends to stay for more than three months; in the Netherlands if the stay is more than six months (30 days only for nationals)--emigration is only registered if intended absence is more than one year. The number of Europeans registering in the Netherlands in 1990 according to this six-month rule was 52,000; the number leaving was 32,000. It is easy to ignore these numbers because they exactly reflect the expectation that there is net immigration to the Netherlands, and 20,000 seems like a reasonable number.

Taking the Dutch method as an example, imagine, first, that every person is a good citizen and registers and deregisters. Further, establish that the group of people who stay or leave for six months or more is larger than the group of people who stay or leave for 12 months or more (the latter being a subgroup of the former). Assume that it is 20% larger, that is, if 100 people move for a period of six months or more, 80 of them will move for a year or more. The Dutch six-month immigration figure would then have to be decreased by 20% from 52,000 to 42,000. Now all of a sudden, there is only a net migration of 10,000, half of the original calculation. This is a big difference.

In Eastern Europe before 1989, the most common registration of migration was via permits of permanent exit or permanent entrance. This was bound to result in a gross underestimation as it excluded all temporary moves. A search in the national yearbooks does not show any indication of a change in this rule. Migration data continues to be published sparsely in the east.

Generally, the countries in Eastern Europe collect migration data less judiciously than their western neighbors. However, the (then still) CSSR, USSR and Poland provided data to the ECE on permanent immigration and emigration for 1990. The flows to and from these countries are shown in Table 2.

The differences in record of the east to the west flows from Poland and the CSSR were on the order of one magnitude, where the data could be compared. The underestimation was even larger for flows in the opposite direction.

The differences for USSR data are not quite as large. In the former USSR it was more difficult to leave the country except with an official passport for permanent migration than it was to depart from other East European countries after 1990. So there were fewer of these people arriving for a few months in the West.

While many East Europeans are moving to the West there is also considerable movement within Eastern Europe itself. There are records of much movement within the former Soviet territory. In each of the years from 1989-1992, about 800,000 left Russia to other former Republics, and 50,000-100,000 left the former Soviet territory altogether (Central Statistical Office of Poland, 1993). However, in terms of rates per 1000 population these flows are small.

Table 2. Migration flows to and from Poland, CSSR, and the USSR in 1990. Permanent migration only. A = registration by receiving country; B = registration by sending country. Source: Economic Commission for Europe, 1992b.

		IMMIGRATION			EMIGRATION		
		Poland	Fr. CSSR	Fr.USSR	Poland	Fr.CSSR	Fr.USSR
Norway	A	12	2	13	45	34	198
	B	219	17		57	12	17
Sweden	A	75	40	11	2114	296	866
	B	108	15	37	479	168	167
Finland	A	8	1	11	194	82	1958
	B			91	8		
Denmark	A	17	6	64	763	93	209
	B	296	43		73		165
UK	A	97	36	1000	300		200
	B	1000			87	287	
Ireland	A	1	2				
	B						
Netherlands	A	27	35	2	1339	206	395
	B	284	77	40	103	136	39
Belgium	A	20	10	3	264	75	
	B	24	40	76			
France	A	111	44	7	3029	124	213
	B				398	105	233
Germany	A	516	516	130	3006963	16948	192820
	B	162130	10095	12133	11898	1383	
Switzerland	A	6	133	1	561	521	230
	B	282	199	562	58	742	
Austria	A	58	186			334	
	B						583
Portugal	A		3				
	B					4	
Spain	A	6	15	3	696		
	B	1		2	614	6	108
Italy	A	53	51	3			
	B			279	179		818
Greece	A	35	51	8			
	B				142	228	23776
Poland	A		274	52		58	365
	B		162	28		40	596
Fr. CSSR	A	58		11	274		358
	B	40		8	162		718
Hungary	A	12	45	4		57	
	B				28		1359
Romania	A	13	162	14	4		18
	B						24
Bulgaria	A	50	150	156		19	
	B				16		446
Fr. Yugoslavia	A						
	B				49	48	157
Albania	A	1	2	3			
	B						
Fr.USSR	A	365	358	15	52	11	
	B	596	718		28	8	

Other statistics or qualitative estimations of intra-east flows are available from incidental papers. Inside Eastern Europe there are three countries which have net inflows of people from other East European countries. Poland receives people from the former Soviet Union and Romania (Korcelli, 1992; *International Migration Review*, 1992, p. 302); the former CSSR has inflows from the former Soviet Union and Poland (Federal Statistical Office of the Czech and Slovak Republic, 1993); and Hungary records large inflows from Romania and former Yugoslavia for 1990. In all reports, Bulgaria is noticeable by absence--except for a brief flow into and back from Turkey in 1990.

So, what should be done with the data provided? Either it comes from population registers with their problems, or concerns a small subgroup, or depends on being an island and peoples' honesty.

One could say that for many of the countries which collect data via the population registers, the criteria are such that they overestimate the number of legal migrants, because they include many with an intended stay shorter than one year. This disadvantage does not hamper the U.K.'s International Passenger Survey since passengers are asked specifically about moves longer than one year. All those with a legal intention of staying or leaving for more than a year have no reason not to declare this.

The migration flows as registered in Eastern Europe are bound to be a gross underestimation. And of course, by definition, all registration underestimates illegal flows. Having said this about the types of data existing, let us turn now to an overview of which data is collected.

#### 4. MIGRATION MATRICES

Many efforts are being made to collect data on the migration flows into tables or matrices. What is a matrix of migration flows?

