# Introduction

## Objectives and structure of the handbook

Improvement of the collection and quality of migration data has been a long-standing concern for data producers, users and policymakers. The ability to measure international migration accurately is imperative for evaluating and monitoring policy decisions related to a wide range of topics, like regional population growth and decline, out- or in-migration of highly skilled workers, impact of migration on the local labour market, socioeconomic integration of migrants, working conditions for migrant workers, and the economic impact of remittances. However, the improvement of statistical systems to measure migration has been a slow process because of weak coordination between migration statistics producers, discrepancies in the applied definitions, and challenges related to data collection.

International migration and the need to improve its measurement are particularly important in the CIS region where migrant stocks and flows are large. Countries of the region share a number of common historical, cultural and linguistic patterns, which facilitates movement between countries, including movement of labour.

In addition to population censuses, the primary data sources for measuring international migration include a wide variety of administrative data and sample surveys. There are other potential sources being investigated, such as “big data,” but the aforementioned sources remain the primary means of gathering information. Improving their use is thus critical for improving the measurement of migration.

The objective of this handbook is to guide statisticians and other professionals in producing and using migration data from administrative sources and household surveys. The first introductory chapter of the handbook includes a description of the key concepts and definitions for the measurement of migration. Chapter 2 provides practical information on the sources and use of administrative data to measure migration, and highlights many of the inherent methodological and organizational challenges of using administrative data. Chapter 3 addresses the use of sample surveys to measure migration, including information about different survey types, methodological processes to govern the use of surveys to collect information on migration, as well as an inventory of migration surveys and best practices in the region.

## Key concepts and definitions for the measurement of migration

A critical question to address is how statistical systems operationalize and define international migration. Thus the first step towards creating comparable migration statistics is to come to agreement on common terms and definitions. Lack of uniform definitions on migration is an important reason for inconsistency in migration statistics between countries. Even within countries, data comparability issues exist, as many individual systems are set up to respond to specific administrative objectives, not for accurate measurement of international migration. Tackling these challenges is necessary to improve migration data at the national, regional and global levels.

Migration, both internal and international, is often studied by looking at its size, characteristics of migrants, and the impact migration has on both migrants themselves and areas from which they come and to where they go. At its most basic level, migration consists of two primary units of analysis, the person (who moves) and geography (where the person moved from and where the person moved to). Migrants are normally defined as persons who have changed their place of usual residence. For the purposes of international migration, a person’s country of usual residence is that in which a person lives, that is to say, the country in which the person has a place to live where the person normally spends the daily period of rest (United Nations Recommendations on Statistics of International Migration, 1998). Whether the change of residence crossed international or local borders, as well as duration (time) and purpose (reason) of stay, are additional criteria for defining a migration typology.

Statistics on the size of the migrant population are normally collected on the basis of migrant stock or flow. Simply put, international migrant stock is the total number of international migrants living in a country at a particular point in time, while the international migration flow is the number of migrants entering or leaving a country over the course of a specific period (e.g. one year). The main criteria for measuring international migrant stock and flow are country of citizenship and birth, while duration of stay also further delineates statistics on migration flows.

### Foreigners and the foreign-born

From a policy perspective, countries tend to distinguish between the immigration and emigration of local and non-local residents. Depending on whether one is trying to measure movement to or from a country, as well as whether primary interest lies in the movement of nationals or non-nationals, different operational issues exist. Nationals and non-nationals (foreigners) are normally identified by looking at their citizenship status. Foreigners are defined as those without citizenship of their current country of residence, thus “non-citizens” are distinguished from “citizens.” While this distinction is often important from a policy perspective, a potential drawback to this approach is that it can include foreigners who were born in their country of residence, thus have never moved and should not technically be considered international migrants (have never changed country of usual residence). This approach also includes naturalized immigrants as citizens, which could be less useful from a policy perspective, depending on what is of interest.

Alternatively, or in addition, many countries look at a person’s country of birth to identify migrant status. Those born in their country of residence (natives) are distinguished from those born outside of their country of residence (foreign-born). Use of the foreign-born classification has the advantage of corresponding to actual change of residence if a usual resident of a country was born in another country. Relative to policy relevance, people born outside their country of current residence, but citizens of this country at birth (e.g. born abroad of national parent(s) living abroad) are often excluded from “foreign-born” tabulations. The foreigner and foreign-born criteria apply to measurement of migrants in terms of both total stock and flows over specified periods.

### Measurement of migrant stock

According to the United Nations Recommendations on Statistics of International Migration (1998), a country’s stock of migrant population can be measured by all persons who have that country as their country of usual residence and who are citizens of another country (foreign population) or whose place of birth is located in another country (foreign-born population). Although slightly different from the stock of international migrants (those who have ever changed their country of usual residence), the stocks of foreigners and foreign-born are deemed highly relevant for the study of international migration.

Thus, the foreign-born are the group of persons who were born in another country. This group corresponds to the stock of international migrants that migrated at least once in their life and reside outside of their country of birth. Persons born in the country are defined as natives. Foreigners are the group of persons who do not have citizenship of the country. Foreigners can be foreign-born or native born. Persons having citizenship of the country are defined as nationals who can be foreign or native born. Regarding measurement of the foreign-born, geography at time of data collection should be used, thus it is important that those who have never moved, but whose country of birth changed due to international boundary changes, not be counted as foreign-born.

