

DEMIG C2C Database

General country notes and Codebook

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NOTE: This document refers to all data contained in the original (internal) DEMIG C2C. However, data for specific countries was removed before releasing the data publicly due to copyright reasons. Thus, not all data described here may be available in the DEMIG C2C database for public use.

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1. General country notes

The first part of this document presents details of the definitions and characteristics of the data in the DEMIG C2C database, including descriptions of the changes over time. For further details on the data, including specific collection methods, treatment of historical countries (e.g. Yugoslavia), residuals and aggregates and specific sources, refer to the Detailed Country Notes file (entitled 'DEMIG C2C_Detailed country notes and sources_version 1.2').

For each country listed, the notes are organised in 8 areas:

- 1. **Definitions and coverage:** who is considered to be an immigrant and emigrant (e.g. citizen, foreign citizen, foreign born)
- 2. Criterion: country of birth, citizenship (nationality), residence
- 3. Length of stay: duration of stay implied in the definitions of migration
- 4. Historical coverage: range of years for which the data are available
- 5. Gender: range of years for which the gender disaggregated data are available
- 6. Calendar year/financial year: whether data represent flows within a calendar year or otherwise
- 7. Collection method: border statistics, population registers, etc.
- 8. Further description: any other comments or specificities of the data

Please note that whenever details on asylum/refugee data were provided, this information has been included in these notes. Whenever it is not provided, the collection method may provide some clues on the likelihood of these data being included. For instance, the US permit system would include refugees as they obtain their green card, like all other permanent immigrants. Population registers, on the contrary, would probably include refugees in adjustment figures (e.g. Belgium).

Country	Notes
Argentina	Definitions and coverage: citizens and foreigners flows for 1945-1976; only foreigners obtaining residence permits for 1980-1992, 2004-2011.
	International immigration statistics (1945-1976) refer to all citizens of Argentina and all foreign citizens entering the country with the intention to establish their residence. Emigration data refer to all citizens of Argentina and all foreign citizens leaving the country with the intention to establish residence abroad.
	Residence permit data refers to permanent residence and permanent entry permits granted by the Dirección Nacional de Poblición y Migración. The data are reported yearly by country of nationality (citizenship). Criterion: country of citizenship
	Length of stay: The international migration statistics (1945-1976) do not distinguish between permanent and temporary immigrants or emigrants. However, the figures exclude visitors, but not clear if temporary migrants are included (seasonal). Permanent residence involves an extended period of stay.
	Historical coverage: Inflows 1945-1976; residence permits 1980-1992 and 2004-2011.

	Note: regularisation data (issued residence permits) are available for the years 1984 and 1993. These data have been entered but are not reported in the C2C file.
	Gender: Only for Argentine citizens and total foreign citizens in 1950-1975
	Calendar year/financial year: Calendar year
	Collection method: population registers (1945-1976), residence permits (1980-1992, 2004-2011)
	Further description: Immigration and emigration data are available on PDF tables starting in 1938. Residence permits data are the only data available for recent year.
Australia	Definitions and coverage: Permanent and long-term movement, citizens and foreigners together. Note that the term Australian resident includes both foreigners with Australian residence and Australian nationals (Zlotnik 1987 'The concept of international migration as reflected in data collection systems').
	Criterion: Country of birth, citizenship and residence
	Length of stay: 12 months
	Historical coverage: 1946-2011 (longest series, not for all criteria)
	Permanent movement consists of persons arriving with the stated intention of settling permanently in Australia, and Australian residents (citizens and foreigners) departing with the stated intention of residing permanently abroad. Settlers are persons who, on arrival in Australia, indicated that they came intending to settle. Former settlers are persons who, on departure from Australia, stated that they have come to Australia intending to settle, had stayed for a period of twelve months or more and were now departing permanently.
	Long-term movement consists of the arrival of visitors and the departure of Australian residents with the stated intention of staying (in Australia or in a country abroad, respectively) for twelve months or more, and the departure of visitors and the return of Australian residents who have stayed (in Australia or in a country abroad, respectively) for twelve months or more.
	 1946-2011 COR Data from the period 1946-1958 PERMANENT included only New Arrivals (staying for one year or more) and Australian Residents Departing Permanently (other categories were temporary); from 1959 to 1971 data include PERMANENT (Assisted Settlers and Other Settlers arriving and Former settlers
	and other Australian residents departing) AND LONG TERM MOVEMENT (Australian residents returning from overseas and overseas visitors arriving and Australian residents and overseas visitors departing); 1975-2011 PERMANENT AND LONG-TERM MOVEMENTS are included. Net migration data reported for the period 1947-1960, thereafter calculated.

• 1948-2011 COC Data for the 1948-1958 period, PERMANENT	
included only New Arrivals (staying for one year or more) and	
Australian Residents Departing Permanently (other categories	
were temporary); from 1959 to 1971 data include PERMANENT	
(Assisted Settlers and Other Settlers arriving and Former settlers	
and other Australian residents departing) AND LONG TERM	
MOVEMENT (Australian residents returning from overseas and	
overseas visitors arriving and Australian residents and overseas	
visitors departing); 1975-2011 PERMANENT AND LONG-TERM	
MOVEMENTS are included. Net migration data reported for the	
period 1949-1960, thereafter calculated.	
1959-2010 COB Data for PERMANENT (Assisted Settlers and Other	
Settlers arriving and Former settlers and other Australian	
residents departing) AND LONG TERM MOVEMENT (Australian	
residents returning from overseas and overseas visitors arriving	
and Australian residents and overseas visitors departing); 1975-	
2011 PERMANENT AND LONG-TERM MOVEMENTS are included.	
No net migration data reported, but calculated for the entire	
series.	
Gender: Yes, entire series available	
Calendar year/financial year: Official statistics are recorded on a monthly basis and by financial year (Jul-Jun).	
Historical data until 1971 report flows by calendar year: a careful read of the	
Demography Bulletins shows that the flows are tracked by month (January through	
December) and the totals match those reported by year. Hence, faced by lack of other	
clear indication, we consider these data for calendar years until 1971. The CBCS report	
on Overseas Arrivals and Departures starts reporting data monthly and by financial	
year. We have constructed these data for 1972-75 (permanent flows only, not long-	
term) by calendar year.	
Collection method: Border statistics (initially tables reported Migration, then	
Overseas Migration and since 1957 as Overseas Arrivals and Departures) (from Notes	
of purchased data: Overseas arrivals and departures (OAD) are derived from a	
combination of full enumeration and sampling. All permanent movements and all	
movements with a duration of stay of one year or more are fully enumerated.)	
Further description:	
There are numerous historical yearbooks for the Commonwealth/Australia since the	
early 1900s. The categories used over time have changed as well as the time (year)	
reported.	
Before 1959 migration flows were recorded as <i>permanent</i> or <i>temporary</i> migration.	
Starting on 1 January 1959 arrivals and departures that were previously categorized as	
permanent were subdivided into two categories: permanent movement and long-term	
<i>movement</i> . We have decided to use data for permanent movements AND also for	
long-term movements. The only gap we have is for the years 1972-1975 for which we	

	only have data for permanent movement and NOT for long-term.
Austria	Definitions and coverage: A person's change of residence is defined as migration. Migrations can occur over variable distances: Depending on whether they cross a border, they are called either internal or international migration. International Migration includes all changes of residence between foreign countries, thus it is also referred to as external migration. In contrast, all changes of residence within the borders of a country are seen as internal migrations. Changes of residence are reported for citizens and foreigners.
	Criterion: country of citizenship and country of residence
	Length of stay: 1996-2001, undefined; since 2002, registration is required for main residence in Austria for more than 90 consecutive days.
	Historical coverage: 1996-2011
	Gender: only 2002-2011
	Calendar year/financial year: calendar year
	Collection method: From 1961 to 1995 (data not reported here) migration data originated from censuses; from 1996 to 2001 dedicated statistics on migration were utilised; from 2002 data are derived from administrative registrations and deregistrations in the Central Register of Residence (CRR).
	Further description: The data utilised have been subjected to an administrative adjustment for the period 2002-2007.
Belgium	Definitions and coverage: Immigration consists of foreign persons added in the population registers as they are in possession of a residence permit which gives them a right to residence for a stay of over 90 days (correspondence with Michel Willems of Direction générale Statistique et Information économique) or Belgian citizens intending to stay in Belgium for longer than three months. Emigration includes Belgian or foreign citizens who intend to establish residence abroad. Since 1971, bilateral emigration flows have been adjusted to account for administrative corrections (net figures of individuals cancelled from registers minus individuals who reregistered after having been cancelled). See below for further descriptions on this.
	Criterion: country of residence and citizenship (nationalité)
	Length of stay: minimum 3 months for immigration; intention to establishing residence abroad for emigration
	Historical coverage: COR 1948-1991, COC 1948-2009
	Gender: 1948-1954 and 1974-2009