The matrix summarizes data on migration flows. Along the top the list of receiving countries is generally given. Each column is the vector of immigrants received by the countries listed along the top. Along the left column is the list of sending countries. Each row is the vector of immigrants sent by the country listed on the left. Each cell has two numbers for the same migration flow, the top one given by the country of destination, the bottom given by the country of origin. The best-known makers of these matrices for Europe are the Statistical Division of the UN/ECE in Geneva and Michel Poulain at the University of Louvain, Belgium.

Matrices are usually compiled by listing the countries in alphabetical order. This simplifies finding the countries but loses some information. The flows occur in a geographical space, and where a country is located in that space strongly influences the flows to and from it. To capture this information in this paper, the countries are arranged geographically from north-west to south-east in all the matrices. Space is two-dimensional, whereas a listing is only one-dimensional, so a perfect geographical arrangement is not possible. South is listed before east.

#### **4.1. Summary of Selected Research Efforts to Make Migration Matrices**

Since 1975, the UN/ECE in Geneva has been collecting data for a migration matrix of Europe. The work involves collaboration with statistical offices and other official institutions of the ECE countries who are requested to provide information on immigration and emigration flows from and to all countries of the world, and on the definition of the data. These data are collected into an unadjusted migration matrix. Much of the data does not comply with the UN definition of a long-term migrant. The collaborating offices are requested to adjust the data to comply with the UN definition. This produces the adjusted migration matrix, which of course has fewer cells filled than the unadjusted one. The adjusted matrix is probably the best existing collection of comparable data on actual long-term flows. The matrices are published in papers which are available to the public. The 1990 matrices are shown in Appendix I-A and Table 4.

Eurostat in Luxembourg has also been collecting migration data since 1989 in a way similar to that of the UN/ECE, by sending questionnaires to member countries' statistical offices. The geographical scope is the twelve EC and seven EFTA countries, and concerns migration exchange with all countries of the world. The information which concerns 1990 migration flows, was so far distributed to members of the statistical offices and representatives from other organizations which attended the Eurostat meeting, November 16-17, 1992 in Luxembourg. This data, organized into a matrix, is shown in Appendix I-B.

In order to insure the availability, reliability, and comparability of these data, Eurostat asked Michel Poulain to produce an overview of the international migration data collection system in the twelve EC countries, and to provide recommendations for harmonization of the systems. The report was presented and discussed in Eurostat in November, 1990 (Poulain et al., 1990). Following the first report was a second one on the EFTA countries (Poulain and Gisser, 1993). Acting as a consultant for the Council of Europe and the Population Activity Unit at the ECE, Poulain extended this approach to all European countries. He visited most of the statistical offices and ministries responsible for migration in East European countries. The final report will be published in Geneva soon. He has also done work to correct matrices.

Recently the ECE and Eurostat have agreed to send their questionnaires together. A common working group on international migration statistics has been settled in 1992 after two meetings. A third meeting is planned for November 1993.

Members of this project also compiled a matrix of 1990 flows with available material from national statistical yearbooks and papers on migration. Two months were allotted to data collection, in order to see what was readily available to someone new in the field.



Table 3. Continued.

Austria	Portugal	Spain	Italy	Greece	Poland	Pr. Ceer	Hungary	Romania	Bulgarie	Pr. Yugoslavia	Albania	Pr. USSR	Turkey
90	66	86 475	172	81	12 219	2 17	22	4 18	16	445		13	445
130	119	220 428	253	515	75 108	40 15	84	40 14	16	158		11 37	66
37	42	114 173	88	48	8 14	0 9	31	1	2	1		11 91	6
142	114	153 767	236 528	245	17 296	6 43	36	10	22	199		64	244
	1000	2398 8000	3599 3000		87 1000	36		13		400		1000	1000
		50	203		1	2							
422	553	646 2137	800 1070	449	27 284	36 77	186	22 59	19	350	2	2 40	2447
99	484	920 1584	2096 2079	373	20 24	10 40	10	13		61		3 76	259
		4034	4813		111	44		164				7	
										12			
14697	3794	3744 9732	13198 37004	15243	584 162130	516 10095	8954	16144	1965	38854	36	130 12133	35866
1528	4817	2665 7331	6081 11956	475	6 282	133 199	219	67 74	100	5856		1 562	2773
		73	703		58	186		160				1	
18		696	448			3							
1	27		1475 3		6 1	15		12				3 2	5
527	142	454 1182	145	409	53	51		72		289		13 279	
357		15	778		35	51		58				8	
	3	696 14	179	142		274 162	28	4	8	49		52 28	8
334	4	6		228	58 40		57		19	48		11 8	
					12	45		162				4	
			647		13	162						14	54
					50	150	5459	5				156	45101
			6332										
					1	2						3	95
583		108	818	23776	365 596	358 718	1359	18 14	446	157			39
					13	2		92				15	

Table 4. UN/ECE adjusted matrix. Source: Economic Commission for Europe, 1992b.