Both methods of measurement have advantages and disadvantages. The advantage of using citizenship-based criteria to measure migration is that it is often policy-relevant, is a relatively objective measure, and is commonly reported across many countries. Disadvantages of using citizenship to measure migrants are that citizenship is fluid (can change over time), the possibility of dual-citizenship (persons can be citizens of more than one country), and the aforementioned fact that foreigners are not necessarily migrants. The advantages of using country of birth as a measure are permanence (place of birth does not change, though country borders can objectivity (though some countries use the measurement of the mother’s place of usual residence at time of birth, rather than actual place of birth), and direct relationship to changing country of residence over one’s lifetime. However, this variable is often deemed less policy-relevant than citizenship, can include nationals (born abroad of native parents or naturalized citizens), and as already mentioned, country borders can change over time (possibly making someone foreign-born who has never made an international move).

In addition to population groups identified on the basis of place of birth and citizenship, information on these groups is often not sufficient to monitor and analyse the impact of international migration over time, particularly from an integration perspective. Therefore an additional population group, descendants of the foreign-born (persons with foreign/national background), is often identified, which includes those persons born in the country whose parents were born outside the country. Persons in this group may or may not have directly experienced an international migration event. Several generations of descendants can theoretically be distinguished, that is: persons whose parents, grandparents, etc., were born abroad. However, in practice, data collection is generally restricted to those persons whose parents were born abroad (often referred to as the “second generation”).

These different criteria for measuring migrant stock are important for understanding the size of migrant populations and their descendants. While change of usual residence is the underlying theoretical assumption for measurement of international migrant stock, it is even more essential, combined with duration of stay, for determining the size of migration flows. The United Nations recommendations on measuring migration flows are discussed in the following section.

### Duration of stay and measurement of migration flows

Duration of stay for migrants, either actual or intended, is a critical criterion for measurement of migration flows. According to the United Nations Recommendations on Statistics of International Migration (1998), for the purposes of measuring migration flows, an international migrant is defined as “any person who changes his or her country of usual residence.” As shown earlier, a person’s country of usual residence is that in which the person lives, that is to say, the country in which the person has a place to live where he or she normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, business, medical treatment or religious pilgrimage does not entail a change in country of usual residence.

The United Nations Recommendations further define two types of migrants by duration of stay criteria. In brief, long-term migrants are defined as those who move to a country other than their country of usual residence for a period of at least one year, while short-term migrants are people who move to a country for a period of at least three months but less than one year. In practice, most countries collect migration flow data on a yearly (12-month) basis, though some survey based questions use a five-year period. International migration flow data are more typically reported for foreigners than the foreign-born. In terms of international migration data availability, in-flow data (immigration) are much more common than out-flow data (emigration).

### Long-term and short-term migrants and data considerations

In practice, the distinction between short- and long-term migrants is often difficult to make, particularly given different data collection systems used by different countries. The complete United Nations definition for long-term migrants is “a person who moves to a country other than his or her usual country of residence for a period of at least one year (12 months), so that the country of destination effectively becomes his or her new country of usual residence.” The complete United Nations definition for short-term migrants is “a person who moves to a country other than that of his or her usual residence for a period of at least 3 months but less than a year (12 months) except in cases where the movement to that country is for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment, or religious pilgrimage.”

These recommendations potentially make migrant flow classifications difficult to collect using current data systems, either administrative or survey based. Not only does country of usual residence need to be determined, but so does the migrant’s duration of stay. Per the United Nations recommendations “the act of being inscribed in a population register or country other than their own, being granted a permit to reside in country, or declaring intention of staying for at least one year, are all ways of making the concept of change of usual residence measurable.” This means countries can use different methods to determine duration of stay, which further complicates data comparability at the international level.

The duration of stay criterion for a long-term migrant can be determined by either actual or intended duration of stay of at least 12 months, thus is subject to practices used by different national data collection systems. For example, different countries have different time criteria for entering migrants into their population registers (e.g. 3 months, 6 months, 12 months), which can complicate determination of change of usual residence. While duration of stay is often inferred from visa types or permit lengths, various work and residence permits have varying lengths of duration, depending on type and formal agreements between countries (e.g. many countries now have visa free regimes, which allow persons to move to countries for up to 3 months without visas or registration). In addition, migrant self-declaration of length of stay upon entry will not necessarily correspond to their actual time spent in the country.

The United Nations recommends using actual duration of stay rather than intended duration of stay, since it provides a more accurate picture of long-term migration. Obviously, some migrants’ intended duration of stay will not match reality (either determined at 12 months and leaving earlier, or determined at less than 12 months, and staying longer). Thus it is recommended that migration figures be retroactively adjusted (using a lag of one and a half years to produce migration flow statistics), which is often difficult methodologically, and especially difficult to explain from a policy perspective. These “status changes” include short-term migrants who become long-term, foreigners originally admitted as non-migrants, irregular migrants who have become regularized as long-term migrants, as well as asylum seekers whose refugee status has been determined.