	Calendar year/financial year: calendar year
	Collection method: population registers
	Further description:
	Bilateral flows by Country of Residence
	Immigration and emigration flows:
	 1948-1991 (not collected thereafter): include only individuals (Belgians or foreigners) who registered and who personally declared their intention to establish residence abroad. <u>No administrative adjustments are included.</u>
	Bilateral flows by Country of Citizenship
	 Immigration flows: 1948-2010: only include individuals (of any nationality, including Belgian) registered with intention to stay 90 days or longer (entries/entrees)
	Emigration flows:
	• 1948-1970: only include individuals (of any nationality, including Belgian) who notified the authorities that they left with the intention of establishing residence abroad (exits/sorties)
	 1971-1990: include individuals above, plus individuals who were cancelled from the registers (once the authorities verify that the individuals have left without notification and have not reregistered anywhere within Belgium) (exits +cancellations)
	 1991-2007: exits + (cancellations-reregistrations); as a result <i>this number can be negative.</i> In fact, should more people reregister than be cancelled from the register in a particular year, the figure would be negative. 2008-2009: exits + cancellations
	 Net migration flows: 1948-1970 (calculated): net of entries and exits (entrees et sorties)
	 1991-2007 (reported): entries – (exits + (net of cancellations – reregistrations))
	 2008-2009 (calculated): entries – (exits + cancellations)
Brazil	Definitions and coverage: Data only refer to foreign citizens. Following are the details of each of the three datasets:
	• Total inflows from 1946 to 1975 are for inflows of permanent immigrants by country of citizenship. The permanent immigrant category has been subdivided in: i) first time arrivals, ii) immigrants entering for subsequent times and iii) others. For 1946-1951 and 1970-1975, the figures are for all types of permanent immigrants, while for the years 1952-1969, the data are clearly for permanent immigrants but no specification of subcategories is provided. An assumption was made that the figures reported were for all permanent immigrants regardless of whether it was their first arrival or otherwise. These figures fall within the trend.
	• For the period 1965-1984, data based on issuance of residence permits by

	citizenship are available. These data seem to stop in 1985 with the end of the military dictatorship. These data refer to foreign citizens granted permanent residence permits.
	• For the period 1998-2004, data based on issuance of work permits by citizenship are available, while for 2005-2008 work permit data are available by country of origin. However, after consulting secondary sources we have determined that this seems to be the country of citizenship.
	Criterion: country of citizenship
	Length of stay: Inflows refer to permanent immigrants, either first entries or returnee immigrants. Resident permit data refer to permanent residence. Work permit data do not specify length of permits.
	Historical coverage: Inflows 1946-1975; residence permit 1965-1984; work permits 1998-2011.
	Gender: Inflows 1954-1960 and 1969-1975 only
	Calendar year/financial year: Calendar year
	Collection method: population registers (1946-1975), residence permits (1965-1984) and work permits (1998-2011)
	Further description: No outflow data are available, even for historical data.
Canada	Definitions and coverage: Immigrants are foreigners who have been granted permanent resident status in Canada. Flows do not include Canadian citizens. No
	outflow data of either citizens or foreigners.
	Criterion: country of birth, citizenship, residence
	Length of stay: Permanent residence.
	Historical coverage: COB 1961-2010; COR 1956-2010 (very few countries for 1956-1965); COC 1964-2010
	Gender: COB 1980-2010; COR 1966-2010; COC 1980-2010
	Calendar year/financial year: Calendar Year: 1 January to 31 December.
	Collection method: People who have been granted permanent resident status in Canada.
	Further description: Before 1973, when the Employment Visa Regulations and employment visas/authorisations were introduced, there was no distinction between temporary

	and permanent immigrants (SOPEMI 1984). This is also when the linkage between immigration and the domestic labour market was made. Temporary and other economic migrants would, from then onwards, be admitted depending on the needs in the Canadian labour market. Temporary flow data are available electronically starting in 1980.
	Note that temporary residents are "Foreign nationals who are lawfully in Canada on a temporary basis under the authority of a valid document (i.e., a work permit, study permit, temporary resident permit, or a visitor record) issued for the purpose of entering Canada and individuals who seek asylum upon or after their arrival in Canada and remain in the country pending the outcome of processes relative to their claim. Temporary residents include foreign workers, foreign students, the humanitarian population and other temporary residents." (Canada Fact and Figures 2010:122). Length of stay varies, so these data are not included in our database.
	Note on 1980-2010 (purchased) electronic data (COB, COC and COR): these data are rounded up or down to a multiple of 5 and figures between 0 and 5 are reported as missing for confidentiality. For many small countries and islands, this meant that figures were unreported in many instances. For this reason, we decided to use the data that we entered manually from the Immigration Statistics reports for 1980-1996, which are reported in detail. For COC data, non-rounded figures are not available for the gender disaggregation, so gender figures will be rounded (electronic) for 1980- 2010, while totals will be non-rounded (manually entered) for 1980-1996 (except 1982-1984) and rounded for 1997-2010.
Chile	Definitions and coverage: foreign individuals who have been granted permits of permanent residence in the country.
	Criterion: country of birth (not specified for the 2006-2011 data and assumed to be by country of birth)
	Length of stay: indefinite
	Historical coverage: COB, 1995-2011
	Gender: 2010-2011 only
	Calendar year/financial year: Calendar year
	Collection method: Residence permits
	Further description: Total permits granted without disaggregation by country of birth are available for the 1983-1994 period.
Czech Republic	Definitions and coverage: "All data refer to the resident population of the Czech Republic, irrespective of citizenship. Since 2001, the figures also include (in

	accordance with the Population and Housing Census 2001) foreigners with long-term stay (i.e. the stay based on visa over 90 days, as stipulated by Act No. 326/1999 Coll.) and foreigners with granted asylum status (in compliance with Act No. 325/1999 Coll.). Since 1st May 2004, in accordance with amendment No. 326/1999 Coll., the figures include citizens of the European Union with temporary stay on the territory of the Czech Republic, and citizens of other countries with long-term stay." (Demographic Yearbook of the Czech Republic 2010, Methodological Notes, page 1 of online version, available at http://www.czso.cz/csu/2011edicniplan.nsf/engpubl/4019-11-eng r 2011, accessed on July 24, 2012). For historical data until 1992, it is unclear what the duration of stay in the Czech lands or abroad to classify an individual an immigrant or emigrant, respectively.
	Criterion: country of residence and country of citizenship
	Length of stay: 90 days and above; temporary stay of citizens of the European Union
	Historical coverage: COR 1950-2004 (only 1950-1953 for flows of Czech citizens); COC 2002-2010 (2002-03 few countries only and no gender)
	Gender: COR 1954-2004; COC 2005-2010
	Calendar year/financial year: Calendar year
	Collection method: Before 2005, migration data were collected from the population registers and from a questionnaire provided by the Czech Statistical Office and completed by the Foreign Police; after 2005, migration data have been provided by the Central Population Register Record, which is administered by the Ministry of Interior.
	Further description: Data were entered manually until 1992. Historical data from 1950-1973 and from 1986 to 1991 come from tables for Czechoslovakia, which reported flows in and out of Czech Lands and Slovakia. Data were reported by country of residence until 2004. In 2005, there was a major change in the collection of migration data: the source has no longer been the direct statistical questionnaire of the Czech Statistical Office, rather the Ministry of Interior. From this point onwards, the Czech Statistical Office no longer has information on country of residence (origin and destination) and received migration data only by citizenship (per email communication with Ondrej Kosata on May 27, 2010).
Czechoslovakia	Definitions and coverage: International migration data in these dataset have been obtained from a series of statistical yearbooks provided by Ondřej Košata at the Czech Statistical Office. In general it is thought that the data came from the population registry offices and from the registers on foreigners kept by the Police. Immigrants and emigrants include all citizens, from Czechoslovakia and abroad, with the exception of the 1950-1953 years which only include Czech (not Czechoslovakian) citizens. The minimum duration of stay in Czechoslovakia or abroad that would lead to the

	registration of immigrants and emigrants, respectively, is unclear.
	Criterion: country of residence
	Length of stay: Unclear
	Historical coverage: 1950-1991; data for 1950-1953 are for Czech citizens only.
	Gender: available for 1954-1991
	Calendar year/financial year: Calendar year
	Collection method: population registers and records of foreigners kept by the Police
	Further description: All these data were entered manually and have been thoroughly verified. For some years, the data were difficult to read (e.g. 1991) and data should be used with caution.
Denmark	Definitions and coverage: Registration in the Central Population Register of migration from abroad must occur if the stay in Denmark is more than 3 months. However, persons who move to Denmark from a Nordic country, the EU/EEA or Switzerland are only liable to register if they stay in Denmark for more than 6 months.
	It is a precondition for registration in the Central Population Register of migration from abroad of non-Nordic citizens that these persons have either a residence permit or certificate in accordance with the Danish Aliens Act or directions issued in pursuance of the Act or have an confirmation from the Danish Immigration Service that they are in accordance with the existing legislation exempted from a residence permit or certificate.
	Any person, Danish or foreign citizen, staying in another Nordic country must be registered as having left the country, if the local registration authority in the country to which the person has moved informs the person that he/she must be registered as having entered this country. Both Danish and foreign citizens leaving Denmark for 6 months or over are required to register as emigrants.
	Criterion: country of residence and country of citizenship
	Length of stay: 3 months for foreign immigrants, 6 months for Nordic citizens as well as citizens of EU/EEA country or Switzerland; 6 months or over determines emigration of Danish or foreign citizens.
	Historical coverage: COR 1945-2011 (not continuous and different years for citizens, foreigners and totals); COC 1969, 1971-1978, 2007-2011
	Gender: COR 1945-2011 (not continuous and different years for citizens, foreigners and totals); COC 1969, 1971-1978, 2007-2011

	Calendar year/financial year: calendar year
	Collection method: Central Population Register; all internal and external migrations which have occurred in a given quarter/year are included, which means the statistics are based on occurrences. It thus follows that a person who migrates several times in the course of a calendar quarter will feature several times in the statistics of migrations and relocations.
	Further description: None
Finland	Definitions and coverage: The statistics on migration describe the moving of individual persons (internally and internationally). A person may appear in one year's statistics several times because the statistical unit is the movement (not the migrant). Only notifications of movement made by persons permanently resident in Finland (citizens or foreigners) on the day of the movement are used in the compilation of statistics on migration. Immigration into Finland from abroad is also included in population statistics if an administrative court approves the place of residence reported by a person (citizen or foreigner) in a notification of movement as his or her permanent place of domicile.
	Criterion: Country of residence
	Length of stay: Not specified.
	Historical coverage: Inflows, 1968-2010; and outflows, 1946-2010 (both have some gaps)
	Gender: Inflows, 1968-2010; and outflows, 1946-2010 (both have some gaps)
	Calendar year/financial year: Calendar year, statistics published once a year in May
	Collection method: 1946-1967 emigration data from passport issuance; inflows and outflows after 1967 from population registers. Finnish population statistics are based on the Population Information System maintained by the Population Register Centre.
	Further description: Data compiled using two main sources: the Finnish statistical yearbooks and the Nordic statistical yearbooks to complement the national data. The Nordic also report data provided by the Finnish statistical office, but which were not available in the statistical yearbooks.
France	 Definitions and coverage: French citizens never included. For permanent workers (1946-1994), includes both new workers and those who entered without permission and were regularised in France. This category includes refugees until July 1980.
	• For family reunification (1947-1994), includes both family members who entered using assistance of ONI and those who were regularised after arrival. From 1st January 1975, flows data for family reunification from CEE no longer available

since this type of migration is no longer under the Office responsibility. Only CEE family introduced by OMI within the 'assisted procedure' are included. In 1987 regularisation was no longer allowed, hence the data include only those family members who applied for family reunification from the origin country (Regards sur l'Immigration depuis 1945, Syntheses, Statistique Publique).