TO:		Norway	Sweden	Finland	Denmark	UK	Ireland	Netherlands	Belgium	France	Germany	Switzerland
FROM:												
Norway	A B		8154		1580	4100		411		91		365
Sweden	A B	2823		5429	1704 1834	3700 753	30	473 0	8	328 441	759	985 289
Finland	A B		3827		156	1100		188		193		351
Denmark	A B	1291	3352 2038	125		2700 2055	64	385 296	287	248 687	1548	614 464
UK	A B	1200	1331 500	400	1511 1500			6593 3900	0	2430 18400	19800	2525 4300
Ireland	A B		89		78			536		348		291
Netherlands	A B	194	5 255	81	270 260	2500 3986	309	0 0	6314	548 2254	5932	1877 1262
Belgium	A B		115		203	5800		4301		896		738
France	A B		546		474	19200		2600				5612
Germany	A B		1139		1289	17500		8784		1414		
Switzerland	A B	269	290 726	263	231 423	1300 1976	233	788 1324	504	325 3779		
Austria	A B		135		34			329		110		2242
Portugal	A B		140		68	700		808		1149		19484
Spain	A B		545		508	12600		1851		506		7791
Italy	A B		315		281	3100		1307		1657		10095
Greece	A B		508		138	1400		785		201		423
Poland	A B		2104		542	300		1314		3029		513
CSSR	A B		293		57			192		124 40		508 81
Hungary	A B		566		80	300		311		97		403
Romania	A B		1453		242	800		777		189		294
Bulgaria	A B		553		60	0		210		104		135
Yugoslavia	A B		2190		585	700		1288		887		27850
Albania	A B		0		3	0		15		3		6
Russia	A B		857		165	200		383		213		230
Turkey	A B				1107	1400		12297		4833		6401

Table 4. Continued.

Austria	Portugal	Spain	Italy	Greece	Poland	Former CIS	Hungary	Romania	Bulgaria	Former Yugoslavia	Albania	Former USSR	Turkey
123	112	595	234	495	96	15	71	10	8	128	0	35	
83	72	443	299	128	96	14	16	5	8	96	1	42	117
9000	1100	8200	3000	400	900	0	0	0	0	400	0	600	1100
331	458	1864	884	354	132	270 260	112	17	6	230	2	31	2090
										12			111
1499	6743	7175	11674	418	191	231 423	168	48	45	5868	0	42	2646

In view of these and other efforts (International Labor Office, International Organization for Migration, European Commission, John Salt at University College London), it is likely that in the near future, it will be relatively easy to obtain a finished, published matrix on European migration flows either from Eurostat, from the UN/ECE, or from a national statistical office. These matrices will contain the officially collected flow data. They may or may not have accompanying information to which subgroups the data apply.

The matrix combining the Eurostat and UN/ECE data is shown in Table 3. One would think that since the sources and the information required by Eurostat and the UN/ECE are the same, the data would be the same. However, this is not the case. A very large portion of the overlapping data do not match. Perhaps this is due to the fact that the surveys arrive at the statistical offices at different dates and the data are adjusted in the meantime. The matrix in Table 3 uses Eurostat data for EC and EFTA countries and UN/ECE data for the others.

#### **4.2. UN/ECE Adjusted Migration Matrix**

It was mentioned above that the adjusted matrix collected by the UN/ECE is probably the best collection of comparable migration data. How good is this best collection? The adjusted matrix is shown in Table 4. There are 27 pairs which contain the flows from both the sending and the receiving country. Actually, analysis of Table 4 shows that even with the adjusted matrix, there are big differences between the numbers for a particular flow as counted by the receiving country compared to the sending country. By following Poulain (1991, p. 129) and analyzing the matrix by counting pairs with a tolerable level of difference (Poulain 10%; Wils 20%), a medium level of difference (20%-50%), and large (over 50%), the results are:

- tolerable difference less than 20%: 3 pairs
- medium difference 20%-50%: 10 pairs
- large difference over 50%: 14 pairs.

So about half of the pairs have very large differences, indicating that one of the data sources is using a rather different method or definition than the other. Only a very small portion of the pairs is well-matched. This means that even this adjusted matrix should be used with caution.

A second way to check is to compare the adjusted data with the unadjusted data. In countries which usually define migrants as those with periods of stay or absence shorter than one year, the adjusted data should be lower. In fact, the adjusted data is almost or exactly identical for all six countries. Apparently, the countries that gave adjusted data considered they had provided data complying with the UN definition in the first place.

#### **4.3. The Unadjusted Migration Matrix**

Table 3 shows the unadjusted migration matrix which includes the data provided by the UN/ECE and Eurostat.

As with the adjusted data, the pairs of data provided by the country of emigration and the country of immigration were compared. Table 5 shows the ratios for the flows where both values were available. An overcount by the immigrant country is indicated when the ratio in the cell is greater than one. A relative overcount of emigration is indicated when the ratio in the cell is less than one. One would expect that the ratios tend to be greater than one, because immigration is generally better registered than emigration.

The correspondence between pairs of numbers was:

- difference less than 20%: 38
- difference between 20%-50%: 38
- difference over 50%: 95.

This is about as good as the adjusted matrix and perhaps even slightly better because there are more well-matched pairs here than in the adjusted matrix. Again, a little over half of the pairs do not match at all.

The pairs of data for Scandinavian countries all have differences of less than 20%, some ratios greater, some smaller than one, indicating that the definitions used in these countries are the same. These countries have an agreement to notify each other in the case of a migration move (Statistics Sweden, 1993). The Dutch emigration data to Sweden and Norway fit very well (remember that the Dutch apply the one-year rule to emigration but a one-month or six-month rule to immigration).

The pairs of "bad fits" are concentrated in the block of immigration to middle-west Europe, UK "through" Switzerland and emigration from the Scandinavian countries.