The difficulty of determining change of usual residence and duration of stay is even greater when measuring the flow of short-term migrants. Short-term migrants are presumed to be a rapidly growing and increasingly important group of migrants, particularly for labour migration, coinciding with increased globalization and frequent repeated moves back and forth across international borders (e.g. circular migration). Technically, short-term migrants do not normally change their country of usual residence (which remains their country of origin), but for the purposes of international migration statistics, the country of usual residence of short-term migrants is considered to be the country of destination during the period they spend it in. In addition, the 1998 United Nations recommendations make an effort to distinguish short-term migrants from tourists, which is often misinterpreted to mean that short-term migrants only include those who move for work or study-related reasons. In fact, asylum seekers or other humanitarian migrants, those moving for family reunification or formation, or even climate-related migrants, would be counted as short-term migrants if the duration of their moves were greater than 3 and less than 12 months. Also note these definitions exclude many temporary migrant workers (e.g. some seasonal migrants), who often move to a country for a period of less than 3 months.

Another related group of interest, but not migrants per definition, are cross-border (or frontier) workers. These are foreigners who have been granted permission to be employed on a continuous basis in a receiving country provided they depart at regular or short intervals (daily or weekly) from that country. This group could also include those without formal permission (informal) to work in another country, but none-the-less commute across borders to work on a regular basis. Information on both citizens and foreigners working under these arrangements are of interest to many countries. In addition to change of usual residence and duration of stay, the final dimension for measuring migrants is based on their reason for move.

### Purpose of stay

While many would agree that people have mixed and multiple motives for migrating, including both economic and non-economic reasons, there is no simple answer to the question of why people move. An individual’s reason to leave a country of origin could differ from their reason to come to a country of destination. Some basic groups defined by purpose of stay are those moving for work-related, family-related, education-related, and for humanitarian reasons. As such, in addition to distinguishing between short- and long-term migration, migration flow statistics are also often further disaggregated by purpose of stay.

Employment-related migration is one of the most important categories for defining migrants and includes foreigners admitted or allowed to remain in the country for employment reasons. This group includes migrant workers, either seasonal, contract workers, project tied workers, or temporary, as well as those with the right to free establishment (e.g. citizens of the EU) or long-term settlement based on high-skilled qualifications. As noted before, people may move for temporary work for a period of less than three months, thus are not counted as migrants. Another category of migrants are those admitted for education or training, including students, trainees, and interns. A third major group of migrants are those who move for the purposes of family reunification or formation. This group includes foreigners admitted because they are immediate relatives or fiancé(e)s of citizens or other foreigners already residing in the receiving country, or because of other family ties. The fourth major group of migrants are those admitted for humanitarian reasons, which include refugees, asylum seekers, foreigners granted temporary protected status, and persons admitted for humanitarian reasons. Additional migrants may be granted legal permission to move to (or live in) a country based on criteria like ancestral ties, retirement, entrepreneurship, or by having their irregular migration status regularized.

### Irregular migration

Regarding regularization of irregular migrants, irregular migrants remain the most difficult migrant group to measure. In theory, international migrants should be determined by change of country of usual residence, thus if the duration of stay criteria is met, irregular (or illegal) migrants should be counted. In practice, this is much more difficult, as irregular migrants, by the nature of their irregular status, are often missing from regular data sources used to measure migrants.

It is also important to distinguish between irregular entry and irregular stay. Many irregular migrants enter a country through legal means but overstay visas (or had refugee status rejected) and remain in a country without authorization (irregular stay). Others bypass formal methods altogether and enter a country via invalid travel documents or through non-controlled borders, which are examples of irregular entry. Because irregular migrants often use informal methods of entry, it is extremely difficult to measure this population, especially seasonal migrants and others who repeatedly move back and forth between two or more countries, leading to under measurement of this group when regular data sources are used. Given the inherent difficulties measuring this population, sources often rely on border apprehension data (plus police records on returns/deportation/expulsions). However, this method is particularly limited in its accuracy as only a fraction of illegal border crossings are documented with apprehension data, and is highly dependent on fluctuations corresponding with the intensity of border enforcement. Since many irregular migrants are undocumented, it is only after regularization of migrants that an accurate “after the fact” measure of their size is obtained (based on the number of regularizations/amnesties granted). These same issues arise when looking at sub-groups of irregular migrants, such as trafficked or transit migrants.

It should also be noted that categories classifying migrants by purpose of stay are not mutually exclusive, which can create challenges when determining these groups. As people often move for many reasons, determining a single reason for move can be difficult. However, purpose of move can be gleamed from a number of different data sources, including both administrative and self-reported. One of the most common methods to determine a migrant’s purpose of stay is to use visa or resident permit information, which includes the legal reason for a migrant’s stay in the country. Another method is to ask migrants themselves as to their reason for move, through either a household survey or population census. However, the results of these two different methods can vary greatly.

As mentioned previously, the primary sources of data to measure international migration, aside from population censuses, are administrative data and sample surveys. The following chapters will address these specific sources in more detail, with particular application to the CIS-region.