- For all others (1987-1994), data were collected only starting in 1987, when OMI was instituted and was made responsible for the entry of other categories of foreigners coming to the French territory: students, interns, non-wage earning workers, visitors, family of French, recipients of accident allowance, former combatants. This category starts to include refugees and their families starting in 1990.
- **1994-2008 INED data**, include all persons born abroad and foreign nationals admitted as legal residents in France for a period equal to or exceeding one year, regardless of their nationality, age, marital status or profession. These statistics include entries of nationals of a member country of the Union European, their minor children, as well as students who have a residence permit for a period of at least one year. They also include foreigners regularized to stay. On the other hand, these data do not account for foreign visitors, seasonal workers, asylum seekers awaiting decision, the illegal aliens (Statistiques des flux d'immigration en France, Année 1994).

Criterion: country of citizenship (nationality)

Length of stay: For INED data: 1 year or more.

Permanent workers: workers with a contract for more than 1 year. Family reunification: it appear to be long-term migration as the head of household (*chef de famille*) must have been holding a valid residence permit for at least for 1 year, 2 years in the new regulations.

As for 'Others', we included both Temporary and Permanent Others, so we also have students, interns, visitors. Therefore, probably some migrants for less than 1 year. (*Statistiques de l'Immigration*, 1993, p. 17 and p. 185).

Historical coverage: Permanent workers 1946-1994; family reunification 1946-1994; others 1987-1994. All migration 1994-2008

Gender: Only for Permanent Workers, from 1967 to 1994, with the exception of 1990-1991; 1994-2008.

Calendar year/financial year: Calendar year

Collection method: The sources of French data vary according to the type of data. Moreover, these are not always clearly specified.

• For permanent workers (1946-1994), the data are from the registers of the National Immigration Office (ONI), which recorded foreign workers whether assisted or non-assisted. Starting in 1975, registers recorded the contracts registered by employers and non-assisted CEE workers were no longer included

(see notes in the dataset for more details). The reporting system utilised for permanent workers is Multiple Registers, because several processes of registration before or after arrival have been utilised, hence the data seem to have been compiled from different registers. For family reunification (1947-1994), data were collected by the National Office • of Immigration (ONI, later OMI). The reporting system utilised for family members is Other Registration, because these figures were tracked using a registers specifically for family members of foreign workers. For all others (1987-1994), data are collected by OMI starting in 1987; the data collection occurred in the regional branched of OMI (Delegations regionales de l'Office) and in the decentralised health points where the health of foreign workers was controlled. The reporting system utilised for Others Temp and Perm is Multiple Registers, because these figures were collected from two different registers (OMI regional offices and health control points). 1994-2008 INED data, Statistics of foreign immigration flows established by INED • based on the use and combination of two sources: 1. Data from the Ministry of the Interior (source AGDREF), from which these two dataset are collected: • The number of foreigners entering France obtaining a residence permit for the first time with a validity period of equal or more than one year, • The number of entries of minors from nationals of a country of the European Economic Area or of refugee mothers (it is estimated to make up for the lack of registration of these two types of flow). 2. Statistics of the Office des Migrations Internationales (OMI STAT) complement the data by the Ministry of Interior by providing the main admissions of minors who are nationals of third countries benefiting from the consolidation family. NOTE: In 1994, there is an overlap of the two datasets, the one compiled by DEMIG and that reported by INED. The two sets can be distinguished through the Collection Method: the DEMIG set uses Multiple Registers, while the INED dataset is coded with Resident Permits. Further description: Refugees were recorded in the permanent workers category until 1980 and starting in 1990 refugees and their families are recorded in the Others category. To distinguish the coverage of foreigners, the French data have the following types of coverage: Foreign Workers, Foreign Family and Foreign Others. The merged dataset uses the conventional Foreigners. **Clarification on French immigration institutions:** The National Immigration Office (ONI) was set up in 1945 with the responsibility to implement immigration policy, particularly to control the entry of foreign workers. In 1975, CEE national would no longer be included in the controls of the ONI. The ONI was renamed Office des Migrations Internationales (OMI) in 1988. In 2009, OMI became the Office Francais de

	l'Immigration et de l'Integration (OFII).
Germany	Definitions and coverage: Migration flow data are based on the population register. Immigration data refer to individuals, citizens or foreigners, who register their residence in Germany. For foreigners, individuals must hold a residence permit in order to be able to register. Emigration data refers to individuals who deregister and leave the country to establish residence abroad. Data for German citizens include individuals of German descent (Aussiedler) and citizens of the former Germany Democratic Republic (Übersiedler). Because there is no minimum residence requirement, persons moving internationally more than once a year are recorded multiple times as an international migration.
	Criterion: country of citizenship and country of residence
	Length of stay: No minimum requirement
	Historical coverage: COC 1962-2009; COR 1952-2010
	Gender: COC 1962-2009; COR 1954-2010
	Calendar year/financial year: calendar year
	Collection method: population registers
	Further description: The reported figures had occasional errors in the totals and totals for females. Errors were frequent for some European countries in the COC net flows; communication with the statistical office confirmed that there were calculation errors in the net flows and that we could use calculated flow data. Therefore, some of the net flows by COC have been calculated.
	Several errors were also noted in the totals as well as random errors in the COR data. In addition, further checks brought to light that some gender disaggregation is reported incorrectly across categories (citizens + foreigners ≠ total). Notes have been made to indicate the cases identified.
Greece	Definitions and coverage: The 1932-1938 data do not report definitions of immigrants and emigrants, the collection method and the duration of stay. Immigrants include both foreign immigrants and those of Greek origin (reported as two separate figures, which we have added). For the period 1955-1977, outflows are reported for Greek citizens who are said to be "those Greek citizens, permanently residing in Greece, who go abroad in order to settle there for a period exceeding one year." (Statistical Yearbook of Greece 1957, page 46). No specific duration of stay is indicated for Greek immigrants. For 1972-1998, inflows of foreigners are based on issued work permits, not including renewed work permits.
	Criterion: country of citizenship (nationality) and country of residence

	Length of stay: generally unclear; outflows of Greek citizens (COC) are for permanent emigration.
	Historical coverage: COC 1932-1938 for foreign citizens and 1961-1977 (only 1968-1977 inflows) for Greek citizens; COR 1932-1938 for inflows and outflows citizens and foreigners; in addition for inflows citizens 1968-1977, inflows foreigners 1972-1998 (work permits) and outflows citizens 1955-1977.
	Gender: 1932-1938 no gender; later years have gender disaggregation
	Calendar year/financial year: calendar year, 1977 only Jan-Sept
	Collection method: Greek citizens were recorded at the border through "Arrival Cards" and "Departure Cards". Unclear how foreign citizens were recorded.
	Further description: Greek data are rather patchy. Unlike other countries, we reported data starting in 1932 due to the limited data for the period overall. Net flows have been calculated whenever inflows and outflows were available.
Hungary	Definitions and coverage: "International migration data are based on the population register and on the number of residence permits issued. Only foreigners are included. Foreign immigrants are defined as persons who have applied for a residence permit. EEA citizens are counted as immigrants if their period of stay exceeds three months, while non-EEA citizens must have a residence permit valid for at least one year in order to be considered immigrants. Foreigners can apply for a settlement permit after having legally and continuously resided in the country for at least three years. A foreigner emigrating is defined as a person who has a residence permit, an immigration permit or a settlement permit and who has left Hungary without intending to return, a foreigner whose permit has expired and has not applied for extension or someone whose permit was invalidated by authorities." (UNPD 2008)
	Criterion: country of citizenship, foreigners only
	Length of stay : Foreign citizens granted a one-year residence permit; EEA citizens staying more than 3 months.
	Historical coverage: COC 1980-2009
	Gender: 1980-2009
	Calendar year/financial year: calendar year
	Collection method: population registers and residence permits. More specifically: registers of immigration permits, registers of residence- and settlement permits of third country nationals, registers of residence and settlement documents of persons with the right of free movement and residence from the Aliens Policing department and the reports of the Refugee affairs department of the Office of Immigration and Nationality, and the Register of personal data and addresses of the Central Office for Administrative and Electronic Public Services. Published in Demographic Yearbooks by

	the Central Statistical Office, Budapest. (information provided by Melegh Attila)
	Further description: Although the data are just for foreigners, small figures for Hungarian citizens are reported. However, these do not seem to reflect actual migratory movement of Hungarian citizens.
Iceland	Definitions and coverage: Foreigners entering the country for the first time must apply for a personal identification number which they can't receive unless they stated that they intend to stay for six months or more. Foreigners entering the country for the purpose of employment or study may be registered if the intended stay is more than three months. After the initial allocation of a PIN, no checks are made as to the intended stay / time away for any registered persons (Icelandic or foreign). It is nevertheless assumed, due to the cost of moving to and fro Iceland, that all changes are "serious", i.e. involve a change of usual residence. It is important to note that a person with a PIN may or may not register the change of address; this will determine whether a person is registered as an emigrant or not (like all other population registers).
	Criterion: country of residence and country of citizenship
	Length of stay: 3 or 6 months for inflows of foreign nationals NOTE: Starting in 2009-2010 Statistics Iceland has started to comply with the EU regulation to track only long-term migration of 12 months or over. However, at this time, these data are not made publicly available.
	Historical coverage: COR 1961-2011 (citizens 1971-2011; foreigners 1986-2011); COC 1961-2011
	Gender: COR 1963 and 1965-2011 (citizens 1971-2011; foreigners 1986-2011); COC 1981-2011 (1981-1985 not for all countries)
	Calendar year/financial year: calendar year
	Collection method: population registers (Registers Iceland)
	Further description: "Statistics Iceland began publishing figures on migration in 1961, before which the main source of information on migration was censuses. Until the end of 1985 figures on migration were processed once per year, thus all persons who moved residence over the course of the year were only counted as moving once. It was measured based on change of residence from December of the previous year to December of the current year. With the founding of the Register of Migration Data in 1986 figures on migration were processed monthly, based on individuals having to be resident for at least one month in the same place before being considered as having moved." (from metadata of Statistics Iceland)
	With the founding of the Register of Migration Data at the end of March 1986 the definition of migration was changed. Instead of being based on migration from year to