In this block, the ratios are up to over 8. They are almost all much greater than one--many more immigrants registered in the middle countries than emigrants registered in the Scandinavian countries. The immigrant countries, except for the U.K. with its Passenger Survey, all define a larger immigrant group than those who intend to stay for one year--e.g. all those who establish residence regardless of period, or those who establish residence for one, three, or more than six months (see Table 1 above). The emigrant countries--Scandinavia--probably do as they do among one another and register one-year emigrants.

A second "bad block" concerns emigration from Spain and Portugal. The ratios range from 0.24 to 770. The Spanish emigration data concern only a subgroup of total emigrants--those who receive help from the State. Spain's immigration data, which it says corresponds to the UN definition, fits much better to other countries' data.

The ratios for Italian immigration and emigration indicate that this data is about as good or as bad as the rest. Italy used to be notorious for undercount, but the statistics seem to have improved.

Table 5. Ratios of immigration and emigration figures of data in the unadjusted migration matrix.

TO: FROM:	Norway	Sweden	Finland	Denmark	UK	Ireland	Netherlands	Belgium	France	Germany	Switzerland
Norway		1.13	0.92	1.01	2.02		1.05	0.87	0.16	2.48	1.69
Sweden	1.01		0.93	1.01	4.78		1.9	1.14	0.69	3.98	3.31
Finland	1.06	1.09		1.11			4.28	2.71	1.91	8.13	4.68
Denmark	0.96	1.14			0.78		0.89	7.55	0.19	1.29	0.83
UK	1.25	2.81	0.78	1.57			1.79	0.51	0.15	0.95	0.7
Ireland											
Netherlands	1.13	0.92	0.71	1.37	0.43			0.84	0.22	1.42	1.37
Belgium	0.82	0.99	0.59	2.31	3.38		1.4		0.09	1.42	1.32
France											
Germany	0.59	0.5	0.2	0.99	1.4		1.08	0.84	0.1		1.3
Switzerland	0.5	0.4	0.27	1.07	0.43		0.73	0.88	0.08	1.09	8.09
Austria											
Portugal					500		443	769.5	7.51	520.33	
Spain	1.8				136.84		38.7	359.5	0.24	212.18	0.92
Italy				2.35	0.84		1.8	0.94	0.35	2.52	1.19
Greece											
Poland	7.98	4.41	24.25	10.44	3.45		13		7.61	25.27	9.67
Fr. Csr	2.83	1.76					1.51		1.18	12.25	0.7
Hungary								2.54			
Romania									0.42		
Bulgaria											
Fr. Yugoslavia											
Albania											
Fr. USSR	11.65	5.19		1.3			10.13		0.91		

Table 5. Continued.

Austria	Portugal	Spain	Italy	Greece	Poland	Fr.Csr	Hungary	Romania	Bulgaria	Fr. Yugoslavia	Albania	Fr. USSR
		0.16			0.05	0.12		0.22				
		0.35			0.69	2.67		2.86				0.3
		0.66			0.57							0.12
		0.2	0.45		0.06	0.14						
		0.3	1.2		0.1							
		0.3	0.75		0.1	0.47		0.37				0.05
		0.58	1.01		0.83	0.25						0.04
		0.39	0.36			0.05						0.01
		0.36	0.51		0.02	0.67		0.91				
			491.67		6							1.5
		0.38										0.05
		49.71				1.69						1.86
					1.45							1.38
					0.61	0.5		1.29				

#### 4.4. Order of Undercount to Overcount

Table 5 can be used to rank the countries from those which give the relatively largest migration numbers to those that provide the relatively smallest numbers. A relative overcount of immigration is indicated when the number in the cell is greater than one. A relative overcount of emigration is when the number in the cell is less than one. Table 6 shows the percentage of filled cells which were relatively overcounted for immigration and emigration, and lists the countries in the order from those with the most overcount to those with the least.

Table 6. Countries listed in the order of those with the most relative overcount to those with the least relative overcount for immigration, emigration, and all flows together.

Country	Immigration ratios overcount	Emigration ratios overcount	Total overcount
Germany	.92	.77	.85
Denmark	.91	.77	.83
Netherlands	.86	.73	.79
Switzerland	.69	.80	.75
United Kingdom	.64	.58	.61
Norway	.67	.54	.60
Belgium	.50	.57	.54
Romania	1.00	.40	.50
Sweden	.64	.36	.48
Italy	.43	.50	.47
USSR	.33	.37	.35
France	.75	-	.75
Finland	.11	.27	.20
CSSR	.22	.12	.18
Spain	.09	.20	.14
Poland	.18	.00	.09
Portugal	-	.00	.00

The countries which define long-term migrants as those who establish or give up residence for periods shorter than a year--Germany, the Netherlands, Switzerland, and Belgium--are at the top with regards to relative overcount. Germany, the country which

is most in the news for its large immigration flows, heads the list for notorious overcounting relative to low counting countries. In these countries, estimations of actual one-year flows will have to deflate significantly the official statistics.

The South and East European countries are all in the lower half of the table, where there is relative undercounting. This conforms with the definitions of migrants in these countries which often include only a subgroup of the long-term migrants according to the UN definition--see Section 3.

The Scandinavian countries are spread all over the table, although they have similar registration methods and coordinate their migration data. Denmark tends to overcount; Finland undercounts relative to other countries.

#### **4.5. East-West and West-West Flows**

Given these tendencies to over- and undercount, what do the data provided say about west-west and east-west flows? Table 7 shows total immigration, emigration, net migration and the ratios of immigration to emigration for west-west and east-west flows separately. The numbers apply only to intra-European migration.

The east-west flows show a large net migration to the west. This is not surprising for two reasons: in 1990 there were as yet, very few East Europeans to "flow back" to the east (those who had arrived during the Cold War years did not all jump at the opportunity to "return"), and the net-flow is expected to be and to remain to the west.

Surprising is the extreme difference in the ratios of inflow/outflow. In Sweden, Finland, and Belgium, well over ten times as many people were registered coming in as leaving. Denmark, the Netherlands, Belgium and Germany count "only" around 3-4 times as many coming from the east as moving there.

As expected, the registered west-west flows are much more balanced than east-west. They are also much larger, which in 1990 may have been more true than it is today. Note that many countries register a net inflow. Generally, countries have a tendency to underregister departures, judging from the west-west flows. This bias is 20-50%.

Table 7. East-west and west-west migration flows in 1990 supplied by Eurostat. Numbers for Italy apply to migration to and from the EC only.

Country	Immigration	Emigration	Net-migration	Ratio: Immigration /Emigration
<b>EAST-WEST FLOWS 1990</b>				
Sweden	8069	432	7637	18.18
Finland	2491	149	2342	16.72
Denmark	2168	670	1498	3.23
Netherlands	4661	1017	3664	4.58
Belgium	1030	224	806	4.60
Germany	625776	250311	375465	2.50
<b>WEST-WEST FLOWS 1990</b>				
Norway	11293	15801	-4508	.71
Sweden	22491	19838	2653	1.13
Finland	7935	5570	2365	1.42
Denmark	15609	17172	-1563	.91
UK	76000	63900	12100	1.20
Netherlands	34393	28440	5953	1.21
Belgium	31436	19027	12409	1.65
Germany	172980	139088	33892	1.24
Spain	16308	11243	5065	1.45
Italy	34430	39369	-4939	.87

## 5. ASYLUM SEEKERS

The intergovernmental consultations in Geneva and the UNHCR have been collecting information about asylum seekers for many years. However, the national offices also collect and publish data on applications for asylum. Table 8 shows the numbers of applications for asylum in selected European countries from 1980-1990.

The asylum seekers are, as a rule, registered separately from other migrants. Their arrival is well documented, for a simple reason: to be an asylum seeker one must declare oneself as such to the authorities.

Table 8. Applications (in thousands) for asylum in selected European countries 1980-1990. Source: UNHCR in SOPEMI, 1992.

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Austria	9.3	34.6	6.3	5.9	7.2	6.7	8.6	11.4	15.8	21.9	22.8	27.3
Belgium	2.7	2.4	3.1	2.9	3.7	5.3	7.6	6.0	4.5	8.1	13.0	15.2
Denmark	0.2	0.3	0.3	0.3	4.3	8.7	9.3	2.7	4.7	4.6	5.3	4.6
Finland	-	-	-	-	-	-	0.1	0.1	0.1	0.2	2.5	2.1
France	18.8	19.8	22.5	22.3	21.6	28.8	26.2	27.6	34.3	61.4	54.7	50.0
Germany	107.8	49.4	37.2	19.7	35.3	73.8	99.7	57.4	103.1	121.3	193.1	256.1
Greece	-	-	-	0.5	0.8	1.4	4.3	6.3	9.3	6.5	4.1	-
Italy	-	-	-	3.1	4.6	5.4	6.5	11.0	1.4	2.2	4.7	27.0
Netherlands	1.3	0.8	1.2	2.0	2.6	5.6	5.9	13.5	7.5	13.9	21.2	21.6
Norway	0.1	0.1	0.1	0.2	0.3	0.8	2.7	8.6	6.6	4.4	4.0	3.0
Portugal	1.6	0.6	0.4	0.6	0.2	0.1	0.1	0.2	0.3	0.1	0.1	-
Spain	-	-	-	1.4	1.1	2.3	2.8	3.7	4.5	4.0	8.6	8.0
Sweden	-	-	-	4.0	12.0	14.5	14.6	18.1	19.6	30.0	29.4	26.5
Switzerland	6.1	5.2	7.1	7.9	7.4	9.7	8.5	10.9	16.7	24.4	35.8	41.6
United Kingdom	9.9	2.9	4.2	4.3	3.9	5.4	4.8	5.2	5.7	16.5	30.0	57.7
Total	158	116	82	75	105	169	202	183	234	320	429	541

How many actually remain is less well documented. In most countries in Western Europe, the procedure to accept or reject the application takes a long time, so the people who are accepted in any one year are those who have arrived some time before. Moreover, even if an applicant is rejected, many countries allow him or her to stay on humanitarian grounds, or the applicant stays in the country illegally. It is also possible that a certain number of applications for asylum are retracted before being handled because the applicant has found another way to remain in the country (work, marriage, acceptance elsewhere). It is not completely clear whether accepted asylum seekers are then registered as immigrants in the year of acceptance or not.

In general, there are two opposing trends: the number of applications for asylum is increasing, and the number of relative acceptances is decreasing.

Taking the UN definition at face value, asylum seekers would have to be defined as long-term migrants at the moment of arrival because they intend to stay in the country of asylum for more than one year. In fact, even if the application is turned down, many of the asylum seekers have been here for well over a year by the time their applications are reviewed.

The departure of asylum seekers is much less documented than the arrival. Some of them are flown back to their country of origin, but many are also simply asked to leave, and not checked if they actually do or not.