	year, migration within a single year was taken into account.
Israel	 Definitions and coverage: Immigrant is "a person entering the country to take up permanent residence under the Law of Return or the Law of Entrance." Data include changes of status of individuals who entered as tourists or on a temporary status and applied and received the status of immigrants while staying in Israel. A potential immigrant is "a person who entered the country on a potential immigrant visa. According to the regulations of the Ministry of the Interior, which took effect in June 1969, a potential immigrant is defined as "a person entitled to an immigrant visa or certificate under the Law of Return 1950, and intends to enter Israel and stay there fo a period exceeding three months. In the first half of 1969, only Jewish potential immigrant swere included. In 1991 the definition was changed, and since then the status of a potential immigrant is as follows: A person entitled to an immigrant visa or an immigrant certificate according to the Law of Return 1950, and the conditions of settling in Israel as an immigrant, is entitled to submit a request for a visa and a licence for temporary residence of type A/1 (potential immigrant). On the same date, rights granted by the Ministry of Absorption to potential immigrants since 1992 may be attributed to this change." (Immigration to Israel 2000-2001 report).
	Criterion: country of birth and country of residence
	Length of stay: Long-term for immigrants and stay of up to three years potential immigrants.
	Historical coverage: COB include only inflows of foreigners for 1950-1958 and 1990-2011; COR include inflows of foreigners for 1958, 1972-75, 1988 and 1990-2011 and outflows of foreigners for 1951-1958, 1962 and 1966.
	Gender: None available
	Calendar year/financial year: Calendar year
	Collection method: border statistics for 1950-1958 and 1972-1975 data; since 1988, data are from the Immigrant Registration Questionnaires which are compiled for each immigrant or potential immigrant. The questionnaires are compiled by the Ministry of Immigrant Absorption (at border checkpoints) and the Ministry of the Interior (at regional population register bureaus) (Multiple Registers for Reporting System) (Immigration to Israel 2000-2001 report, August 2007).
	Further description: Definitions for the older data are vague; based on the information available we presume that the data are for foreign citizens.

Italy	Definitions and coverage: Immigration and emigration flows measure Italian and foreign citizens registered for transfer of residence from abroad and deregistered for transfer of residence abroad, by country of residence. Registrations must occur by the 20th day of the establishment of residence in Italy. For emigration, Italian citizens are required to deregister if residence abroad is established for 12 months or over (inscription in the register of Italians abroad). Foreign citizens do not have any temporal limit for deregistering. Refugees and asylum seekers are included in these flows if they have received a residence permit.
	Criterion: country of citizenship, country of residence
	Length of stay: 20 days from establishment of residence and no minimum requirements for outflows of foreign residents, while Italian citizens must de-register for stay abroad of 12 months or above; COR dataset for Italian citizens only (espatriati e rimpatriati) also has no time limitations.
	Historical coverage: COC 1980-2009; COR 1955-2010 for registrations and cancellations from population registers; COR 1946-1988 for Italian emigrants and returnees recorded in emigration registers.
	Gender: COC 1980-2010; COR 1980-2010; COR Italians citizens only 1968-1988
	Calendar year/financial year: calendar year
	Collection method: Population registers; for Italian emigrants and Italian returnees, data were collected through statistical cards in passports, passenger lists verified with municipal records and records of emigrants and emigrated Italian (<i>Schedario degli emigranti ed emigrati</i>) maintained in city halls (Comuni) starting in 1964.
	Further description: The data from population registers and for Italian emigrants and returnees are not comparable.
Luxembourg	Definitions and coverage: International immigration statistics refer to all citizens of Luxembourg and all foreign citizens entering the country with the intention to establish their residence. Emigration data refer to all citizens of Luxembourg and all foreign citizens leaving the country with the intention to establish residence abroad.
	Criterion: country of residence and country of citizenship
	Length of stay: Luxembourg's international migration statistics do not distinguish between permanent and temporary immigrants and emigrants. However, the figures exclude visitors, that is, non-residents who intend to stay in the country for up to three months without exercising a remunerated activity as well as border workers, that is, persons residing in border regions who need to cross the border frequently in order to exercise a remunerated activity.
	Historical coverage: COR 1946-1986 (outflows) and 1953-1986 (inflows); COC 1987-2011

	Gender: 1956-2011
	Calendar year/financial year: calendar year
	Collection method: population registers
	Further description: Both historical data and the more recent data cover only 8 countries – Belgium, France, Germany, Italy, the Netherlands, Portugal, Spain and the United States (and the DR Congo for 1953-1959) plus a few residuals but no data for Latin America, Asia or Oceania. The historical tables also contain some errors, which were fixed whenever possible.
Mexico	Definitions and coverage: Inflow data represent foreigners who entered the country as immigrants according to their citizenship and gender. A definition of length of stay and whether this includes inflows for less than 12 months is not provided. However, visitors are not included as they are reported in a separate table. Outflows report the foreigners who left the country after being immigrants, disaggregated by citizenship and gender.
	Criterion: country of citizenship
	Length of stay: Undefined for flow data; permanent stay for residence permits
	Historical coverage: COC inflows 1950-1956 & 1968-1973 and outflows 1950-1956; COC residence permits 1995-2010
	Gender: only for 1950-1956 data
	Calendar year/financial year: calendar
	Collection method: unknown for 1950-1974 data. Residence permit data for 1995-2010 report the permits granted for permanent residence in Mexico, according to the articles 52 and 54 of the General Population Regulations.
	Further description: The data available are limited. Like other countries in South America, migration is tracked using permit data. Total flow data are available, but they are subdivided in several categories which are not clearly defined.
Netherlands, The	Definitions and coverage: From 1948 to 1994, statistics refer to all individuals, either arriving in or leaving the Netherlands and whose arrivals and departures result in entries into and removals from the Netherlands population registers respectively. Except in a few special cases any person who intends to stay in the Netherlands for more than 30 days (aliens 180 days) has to be entered into the population register. Removal therefrom follows if a person leaves the Netherlands permanently or for an indefinite period exceeding at least 360 days. The figures given in the statistics are based on the processing of data filled in on individual enumeration cards by the
	municipal officer in the case of entries into and removals from the population register with regard to external migration (Statistiek van de buitenlandse migratie 1950-1952).

	From 1994, inflows record people moving to the Netherlands from another country.
	All persons who enter the Netherlands with the intention of staying in the country for
	a certain period of time. For people arriving in the Netherlands, registration is
	obligatory if they stay in the country for at least four months during the first six
	months following registration. Outflows record people leaving for another country. All
	persons who leave the Netherlands to live in another country for a certain period of
	time. People leaving the country are obliged to notify the authorities if they intend to
	live outside the Netherlands for at least eight months in the first year following this
	notification (1994 onwards definition from CBS electronic file).
	Criterion: country of residence, country of citizenship and country of birht
	Length of stay: immigration registration if individual intends to stay in the Netherlands
	for at least four months out of the first six months following registration; emigration is
	individual intends to live outside the Netherlands for at least eight months in the year
	following registration.
	Historical coverage:
	COR 1948-2009, disaggregation citizens and foreigners only 1948-1971
	COB 1954-2010, disaggregation citizens and foreigners only 1954-1970
	• COC 1961-1963, 1966-2010
	Gender: entire historical period
	Calendar year/financial year: calendar year
	Collection method: population registers
	Further description: several residuals were listed in the gender disaggregated COR
	and COB data. Many residuals, which reflected older territories that have since been
	recognized as countries, were reported in the country lines or merged with other data
	reported for the independent countries.
	Because the data originate from the population registers, they are subject to
	administrative adjustments, which often affect outflows significantly. However,
	adjusted data are available only for COB and COC outflow data from 1995-2010. Also
	net flows are affected by administrative adjustments, but adjusted net flows are not
	always available. Use caution when you use net flow data and read notes carefully.
	Definitions and coverage: Permanent and long-term arrivals include overseas
New Zealand	migrants who arrive in New Zealand intending to stay for a period of 12 months or
	more (or permanently), plus New Zealand residents returning after an absence of 12
	months or more. Permanent and long-term departures include New Zealand residents
	departing for an intended period of 12 months or more (or permanently), plus
	overseas visitors departing New Zealand after a stay of 12 months or more. For arrival
	series, the country of residence is the country where a person arriving in New Zealand
	last lived for 12 months or more (country of last permanent residence). For departure
	series, the country of residence is the country where a person departing New Zealand
	intends to live for the next 12 months or more (country of next permanent residence).