## 6. ILLEGAL MIGRATION

By its nature, undocumented migration is badly documented. But, though the extent is unknown, it is all the more discussed, informally, and at a high political level.

Undocumented migration is a subject that lends itself more to qualitative research than statistical. In *Les Migrations*, a dossier assembled by World Media (1991), there were many articles on undocumented migration to Europe. There were case stories, typical of the present undocumented migration flows: a Moroccan to Spain--typical of the relatively new attraction of countries in Southern Europe for Maghreb and black African migration; a family from Cape Verde which moves to join relatives in France (Chichizola, 1991)--the migration from sub-Saharan Africa to countries which actually have restrictive migration policies; an Albanian fleeing across the green border to Greece to join his uncle there and work illegally--the illegal east-west flow.

One thing is evident: the "typical" undocumented migrants in these cases all arrive with the address of relatives or friends in their pocket (migration chains).

A selection of estimations of illegal migrants to EC countries shows that the numbers of illegal migrants are suspected to be large:

Germany	According to the Polish Ministry of Labor, 600,000 to 1 million Poles work illegally in Germany (Blascke, 1991);
---------	--

Belgium	Estimated 40,000 illegal Polish workers in 1991 (Vandermeulebroucke, 1991);
Italy	1 million illegal migrants, 40% of total foreign population (Venturini, 1991);
Spain	600,000 illegal migrants, 40% of total foreign population (Venturini, 1991) of whom 72,000-170,000 are Moroccans;
Portugal	150,000 illegal migrants, 40% of total foreign population (Venturini, 1991);
Greece	300,000 illegal Albanians (informal Greek information);
All Western Europe	net flow of 100,000-200,000 illegal East Europeans in 1990 (Widgren, as quoted in <i>The Economist</i> , 1992).

In most countries with high suspected stocks of illegal migrants, there have been regularization drives. The numbers of people who have turned up to be regularized are always far less than the suspected number of illegal migrants. Venturini (1991) ventures two reasons for this. One is that through overestimation of the immigrants and underestimation of the departures, the actual stock is smaller than believed. The other reason is that illegal migrants with a job in the secondary economy prefer to hold on to this "sure" job rather than join the group of legally unemployed.

## 7. CONCLUSIONS

This paper has discussed the various sources of migrant registration and counting in Europe.

The **registered flows** of legal migrants, which were discussed using the example of the data collection work done at the ECE and Eurostat, are not uniformly registered throughout Europe. There are many different definitions of who is a long-term immigrant or emigrant, and there are various sources where the data are collected. This leads to an obvious overestimation of migrants in some cases, like Germany, and an obvious underestimation in other cases, like Eastern European countries. Even when countries adjust their data to conform more closely with the UN definition of a long-term migrant, there are still differences in the size of flows measured by the receiving and by the sending country.

An attempt was made to identify which countries' data is probably overestimated, which is reasonable, and which is underestimated. It was found that Germany, the Netherlands, Denmark and Switzerland have the most relative overcount of the West European countries providing data. These countries also define migration streams which one would expect to be larger than the stream of one-year-or-more long-term migrants. They use definitions such as established residence (regardless of duration of stay), and intended to stay or leave for three or six months or more. The three Scandinavian countries used the one-year UN definition of a long-term migrant and harmonize their migration flow data among each other via a special agreement. The Scandinavian data could probably be used as it is published. The countries with the most relative undercount were in Southern and Eastern Europe.

Thus, for anyone studying long-term migration flows according to the UN definition, the German, Dutch, Danish, and Swiss statisticians would have to be questioned about how much smaller the one-year migration flows are than the registered flows.

The inflow of **asylum seekers** is well-registered throughout Europe as, by definition, one can only become an applicant for asylum by registering with the authorities. What is not very well documented, or published, is the number of acceptances, the rate of rejection, and what the year of application (immigration) was for acceptances. It is also not clear to what extent accepted asylum seekers are subsequently registered as regular immigrants. And how many of those rejected actually leave the country.

The process of handling the applications for asylum takes over a year in most European countries, so, asylum seekers are mostly long-term migrants according to the one-year definition. Thus, one could use the applications for asylum as de facto long-term immigration flows in the year of application. The number of rejections is the de facto emigration--except for illegal extension of the sojourn.

The third large group of long-term migrants is the **illegal migrants**. It is suspected that this flow is large, perhaps as large or larger in some cases than the legal flow. The undocumented flows rely on a base of friends and relatives who are already established in the country of illegal immigration. By nature, this is the worst documented group. However, it is probably true that there is a tendency to focus attention on the arrival of illegal migrants and to ignore their departure.

In view of the above there is probably a tendency to **overestimate immigration and to underestimate emigration**. The overestimation of immigration comes from the fact that the three groups of migration overlap, but that they are each estimated and discussed separately. A second reason for overcounting is that immigrants are often defined according to shorter periods of stay than emigrants for leaving. The underestimation of emigration comes from the facts that a) departing migrants have lower motivation to register their move, and many appear not to deregister; b) the rejections of applications for asylum are less publicized than the arrivals; and c) illegal immigrants are likely to be noticed, whereas emigrants disappearing will simply be forgotten.

In studies which attempt to estimate the **total** flows of migrants in any given period or year, the different groups of migrants and their overlap should be explicitly discussed, and calculations made to help correct the underestimation of departures.

## REFERENCES

- Blascke, Jochen. 1991. D'est en ouest mais d'Allemagne en Allemagne. In *Les Migrations* (June 1991). Brussels: World Media.
- Central Statistical Office of Poland. 1993. *The Dilemma of International Migration Statistics in Poland*. Working Paper No. 5, submitted to the Economic Commission for Europe for Joint ECE/Eurostat Work Session on Migration Statistics, Geneva, 22-24 February, 1993.
- Chichizola, Jean. 1991. Du Cap-Vert en France: le Chemin de Croix d'un Clandestin. In *Les Migrations* (June 1991). Brussels: World Media.
- Economic Commission for Europe. 1992a. *International Migration Flows Among ECE Countries, 1987, 1988, and 1989*. Note by the Secretariat, CES/710. Paper to 40th Plenary Session, ECE, Geneva, 15-19 June, 1992.
- Economic Commission for Europe. 1992b. *International Migration Flows Among ECE Countries, 1990*. Note by the Secretariat, CES/728. Paper to 40th Plenary Session, ECE, Geneva, 15-19 June, 1992.
- Eurostat. 1993. "Immigration by country of previous residence" and "Emigration by country of next residence." Unpublished data sheets.
- Federal Statistical Office of the Czech and Slovak Republic. 1993. *Some Problems of Population Migration in the Czech and Slovak Federal Republic*. Working Paper No. 4, submitted to the Economic Commission for Europe for Joint ECE/Eurostat Work Session on Migration Statistics, Geneva, 22-24 February, 1993.
- International Migration Review*. 1992. Volume 26, Summer. New York: Center for Migration Studies.
- Korcelli, Piotr. 1992. Polish Emigration after 1945. Draft paper for publication in: *European Migration Since 1945*, edited by Heinz Faßmann and Rainer Münz.
- Poulain, Michel. 1991. Un Projet d'Harmonisation des Statistiques de Migration Internationales au Sein de la Communauté Européenne. In *Revue Européenne des Migrations Internationales* 7(2).
- Poulain, Michel, Marc Debuissou, and Thierry Eggerickx. 1990. Proposals for the Harmonization of European Community Statistics on International Migration. Manuscript. Louvain, Belgium: Catholic University of Louvain, Institute of Demography.
- Poulain, Michel, and Richard Gisser. 1993. *Migration Statistics for the EFTA Countries*. Document DG 34/E. Luxembourg: Eurostat.

- SOPEMI. 1992. *Trends in International Migration Continuous Reporting System on Migration*. 19th report. Paris: OECD.
- Statistics Sweden. 1993. *Different Migration Statistics and Their Impact on Population Statistics in Denmark and Sweden*. Working Paper No. 2, submitted to the Economic Commission for Europe for Joint ECE/Eurostat Work Session on Migration Statistics, Geneva, 22-24 February, 1993.
- The Economist*, September 19, 1992, "Keep Out", pp. 34-35.
- United Nations. 1980. *Recommendations on Statistics of International Migration*. Statistical Paper, Series M, No. 58. New York: UN.
- United Nations. 1986. *National Data Sources and Programmes for Implementing the United Nations Recommendations on Statistics of International Migration*. Series F, No. 37. New York: UN.
- Vandermeulebroucke, Martine. 1991. La Belgique, de l'emigration du XIXe Siècle à l'intégration. In *Les Migrations* (June 1991). Brussels: World Media.
- Venturini, Alessandra. 1991. La Main-d'oeuvre Clandestine Favorise le Travail en Noir. In *Les Migrations* (June 1991). Brussels: World Media.
- World Media. 1991. *Les Migrations*. Dossier (June 1991). Brussels.

## Appendix I-A. Long term migration among member countries of the ECE, 1990.

FROM:	TO:	Norway	Sweden	Finland	Denmark	UK	Ireland	Netherlands	Belgium	France	Germany	Switzerland	Austria
Norway	A		8620	405	1580	4100		441		91	1237	365	
	B		7631	428	2756	1980	25	420	198	561	687	231	98
Sweden	A	5053		6341	1706	3700		520		328	2719	985	
	B	5016		6414	3142	837	18		821	474	834	318	138
Finland	A	202	4368		156	1100		201		193	1702	351	
	B	203	4059		240	167	15		59	104	279	85	
Denmark	A	2356	3719	218		2700		425		248	2405	614	
	B	1291	2038	125		2055	64	296	287	687	1535	464	83
UK	A	1250	1404	325	1511			7176		2430	13580	985	
	B	1200	500	400	1500			3900	5000	16400	19400	318	
Ireland	A	43	70	11	78			587		348	3169	291	
	B												
Netherlands	A	292	6		270	2500				548	7492	1877	
	B	259	307	97	327	4650	178		6929	2526	6886	1413	442
Belgium	A	111	143	67	203	5800		5335		896	3208	738	
	B												
France	A	377	588	108	504	19200		2958			12264	5612	
	B												
Germany*	A	624	1204	342	1289	17500		9787		1414	344694**		
	B	799	1746	1329	1499	9774	1853	6660	3257	10957	2447**	5995	10792
Switzerland	A	147	314	84	231	4300		996		325	5489		
	B	296	726	263	423	1976	233	1324	504	3779			1499
Austria	A	51	144	22	34	0	8	379		34	14947	2242	
	B												
Portugal	A	56	157	35	68			708		900	6118	14078	
	B												
Spain	A		545		383	7900		1973		299	7947	6894	
	B					10	4			176	2	190	
Italy	A		348		288	3300		1433		1301	43061	10095	
	B												
Greece	A		584		112	1700		871		253	30522	500	
	B												
Poland	A		1813		611					1446	455075	493	
	B	62	530	18	99	200			75	546	18169	76	533
Fr. CSSR	A		365			600		109			17130	401	
	B	4	66	1	7	49		49	15	40	995	82	161
Hungary	A		713		69			321		124	15372	413	
	B												
Romania	A		1320		312	7		243		63	29483	190	
	B												
Bulgaria	A		241		30			62		46	2275	150	
	B												
FR. Yugoslavia	A		1749		494	200		1164		806	63438	19362	
	B												
Albania	A		9					14		2	75		
	B												
FR. USSR	A		562		91	400		118		204	121378	996	
	B	11	149	357	12		3	23	3	242	99976	27	47
Turkey	A		1863		1331	3208		11122		5311	86643	3710	
	B												
Total Europe Immigration	A		33720		10317	67107		41520		15894	957457	72142	