	Criterion: country of residence and country of citizenship
	Length of stay: 12 months and above
	Historical coverage: COR 1979-2010 (citizens and foreigners combined); COC 1953- 1970 fiscal year/1979-2010 calendar year
	Gender: entire COR and COC series
	Calendar year/financial year: COR by calendar year, while for COC we could either do the complete series by fiscal year (end 31 March) or have the older set 1953-1970 by fiscal year and the 1979-2010 set by calendar year. Upon internal consultation, we decided to go for the second option.
	Collection method: border statistics
	Further description: Users must be careful in comparing these data in DEMIG C2C with other datasets (e.g. UNPD data) in circulation, because we use calendar year rather than the fiscal year regularly used by Statistics New Zealand.
Norway	 Definitions and coverage: The statistics on immigration include all persons who wish to stay in the country for at least six months. This includes foreign citizens first arriving with the intention to stay at least six months and Norwegian citizens who are returning with the intention to stay at least six months after having been outside of Norway for at least six months. The statistics on emigration include all residents, citizens and foreigners, who report to the government that they are leaving Norway. Not all emigrants report their departure. In addition, individuals with strong connections to Norway, such as family members, and who intend to keep their permanent residence in Norway are not granted a notice of emigration even if emigration of six months or longer is taking place. Such individuals can include military personnel, students abroad or people with long-term employment abroad. Note that figures report citizens and foreigners together, not separately. From March 1987 to January 1994, asylum-seekers were counted as residents, and therefore immigrants. Before and after this period asylum-seekers are only considered resident if they have been issued a residence permit. (Definition verified by Svein Inge Holm, Senior Executive officer at Statistics Norway – sveing.inge.holm@ssb.no). Criterion: country of birth, country of citizenship Length of stay: six month intended stay in Norway, no time limit for stay abroad for outflows; in addition, individuals who retain their permanent residence in Norway (see above) may never be registered as emigrants even if they live abroad for long periods of time. Historical coverage: COR 1946-2009 (outflows) and 1958-2009 (inflows), COC 1981-2009 (1985 missing)

	Gender: COR 1958-2009 (see further description below); COB 1981-2009 (1985 missing)
	Calendar year/financial year: calendar year
	Collection method: population registers; If a person changes his or her country of residence several times during the same calendar year, each move counts.
	Further description: Data by country of residence (COR) were available from three sources: Statistical Yearbooks of Norway (on paper), Yearbooks of Nordic Statistics (on paper) and Statistics Norway (electronic). Read notes in the Detailed Country Notes file carefully, particularly if residuals and aggregates are used.
Poland	Definitions and coverage: Data concern persons (citizens and foreigners) who deregistered from permanent residence in Poland due to departure abroad (emigration) and persons arriving from abroad registered for permanent residence in Poland (immigration). These figures are based on individuals declaring the intention of permanent residence in Poland or abroad.
	Criterion: country of residence; country of birth and citizenship
	Length of stay: historical data by COR, COB and COC are for permanent residence; from 2008, COR data is reported based on intent to stay or to stay abroad at least 12 months.
	Historical coverage: COR 1966-2011; COR 12-months 2008-2012; COB 2009-2011; COC 2009-2011
	• Starting in 2008, Poland has started to produce data for immigration and emigration of at least 12 months , regardless of whether migration is for permanent residence (fulfilling EC regulation 862/2007). These figures are much higher than the permanent residence data and are reported in a separate COR file. Data were also found for 2002, but their quality seemed low, so they have not been included in this set.
	Gender: data from 2006
	Calendar year/financial year: calendar year
	Collection method: population registers. Note that the method of collection has moved from manual to electronic in 2006, but essentially data continue to be collected via population registers. Note: "Until 2005 the data were compiled by the Ministry on the basis of documents supplied by registry units of gminas (community/municipality); the scope of the data included information on previous and present place of permanent residence, sex, age, marital status and level of education of migrants. Since 2006 the data are taken from PESEL (the Common Electronic System of Population Register); the scope of data does not include level of education because these data are not collected in PESEL." (Demographic Yearbook of Poland 2011:392).

	Further description: Note that the country disaggregation for all the C2C data is not extensive. Also note that the two COR files cannot be merged because of the significant difference between the figures of flows for 12-months and over and flows of permanent residents.
Portugal	Definitions and coverage: Country of citizenship data records inflows and outflows of Portuguese and foreign citizens. A second set of data by country of citizenship uses residence permits, thus it refers only to foreign citizens. Data by country of residence only record the emigration and return of Portuguese citizens.
	Criterion: country of citizenship, country of residence
	Length of stay: COC inflows and outflows were for migratory movements without specification of length of stay. Although these include all arrivals and departures, they clearly refer only to migration movements (no visitors or temporary). COC residence permits record the first application of permanent residence (possibly, starting in 2006, also resident permit renewals are included – however, this remains
	unclear). COR data are for emigration and return of Portuguese citizens without any reference to time abroad.
	Historical coverage: COC flows 1946-1954; COC residence permits 1992-2011; COR 1946-1972 for inflows and 1946-2000 (patchy) for outflows.
	Gender: COR Residence Permit data 1992-2011; COR inflows 1946-1972 (excl. 1969) and outflows 1946, 1952, 1960, 1962, 1966, 1969-1988, 1992.
	Calendar year/financial year: Calendar year
	Collection method: population registers (COC 1946-1954; COR 1946-2000) and residence permits (1992-2011)
	Further description: The datasets are not complete and caution must be used when handling these data. Note that because country of citizenship data records all arrivals and departures, the figures are much higher than figures for permanent migration recorded in in the country of residence data.
Slovak Republic	Definitions and coverage: "The data on international migration cover the whole population of the SR regardless of their citizenship who have their legal (registered) residence in the territory of the Slovak Republic for a period that is, or is expected to be, at least 12 months as implied from the type of residence (i.e. permanent residence in case of citizens of the European Economic Area and temporary stay in case of third- country nationals). Immigrant means a person who established his/her legal (registered) residence in the territory of the Slovak Republic, either the permanent residence (a SR national, an EEA citizen and, under the specific conditions a third- country national), or the temporary stay (a third-country national; the competent

	police section may, upon third-country national's request, grant permit for temporary stay for a time necessary for achieving its purpose, at maximum for 2 years). Emigrant means a person, a SR national who checked out from the permanent residence in the territory of the SR, an EEA citizen whose registration of the first stay of 5 years has expired and he/she does not apply for subsequent registration, a third-country national whose permit for stay has expired, a foreigner who has been sentenced with expulsion, has been administratively expelled" (from Methodological Notes on SLOV STAT online database of Slovak Statistical Office).
	Criterion: country of residence and country of citizenship
	Length of stay: 12 months. The migration flows by country of citizenship measured permanent movement until 2003; thereafter long-term movement to/from the Slovak Republic were recorded. For this reason, <i>the figures increase drastically from 2003 to 2004</i> .
	Historical coverage: COR 1954-2010; COC 1992-2010 (few countries until 2004)
	Gender: COR 1954-2010; COC 1992-2010
	Calendar year/financial year: calendar year
	Collection method: population registers and foreign registers: "Information on migration of foreigners is drawn from the information system "Registration of Foreigners" of the Bureau of Border and Aliens Police of the Presidium of the Police Force. Since the year 2003, the Statistical Office of the SR and the Bureau of Border and Aliens Police of the Presidium of the Police Force have cooperated on the development and implementation in practice of the Regulation on statistics on migration. Foreigners are citizens of another EU Member State, nationals of any other State party to the Agreement on the European Economic Area (EEA), nationals of the Swiss Confederation and members of their families, third-country nationals and stateless persons. The entry and stay of EU/EEA citizens in the Slovak Republic are subjects to a special legal regime approximating to the rights of the citizens of the Slovak Statistical Office).
Slovenia	Definitions and coverage: Statistical definitions of immigrants from abroad, emigrants abroad and internal migrants from 2008 are based on the concept of usual residence and are harmonized with definitions of population and migrants from the Regulation (EC) No 862/2007 of the European Parliament and of the Council on Community Statistics on Migration and International Protection.
	The concept of usual residence is based on the criterion of one year of actual or intended residing at the permanent or temporary residence. The key criterion for determination of migration is therefore taking into account one year of residing at the registered address. This includes those who have actually resided one year at the

registered address (actual residing) and those who at the registred adress intend to reside one year or more (intended residing). A distrinction is made between temporary and permanent redisence, but it appears that the temporary movements included in these statistics maintain the duration of residence of at least one year. Immigrants are those persons who immigrated to the address of permanent residence having: 1. registered permanent residence in Slovenia; or 2. those who after being temporary absent from Slovenia for one year or more return to Slovenia; or 3. those who change the settlement of permanent residence in Slovenia; or 4. those who registered temporary residence which was deregistered or its validity expired (hence whose stay has passed the temporary stay). Emigrants are persons who, after being counted as population of Slovenia, have: 1. deregistered permanent residence; or 2. deregistered temporary residence; or 3. are temporary absent from Slovenia one year; or 4. the validity of their temporary residence on the territory of Slovenia expired and was not renewed in 8 days; or 5. changed the settlement of residence on the territory of Slovenia. Between 1995 and 2007 the data on migration were prepared in accordance with the statistical definition of population published in 1996. Data on immigrations and emigrations in Slovenia included also the data on migration of foreigners. Data on emigrations of foreigners in 1995-2007 were estimated on the basis of the number of foreigners and natural changes in Slovenia. Since 1999 the data on international migration of citizens of Slovenia also included temporary absence from Slovenia because of departure abroad (for more than 3 months) and arrivals after temporary residing abroad. From 2008, temporary movements of less than three months are no longer included. **Criterion:** country of citizenship and country of residence Length of stay: One year permanent residence in Slovenia and absence from Slovenia for at least one year since 2008; from 1999 to 2007 residence and absence of more than 3 months are included. For 1992-1994 data are for permanent residence. This detail is not available for the data for 1983-1991 and 1995-1998. Historical coverage: COR 1982-2010; COC 1996-2010 Gender: All data have gender disaggregation available, with the exception of COR 1990. Calendar year/financial year: Calendar year **Collection method:** population and foreigners registers Further description: Data for certain periods are not comparable, particularly due to the inclusion or exclusion of temporary stay in Slovenia or abroad.