Includes former DDR

## Appendix I-A. Continued.

Portugal	Spain	Italy	Greece	Poland	Fr. CFSR	Hungary	Romania	Bulgaria	Fr. Yugoslavia	Albania	Fr. USSR	Turkey
				12	2		4					
66	475	172	81	219	17	22	18	16	445		13	145
				75	40		40					
119	628	253	515	108	15	84	14	16	158		37	66
				9	2						11	
50	185	95	55	14	9	32	1	2	1		93	6
				17	6							
96	443	299	128	96	14	16	5	8	96		42	117
	1404			97	36		13		2			
1100	500	3000	400	900				5000	400		600	1100
					2							
	809			27	36							
551	2126	1070	449	284	77	186	551	19	350	2	40	2447
				20	10		13		1		3	
	4361			111	44		164				7	
				5					28			111
	3857			584	516				2		130	
2723	7456	27732	11906	18+05	7780	6133	10043	1274	28155	36	9178	26854
				6	133		67		1241		1	
4743	7175	11674	418	191	154	168	48	45	2082		62	2646
				58	186		160				1	0
	637			1	3							
				10							7	
18												7
	473			50	21						9	
	31			117	19				1		9	
					191				9		34	
	43	351	212		136	24	1	16	60		27	24
				78					2		22	
3	2	128	159	47		71		15	82		23	3
				10	44				2		17	
				11	34				1			
				61	60				5		169	
				48	88						12	
				1	1							
				218	331				12			
7	41		10735	443	605	643	9	429	98			1
				9							2	
	17353			1398	944				37		371	

## Appendix I-B. Eurostat immigration-emigration trends, 1990.

FROM:		Norway	Sweden	Finland	Denmark	UK	Ireland	Netherlands	Belgium	France	Germany	Switzerland	Austria
Norway	A		8620	394	2781	6000		441	173		1701		390
	B		7631	428	2756	1980	25	420	198	561	687		231
Sweden	A	5033		3939	3183	6000		320	933		3420		1051
	B	5016		6414	3142	837	38	274	821	474	859		318
Finland	A	202	4368		264	1000		201	157		2212		393
	B	191	4019		237	159	14	67	58	101	272		84
Denmark	A	2356	3719	209		3000		425	3645		3168		652
	B	2442	3262	240		3827	129	475	483	1293	2441		784
UK	A	1250	1404	313	3130			7176	2564		18071		2786
	B	1000			2000			6000	5000	16000	19000		6000
Ireland	A	43	70	11	155			587	255		3878		314
	B												
Netherlands	A	292	281	69	447	2000			5847		9821		1931
	B	259	307	97	327	4652	378		6929	2526	6921		1413
Belgium	A	111	143	67	361	6000		5335			4332		768
	B	135	143	114	156	1774	78	3804		6572	3050		580
France	A	377	588	105	954	19000		2958	7355		17158		589
	B												
Germany	A	624	1204	338	2051	18000		9787	3645			10423	
	B	1064	2607	1691	2066	12819	2569	9083	4323	14394		8002	16497
Switzerland	A	147	314	83	499	1000		996	470		7428		31463
	B	296	786	302	467	2316	264	1364	535	4107	6803		3888
Austria	A	51	144	22	82			379	136		18669		2295
	B												
Portugal	A	56	157	35	124	1000		886	1539		7805		19572
	B					2		4	2	153	15		
Spain	A	529	596	192	837	13000		2322	1438		8065		7927
	B	294			0	95	0	60	4	2143	38		8582
Italy	A	122	340	87	511	3000		1494	2616		39679		10810
	B				217	3564	55	832	2787	4695	15735		9079
Greece	A	80	543	71	230	1000		886	661		27589		310
	B												
Poland	A	455	2114	194	762			1339	264		300693		561
	B												
Pr. CMM	A	34	296	82	93			204	75		16948		521
	B												
Hungary	A	40	567	125	93			346	33		16708		
	B												
Romania	A	165	1457	49	245	1000		786			174388		
	B												
Bulgaria	A		554	64	76			220			11193		
	B												
Pr. Yugoslavia	A	841	2215	17	687	1000		1334	459		66484		
	B												
Albania	A	124	0	0	3			15			3492		
	B												
Pr. USSR	A	198	866	1958	209			395	199		192820		
	B												
Turkey	A	590	1726	417	1223	1000		12769	1997		84592		
	B												
TOTAL EUROPE IMMIGRATION		14131	28454	2582	19968	80000		52061	32018		1038253		