South Africa	Definitions and coverage: <i>Immigration flows</i> refer to long-term and permanent
South Anneu	migrants, based on residence permits. Long-term immigrants refer to foreign citizens
	being issued work, study, permanent residence, family or retirement permits. An
	<i>emigrant</i> is foreign or South African citizens who self-declare the intention to establish
	residence abroad. Immigrants and emigrants include foreign citizens as well as South
	African citizens.
	When using data for 1945-1975 , beware that the figures are for <i>persons of European</i>
	<i>stock only</i> . Among these are both national and alien residents departing permanently
	or intending to establish permanent residence in South Africa (from UN Demographic
	Yearbooks 1948-1959).
	Criterion: country of birth, citizenship, residence
	Citerion . country of birth, citizenship, residence
	Length of stay: long-term and permanent, non-time specific
	Historical coverage:
	COC 1965-2003 with some breaks;
	COB 1965-2003 with some breaks;
	COR 1945-2004 longest series, with some breaks
	Gender: gender disaggregation available only for entire series
	Calendar year/financial year: calendar year
	Collection method: <i>Inflows</i> based on port and border statistics from 1945 until 1958
	and on residence permits from 1965 onwards. The inflow data for 1959-1964 appear
	to originate from residence permits, although no clear definition is provided in the
	source tables. For a person granted permanent residence status in SA, details are
	collected about the person's country of birth, the country of citizenship and the
	country of previous permanent residence. Note that South African citizens are also
	included in immigration statistics.
	Outflows based on port and border statistics from 1945 until the present. Note that
	since 1997 Statistics South Africa obtains its emigration statistics from the departure
	forms (border statistics) filled in by South African residents upon departure from
	either one of the three international airports of Johannesburg, Durban and Cape
	Town. By law it is compulsory for South African citizens to fill in these forms. However,
	for various logistical reasons it is not always feasible to accurately verify the contents
	of the details filled in. In other words, an intending emigrant may not always fill in the
	form, and even if the intending emigrant does complete it, he/she may state that the
	purpose of visit is 'holiday' or 'business'. The emigration statistics reported since 1997,
	therefore, refer to 'self-declared emigration', which is different from actual emigration
	(from Documented Migration reports 03-51-03). South Africa has abandoned the use
	of departure forms in 2004.
	NB: In South Africa, the only source of outflows of long-term migrants is the Network
	of Skills Abroad (SANSA) database. This database contains information of long-term

	and permanent professionals to 5 receiving countries: UK, Australia, New Zealand, Canada and USA (from a presentation by Statistics South Africa dated December 2006 available through unstats.un.org).
	Further description: Caution must be used because of the historical data only including white persons. Moreover, the calculated net flows may not be accurate due to different list of countries in inflows and outflows (irregularities in the data).
Spain	Definitions and coverage: Immigration flows include foreigners who register with the intention of establishing residence in Spain and Spanish citizens returning after having emigrated with the intention to establish residence in Spain. Emigration flows record persons, either Spanish citizens or foreigners, who intend to establish their residence abroad. Since 2000, all immigrants, regardless of their status, are allowed to register. There is no minimum residence requirement. Since 2006, emigration flows include cancellations of foreigners who failed to re-register every two years (see note on 'cancellation by expiration' above).
	Criterion: country of birth, citizenship, residence
	Length of stay: No set minimum; outflows are subjected to administrative adjustments for foreigners who fail to renew their re-registration after two years.
	Historical coverage: COB inflows 1988-2011, outflows 2002-2011; COC inflows 1988-2011, outflows 2002-2011; COR inflows 1945-1958 & 1984-2011, Outflows 1945-1958 & 2002-2011
	Gender: COB 1988-2011; COC 1988-2011; COR 1985-2011
	Calendar year/financial year: Calendar year
	Collection method: Population registers, precisely the Statistics on Residential Variation (EVR). The EVR tracks the variations in the registrations in the municipal registration (Padron Municipal de Habitantes). Its objective is to provide information on annual migration, both internal, between the different municipalities in Spain, and external, between municipalities in Spain and foreign countries. Records in the registrar include movements of both regular and irregular foreigners.
	The data in the C2C dataset are extracted from the microdata in .txt provided by the National Statistic Office, which provide a better country breakdown in comparison to the online published data. When comparing the figures with the totals provided online the country categories might be different. As of 2002, the foreign emigration chapter was incorporated, which incorporates cancellations due to change of residence communicated by City Councils, which mainly refer to movements of Spaniards abroad that have been registered in Consular Office Registers. Similarly, some foreign national cancellations are covered, but only to the extent that City councils have knowledge of their return abroad, which occurs in an unknown percentage of cases. The substantial difference between registered cancellations of Spaniards and of foreign nationals is due to the fact that registry legislation includes communication to Municipal Councils, after coordination by the INE, of the registrations of Spaniards

produced in the Consular Office Registers, while for foreigners this is not possible. As of 2006, 'cancellations by expiration' have been incorporated in the foreign emigration tables, including specific tables for these cancellations as well. Cancellation by expiration are administrative adjustments made based on the fact that non- community foreign nationals who do not have permanent residence permits, are required to renew their registration every two years. If renewal does not take place, the City Councils should declare the expiration of the registration. Further description: The C2C datasets have been compiled merging data from various tables in the statistical yearbooks and by manipulating the micro-data available from INE. Note that the dataset for 1999 which has been made available publicly was incorrect, so we were provided a new dataset which is now included in DEMIG C2C. Sweden Definitions and coverage: Immigration statistics include Swedish citizens and foreigners (Scandinavian citizens or otherwise) holding a residence permit who intend to remain in Sweden for one year or longer. Criterion: country of birth, citizenship, and residence Length of stay: One year Historical coverage: COR 1958-2011 (citizens and foreigners only 1968-1999); COC 1958-2011; COB 2000-2011 Gender: In COR, gender disaggregated data are available starting in 1964, although incomplete until 2000 – moreover, no gender disaggregation for the entire period available. Calendar year/financial year: calendar year Collection method: population registers Further description: The data available in the Swedish statistical yearbook are very detailed, but unavailable electronically. All data until		
emigration tables, including specific tables for these cancellations as well. Cancellation by expiration are administrative adjustments made based on the fact that non- community foreign nationals who do not have permanent residence permits, are required to renew their registration every two years. If renewal does not take place, the City Councils should declare the expiration of the registration.Further description: The C2C datasets have been compiled merging data from various tables in the statistical yearbooks and by manipulating the micro-data available from INE. Note that the dataset for 1999 which has been made available from INE. Note that the dataset for 1999 which has been made available from two sets incorrect, so we were provided a new dataset which is now included in DEMIG C2C.SwedenDefinitions and coverage: Immigration statistics include Swedish citizens and foreigners (Scandinavian citizens or otherwise) holding a residence permit who intend to remain in Sweden for one year or longer. Emigration statistics include Swedish citizens and foreigners residing regularly in Sweden who leave the country with the intent to remain abroad one year or longer.Criterion: country of birth, citizenship, and residence Length of stay: One yearHistorical coverage: COR 1958-2011 (citizens and foreigners only 1968-1999); COC 1958-2011; COB 2000-2011Gender: In COR, gender disaggregated data are available starting in 1964, although incomplete until 2000 – moreover, no gender disaggregation for flows of citizens and foreigners disaggregated; COB and COC have gender disaggregation for the entire period available.Collection method: population registersFurther description: The data available in the Swedish statistical yearbook are very detailed, but unavailable electronically. All data until 1999 were ent		produced in the Consular Office Registers, while for foreigners this is not possible.
Swedenforeigners (Scandinavian citizens or otherwise) holding a residence permit who intend to remain in Sweden for one year or longer. Emigration statistics include Swedish citizens and foreigners residing regularly in Sweden who leave the country with the intent to remain abroad one year or longer.Criterion: country of birth, citizenship, and residenceLength of stay: One yearHistorical coverage: COR 1958-2011 (citizens and foreigners only 1968-1999); COC 1958-2011; COB 2000-2011Gender: In COR, gender disaggregated data are available starting in 1964, although incomplete until 2000 – moreover, no gender disaggregation for flows of citizens and foreigners disaggregated; COB and COC have gender disaggregation for the entire period available.Calendar year/financial year: calendar yearCollection method: population registersFurther description: The data available in the Swedish statistical yearbook are very detailed, but unavailable electronically. All data until 1999 were entered manually.SwitzerlandDefinitions and coverage: Country of residence data (1946-1972) report only Swiss citizens who registered in the emigration and repatriation registers. Data by country of citizens who registered in the emigration and repatriation registers. Data by country of citizens who registered in the offoreign citizens over time: this dataset includes the movement of foreign citizens with permanent resident permits, established short residency and foreigners in asylum processes.		emigration tables, including specific tables for these cancellations as well. Cancellation by expiration are administrative adjustments made based on the fact that non- community foreign nationals who do not have permanent residence permits, are required to renew their registration every two years. If renewal does not take place, the City Councils should declare the expiration of the registration. Further description: The C2C datasets have been compiled merging data from various tables in the statistical yearbooks and by manipulating the micro-data available from INE. Note that the dataset for 1999 which has been made available publicly was
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Switzerland citizens who registered in the emigration and repatriation registers. Data by country of citizenship include different categories of foreign citizens over time: this dataset includes the movement of foreign citizens with permanent resident permits, established short residency and foreigners in asylum processes.		
Criterion: country of citizenship and country of residence	Switzerland	citizens who registered in the emigration and repatriation registers. Data by country of citizenship include different categories of foreign citizens over time: this dataset includes the movement of foreign citizens with permanent resident permits,
		Criterion: country of citizenship and country of residence

	Length of stay: unclear for Swiss citizens (COR data); COC includes permanent permits
	which are for one year or more.
	Historical coverage: COR 1946-1972 (inflows only 46-48 and 58-72 and nets only 58-72); COC 1981-2009
	Gender: only for COC data 1981-2009
	Calendar year/financial year: calendar year
	Collection method: Data by country of residence (COR) come from emigration and repatriation registers until 1967 and from Consulates' reports for 1968-1972; data by country of citizenship (COC) are derived from adjusted census figures until 1991, when a foreign population register (PETRA) was created. The published COC data combine foreign population registers and census data for adjustments.
	Further description: for the periods 1996-2009 the original data provide data separately for movements of individuals with permanent permits and for individuals who experience a change of status from non-permanent to permanent permission. The data for change of status have not been included in the C2C dataset for the 1996-2009 period in order to maintain consistency with the 1991-1995 series.
United Kingdom	Definitions and coverage: An international migrant is any person who changes his or her country of usual residence for a stay of at least one year. In the early data for the 1940s (COR), data reflect the movement of overseas nationals and alien travellers', although for some subsets (see Detailed Country Notes file) figures only cover the movements of British nationals.
	Criterion: country of birth, citizenship, and residence
	Length of stay: At least one year of residence abroad and the intention of staying at least one year in the United Kingdom. For emigrants, having resided in the United Kingdom at least one year and departing with the intention of staying abroad at least one year.
	Historical coverage: COR 1946-58 & 1964-2009; COC 1991-2009; COB 1991-2009
	Gender: Not available
	Calendar year/financial year: Calendar
	Collection method: Data are estimated from the International Passenger Survey (IPS), which collects a sample of passengers arriving and departing from the main air and sea ports in the United Kingdom, including passage through the Channel Tunnel (UNPD 2010).
	Further description: Data for the United Kingdom are very limited and largely provide aggregates.

United States of America	Definitions and coverage: An immigrant is a foreigner, other than a returning resident, who is admitted for permanent residence (LPR). Immigrants are mainly foreign-born, but COB data show that there are also small numbers of individuals born in the US who need to adjust their residency status. An emigrant is an alien resident of the U.S.A. departing with the declared intention of residing permanently in a foreign country. The U.S. does not record the movement of U.S. citizens.
	Note: Inflows of LPRs include all categories of people who obtain legal residency, that is: 1) family-sponsored; 2) employment-based; 3) immediate relatives of U.S. citizens; 4) diversity programme; 5) refugees and asylees; 6) others. Inflows disaggregated according to this breakdown are available online from 1998 to 2010 (http://www.dhs.gov/files/statistics/publications/LPR10.shtm).
	Criterion: country of birth, country of residence
	Length of stay: permanent immigration and emigration
	Historical coverage: 1946-2010 COB and COR inflows; 1946-1957 COR outflows (as a whole, outflows in the US were recorded from 1907 to 1957).
	Gender: 1973-2009
	Calendar year/financial year: fiscal year. Before 1976, the fiscal year was from July 1 to June 30 of the following year; starting in 1976, the fiscal year runs from October 1 to September 30. To adjust for this change, 1976 is a 15-month year. The year 1977 captures Oct 1 1976 to Sept 30 1977 and so forth.
	Collection method: Immigration data report the numbers of foreigners who have been granted Legal Permanent Residency (LPR) (Alien Registration Card) in the United States. It is necessary to note that the recording of an individual's entry may occur from a few months to a few years after the actual entry, since the process of granting permanent residence is not immediate.
	Further description/comments: The IRCA legalization, which significantly inflates the inflow numbers from 1989 to 1998, has been included in the COR and COB datasets. For a disaggregation (for COB only), refer to the 2005 version of the UNPD dataset.
Uruguay	Definitions and coverage: Inflows measure the residence permit granted to foreigners by country of nationality. These data are reported by the Direccion Nacional de Migracion: http://www.dnm.minterior.gub.uy/index.php. This entity was created in 1865 and belongs to the Ministry of Interior. It has been working to regulate the entry of foreigners, assistance of Uruguayans emigrated and the re-integration of Uruguayans from abroad.
	Criterion: country of citizenship

Length of stay: unspecified
Historical coverage: 1995-2011
Gender: 1999, 2001-2011
Calendar year/financial year: calendar year
Collection method: residence permits
Further description: Note that the list of countries in this dataset is limited.

2. Codebook

The second part of this document provides detailed information on the fields (18 columns) in the Central Master file, version 1.2 of the DEMIG C2C database. The Central Master file includes data for all 34 reporting countries, all criteria and types of flows. Due to the size of this file, Inflows, Outflows and Net Flows are reported in three separate worksheets. Moreover, all blank fields were removed to ensure that all data would fit within each worksheet.

As a general recommendation we encourage you to check two documents in connection with this Codebook: General Country Notes and Detailed Country Notes. These documents provide descriptions of the definitions of migration, criteria, collection methods for the data in DEMIG C2C.

User must be aware that the data have largely been retained as reported by the various national statistical officers, which introduces variation across national datasets. Moreover, the Central Master File includes ALL data. Therefore, the data must be filtered to produce accurate tables and analyses. In order to avoid double-counting flows, pay particular attention to: **Criterion, Type of Flows, Coverage and Gender.** Moreover, users must understand **the logic of four codes**:

- **OTH (995)** these are residuals. In addition to the set of 236 countries reported for each dataset, national statistics reported other countries or subset of countries that did not fit in the official list of countries, e.g. Aden, Admiralty Islands, Canary Islands and New Guinea among many others. These residual values can be different for reporting country and year. Hence, these have been retained as residuals, coded OTH (995). Whenever a user wants to calculate total flows, OTH must be included.
- OTHA (997) these are also residuals which have been reported separately, but they have already been included in the countries that represent their larger political entity (e.g. Abu Dhabi, which has already been included in U.A.E. and Madeira already included in Portugal). This was done whenever it was possible and logical to do so. Whenever a user wants to calculate total flows, OTHA must be excluded.
- AGG (996) aggregates as reported by national statistical offices. Note that these change across countries, but also over time within each country. For instance, the way the EU is calculated varies by country and over time, making these aggregated figures highly incomparable. We suggest that users only use these aggregates if they work on one country. Otherwise, it is advisable to calculate aggregates using Major Area Codes and Region Codes (see below). Note that some descriptions in the Countries field are exactly the same but are coded OTH and also AGG. These are not errors. Rather, they describe data found in older dataset which were listed as both residuals and aggregates, e.g. Australia and Oceania. Whenever a user wants to calculate total flows, AGG must be excluded, unless he/she wants to calculate totals only from aggregates, in which case only countries coded AGG should be retained.
- TOT (1) the total flows reported by each country may also vary, with some national statistics reporting more than one total, e.g. Germany reports total according to its territory as Federal Republic of Germany and occupied territories and as Germany after reunification. Moreover, some totals have been calculated as they were not reported by the national statistical offices. Total flows can be easily calculated by adding all countries and all OTH coded countries. Or, by keeping all country codes and removing OTHA, AGG and TOT.

Fields description

- **Reporting country:** countries that produced and published the migration flow data. This field is the point of reference to interpret other fields e.g. inflows, outflows, citizens and foreigners categories, collection method.
- **Countries:** countries according to which the international migration moves are classified. There are 236 countries in this list, including some historical countries (e.g. Czechoslovakia). Depending on the Criterion (see below) this field may mean country of origin and destination (country of residence), country of citizenship or country of birth.
- UN numeric code: the field 'Countries' is also identified by a numeric code used by UN. Additional codes added are for the categories 'Other' (995) (e.g. Other Africa, Abu Dhabi), aggregates (996) (e.g. Africa Total); or Other already included in countries (997) (e.g. Madeira already included in Portugal); Total (1).
- Country codes –UN based-: the field 'Countries' is also identified by an alphabetic code used by UN. Other codes added are for the categories 'Other' (OTH) (e.g. Other Africa), aggregates (AGG) (e.g. Africa Total); Other already included in countries (OTHA) (e.g. Madeira already included in Portugal); Total (TOT).
- Country codes –WDI based-: the field 'Countries' is also identified by an alphabetic code used by the World Development Indicators. Other codes added are for the categories 'Other' (OTH) (e.g. Other Africa), aggregates (AGG) (e.g. Africa Total); Other already included in countries (OTHA) (e.g. Madeira already included in Portugal); Total (TOT).
- Major area: each 'Country' is classified according to Major areas (continents + USSR + Stateless).
- Major area code: the field Major area is also coded according to the UN numeric codes.
- **Region:** each 'Country' is classified according to its region (e.g. Caribbean, South East Asia, etc. + USSR + Stateless)
- **Region code:** the field Region is also coded according to the UN numeric codes.
- **Development UN based 2010-:** each 'Country' has been classified according to the UN based development level for 2010.
- **Development code UN based 2010-:** the 'Development' level has assigned a UN numeric code.
- **Collection method:** refers to the method of data collection. The following methods have been recorded in DEMG C2C:

- Border Statistics
- Multiple Registers, used when data are compiled by national statistical office from various registers
- Other Registration, includes Foreigner Registers, Household Surveys
- Passenger Survey
- Passport Issuance, used for outflows particularly in the past
- Population Register
- Residence Permit
- Work Permit
- N/A, used for net flows only when data are calculated from two different collection systems (but they are reported as inflows and outflows by national statistical office)

The collection method changes across countries as well as within countries over time. Be aware that major changes in trends may be due to possible changes in collection method. Full description of collection methods are available for each country in the previous section of this document.

- **Criterion:** refers to whether the moves are reported by Country of Residence (COR), Country of Citizenship (COC) or Country of Birth (COB). Make sure that you only select one of these criteria at a time.
- **Type of flow:** refers to migration into a reporting country (inflows), out of a reporting country (outflows) or measuring net migration in relation to a reporting country (net flows).
- **Coverage –Citizens/Foreigners/Both-:** this field refers to whether the international migrants moving are citizens, foreigners or the figure includes both. These categories refer to the reporting countries, so if you are looking at Australian data, citizens will be Australian citizens and foreigners the rest of the world.
- Year: Year when the movement was occurred in most instances, or tracked as in the case of when permanent permits as issues (e.g. U.S).
- **Gender:** this field refers to the gender of international migrants male or female.
- Value: this field represents the international moves reported for a particular category and a specific year.

Note on Countries and Development codes (fields 2-11): All fields between 2 and 11, with the exception of 5 (Country codes –WDI based), are based on lists and codes provided by the United Nations in 2010.

For countries that no longer exist, we used UN codes that have been 'retired' (e.g. Czechoslovakia, German Democratic Republic). Field 5, Country codes –WDI based, adopted codes utilised by the World Development Indicators (WDI). For countries that no longer exist, even here we used UN codes that have been retired as such codes are not available for historical WDI.

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Users interested in using the Central Master file to create longitudinal (wide) country based files and make the data easier to view can use Pivot Tables. However, users must be very careful to filter the data according to **criterion, type of flow, coverage, gender and country codes** in order to avoid double counting. In particular, be aware of the following issues:

- When extracting your data always change the Value setting to 'Sum of' instead of 'Count of';
- When extracting bilateral breakdowns always filter the data by the field 'Country codes –UN based-' and do not select the fields OTHA, AGG and TOT, since you would be double counting moves.

3. Sample Pivot Tables

For users interested in extracting data for individual countries, you can use the Pivot Tables function in Excel. This section provides a few screenshots and descriptions to create longitudinal tables which can be used to produce descriptive graphs. Users should be careful in using these tables, as the Pivot Tables function calculates totals and subtotals, which at times seem useful but may double count totals already in the DEMIG C2C database.

Using Pivot Table to create a longitudinal file for one reporting country

In the first example (Figure 1), we create a longitudinal file for inflows to the Czech Republic using the country of residence criterion and for citizens and foreigners combined. Gender disaggregation is not selected, indicating that we extract men and women as a total. From the Inflows worksheet, select the Insert > Pivot Table function. Then follow Figure 1 to drag and drop the fields you see listed in the right hand side of Figure 1 to the lower right section of the screen to create the table. Note you must select Sum of Value in the Values box to see the accurate figures.

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Figure 1 Creating a longitudinal file for inflows to the Czech Republic, by country of last residence, citizens and foreigners combined, without gender disaggregation

In the upper left corner of the page, you filter the data you want to appear in the table:

- Reporting country: Czech Republic (or any other reporting country for which you want data)
- Country codes –UN based-: De-select AGG, OTHA and TOT, so that you have all other countries selected, including residuals (OTH) (see page 33 of this document for further description of these fields)
- Criterion: Retain only COR (country of residence)
- Coverage Citizens/Foreigners/Both: Retain only Both
- Gender: Retain only Total

Through this process, you will have a longitudinal table of all data included in the database for inflows to the Czech republic according to the last country of residence.

Using Pivot Table to create a longitudinal file for one reporting country and gender disaggregation

To add gender-disaggregated data, users can drag the field Gender from the 'Report Filter' to the Row Labels, after having selected all options (Total, Male and Female). The table will change to what you see in Figure 2. However, note that the total calculated by the Pivot Table function for each country, which appears **in bold** on the same row as the name of the country, actually doubles the figures. Thus, users are cautioned to copy and paste this table onto another worksheet and remove these figures in bold.

Figure 2 Creating a longitudinal file for inflows to the Czech Republic, by country of last residence, citizens and foreigners combined, with gender disaggregation

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19 Male							4		1	6	23	10	4	2	5	3	8		- Fonde		
20 Total							4		1	6	23	10	5	2	6	3	10				
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29 = Argentina		16	16	4	16	8		10	12	4	8	4	8	16	20	18	10				
30 Female		3	3	1	4	2		1	1		4	1	2	4	4	5	2				
31 Male		5	5	1	4	2		4	5	2		1	2	4	6	4	3		Row Labels	Σ Values	
32 Total		8	8	2	8	4		5	6	2	4	2	4	8	10	9	5		COUNTRIES 💌	Sum of Value	-
33 = Armenia																			Gender 🔻		
34 Female																					
35 Male																					
36 Total																					
37 = Australia		2	2	12	18	2	4	12	4	2			14	14	12	18	26				
38 Female		1	_	3	2	1	1	3		1			5	4	4	6	7				
39 Male			1	3	7	-	1	3	2	-			2	3	2	3	6		Defer Layout Updat	e Upo	fate
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Using Pivot Table to create a longitudinal file for one reporting country by continent aggregates and gender disaggregation

To create a table that only reports aggregate data by continent, the same filtering process can be used. This time, in the 'Country codes –UN based-' filter, users should de-select all fields except for AGG. You will generate a table similar to the one in Figure 3. Please note that you will have the same problem described above with a total being calculated and displayed **in bold** by Pivot Tables, which must be discarded. Moreover, please note that by using the AGG table, you will use the aggregates reported by the national statistical office of the Czech Republic. Should you want to use aggregates that are comparable across countries, follow the next example.

Figure 3 Creating a longitudinal file for inflows to the Czech Republic, by continent of last residence, citizens and foreigners combined, with gender disaggregation

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Row Labels			4055	4050	4057	1050	4050	4000	1004	4000	4062	4004	4000	1000	1967	1000	4000	4070	4074	4070		Major area	
	•	1954	1955	1950	1957	1958	1929	1900	1901	1902												Major area code	
Africa AGG Female											320 24	352 24	226 8	250 7	224 6	316 40	172 8	240 9		222 25		Region Region code	
Male											136		8 105	118	106	40 118	8 78		105	25 86		Development -UN based 20	10
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Total			-				50				160	176	113	125	112	158	86	120		111		Collection method	
America AGG		74	70	64	104	98	58				242	140	166	244		292	254					Criterion	
Female		13	15	16	25	18	10				28	19	27	44	32	64	50	52		42		Type of flow	
Male		24	20	16	27	31	19				93	51	56	78	77	82	77	77		50		Coverage -Citizens/For	eigners/
Total		37	35	32	52	49	29				121	70	83	122		146	127	129	68	92		Vear Year	
Asia AGG											630	636			1158			1276				Gender	
Female Male											9	19	52	56	112		40	77	78	27		✓ Value	
Male											306	299	317	288	467	772	183	561		95			
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Australia and Oceania AGG											2	4	14	14	16	32	28	10		14		Drag fields between areas belo	
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Total											1	2	7	7	8	16	14	5		7		Country code	
Europe AGG Female															2330							Criterion T	
		506			676	459	413	455	443	369	379	423	533	826	695	710	600	630			1	Coverage -Ci 🔻	
Male		545	568		602	368	293	275	283	225	278	283	335	586		1171							
Total				1168		827		730	726		657	706	868	1412	1165	1881	1862	1501	1448	2315	4		
Other countries AGG		800	220		478	396	446	824		1092													
Female		113	27	32	45	22	13	46	35	24												Row Labels Σ	/alues
Male Total		287	83		194				434														of Value
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Using Pivot Table to create a longitudinal file for one reporting country by DEMIG C2C continental codes and gender disaggregation

Because data from the various national statistical offices have been coded with major area and regional codes following UN based (as well as WDI based) coding, users can create overview tables that aggregate flows by major area and region which are comparable across reporting countries. To run such a table, follow the example in Figure 4. Rather than having the 'Countries' field in the Row Labels box, drag the field Major area. Make sure that in the field 'Country codes –UN based' you have all codes selected

EXCEPT AGG, OTHA and TOT. Now all country and residual fields are selected and they are reported by Major Area of the world. Note that a row titled Unspecified appears: this contains data that had been reported by the Czech statistical office as Other or other undefined category, which would not be assigned to any specific area or region.

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Country codes -UN based-	(Multiple Items) 🖓	r																		Reporting country
Criterion	COR 🦪																			
Coverage -Citizens/Foreigners/B	oth-Both 🗊	ſ																		UN numeric code
																				Country codes -UN based- Country codes -WDI based-
Sum of Value	Column Labels																			Major area
Row Labels	T 1954	4 1955	1956	1957	1958	1959 :	1960	1961	1962 :	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	Major area code
Africa	10	5 26	6	38	90	90	168	318	288	320	352	226	250	224	316	172	240	256	222	Region
Female	:	5 10	3	3	6		1	4	4	24	24	8	7	6	40	8	9	23	25	Region code
Male	:	3 3		16	39	45	83	155	140	136	152	105	118	106	118	78	111	105	86	Development -UN based 2010-
Total	1	3 13	3	19	45	45	84	159	144	160	176	113	125	112	158	86	120	128	111	Dev code UN based 2010
Americas	74	4 70	64	104	98	58	130	278	256	242	140	166	244	218	292	254	258	136	184	Collection method
Female	13	3 15	16	25	18	10	24	18	12	28	19	27	44	32	64	50	52	34	42	Criterion
Male	24	4 20	16	27	31	19	41	121	116	93	51	56	78	77	82	77	77	34	50	Type of flow
Total	3	7 35	32	52	49	29	65	139	128	121	70	83	122	109	146	127	129	68	92	Coverage -Citizens/Foreigners/ Vear
■Asia	77	3 190	262	406	280	246	456	238	492	630	636	738	688	1158	1902	446	1276	676	244	Gender
Female	10	7 17	23	39	12	5	18	9	5	9	19	52	56	112	179	40	77	78	27	Value
Male	283	2 78	108	164	128	118	210	110	241	306	299	317	288	467	772	183	561	260	95	
Total	385	9 95	131	203	140	123	228	119	246	315	318	369	344	579	951	223	638	338	122	
Europe	177	3 2020	1828	2026	1086	1164	1188	1094	966 1	1104	1126	1230	1852	1616	3282	3390	2678	2508	4224	-
Female	44	7 565	517	516	298	306	353	322	287	302	320	370	525	476	537	486	530	522	811	Drag fields between areas below:
Male	443	2 445	397	497	245	276	241	225	196	250	243	245	401	332	1104	1209	809	732	1301	Report Filter Column Labe
Total	88	9 1010	914	1013	543	582	594	547	483	552	563	615	926	808	1641	1695	1339	1254	2112	Reporting co Year
Oceania		2 2	12	18	2	4	12	4	2	2	4	14	14	16	32	28	10	10	14	Country code 🔻
Female	:	1	3	2	1	1	3		1	1	1	5	4	6	8	8	4	2	2	Criterion 🔻
Male		1	3	7		1	3	2			1	2	3	2	8	6	1	3	5	Coverage -Ci 🔻
Total	:	1 1	6	9	1	2	6	2	1	1	2	7	7	8	16	14	5	5	7	
Unspecified	4	4 2	12	16	24	106	58	100	54		6								4	
Female			3	1	3	7		4	2		1									
Male	:	2 1	3	7	9	46	29	46	25		2								2	Row Labels Σ Values
Total	:	2 1	6	8	12	53	29	50	27		3								2	Major area Sum of Value
🗆 USSR (former)	324	484	508	530	568	248	272	358	222	210	280	506	972	714	480	334	324	388	406	Gender
Female	55	9 119	141	160	161	107	102	121	82	77	102	163	301	219	173	114	100	116	132	
Male	10	3 123	113	105	123	17	34	58	29	28	38	90	185	138	67	53	62	78	71	
Total	163	2 242	254	265	284	124	136	179	111	105	140	253	486	357	240	167	162	194	203	
Grand Total	297	5 2794	2692	3138	2148	1916	2284	2390	2280	2508	2544	2880	4020	3946	6304	4624	4786	3974	5298	
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Figure 4 Creating a longitudinal file for inflows to the Czech Republic, by continent of last residence, citizens and foreigners combined, with gender disaggregation, using comparative DEMIG C2C area codes

Note that by also dragging the field 'Region' into the Row Labels box, you will see both the continental (area) and sub-continental (regional) disaggregation. Also note the recurring problem that the data **in** bold is double-counted and MUST NOT BE USED.

These examples are meant to provide a few guidelines. For complete instructions on creating Pivot Tables, users should refer to the official support documentation for Microsoft Excel.

We would like to caution even experienced users of Pivot Tables in handling DEMIG C2C data. This database contains complex data and users should exercise close attention to the filtering process as it is common to forget to exclude some field and over count data. It is recommended to start from the simplest tables, make a note of the expected total figures and double-check that the totals are not much larger than expected as more variable (fields) are added to tables.