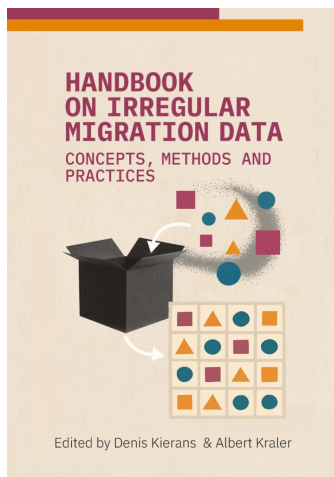




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Box 7.1: Applying the ‘Signs of Life’ method: The case of Italy

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A similar approach has recently been applied in **Chile**, where the number of irregular migrants is estimated by integrating data from post-census administrative records on education, tourist stays, and police reports, and comparing this data against the baseline of residence permit applicants (see Box 7.2). In **Spain**, everybody is encouraged to register in the municipal population registers of their municipality (*Padrón Municipal*). The registration is a prerequisite for accessing basic rights and public services, such as health care and schooling. It is independent of legal status and – crucially – is not used for immigration control. As a consequence, the *padrones* even include irregularly staying migrants. When comparing or linking the *padrón* data to other administrative datasets, it is possible to assess questions around migrant irregularity, such as deriving the number of irregularly staying migrants

from a comparison of the *padrones* with the database of legal stay permits (González-Enríquez, 2016). In the **UK** and **Poland**, recent efforts have been undertaken to produce a time series of the number of irregularly staying migrants based on the ethnic economies approach and non-linear count regression models. The assumption is that regularly settled ethnic groups provide support for individuals of similar ethnicity from their countries of origin to circumvent national restrictions on migration rules regarding work. Based on this, the numbers of detentions extracted from official police and border enforcement data are scaled up to the regularly residing foreign population using non-linear count regression models to estimate the number of irregularly staying migrants per country of origin (Beręsewicz, 2024).¹

Box 7.1: Applying the ‘Signs of Life’ method: The case of Italy

Marco Marsili

In Italy, the National Institute of Statistics (Istat) identifies the number of irregularly staying migrants by applying the Signs of Life (SoL) approach. To this end, in a first step, data on migration (changes of residence) are drawn from the centralized population register (ANPR, managed by the Ministry of the Interior). These data are subjected to standard control and correction procedures. In general, the quality of the data is quite high; in case of partial non-response, the information is filled using donor hot-deck methods of imputation or by retrievals from the previous year’s census, where available.

In a second step, the information of the ANPR is integrated into a demographic data system (Midea-Anvis, Micro-DEmographic Account - Virtual Statistical register of the population) which, in addition to migrations, also incorporates data of other population changes (births, deaths, acquisitions of citizenship). Midea-Anvis is a counting system based on micro-data, in which all data are integrated with each other and with respect to the population of the last census, in order to verify the stock-flow coherence of the information acquired.

The last step is comparing Midea-Anvis with a large set of administrative archives (AIDA, Integrated Archive of Administrative Data), including, among others, the tax, social security, energy consumption, and education registers as well as the Cadastre of buildings and constructions. Each administrative archive in AIDA provides life signals on habitually resident persons who have spent a significant amount of time in Italy over the last three years. The comparison between AIDA and Midea-Anvis produces three distinct datasets:

1. individuals present in Midea-Anvis and confirmed as residents through the life signals system in AIDA (the so-called “usual resident population”);
2. individuals not present in Midea-Anvis but with strong life signals in AIDA (under-coverage);
3. individuals present in Midea-Anvis but without life signals in AIDA (over-coverage).

¹ This research was led by Brendan Georgeson (Office for National Statistics, UK) and Maciej Beręsewicz (Poznań University of Economics and Business, Poland).

The second of these datasets is relevant information about irregular migrants. It comprises all those individuals who, despite not having specific authorization to reside in the national territory (for example, because they have an expired residence permit) show signs of administrative life in Italy (e.g. because of working, studying or awaiting residence permit renewal). Hence, as regards irregular or undocumented migrants, the current structure of the data production system allows to correctly focus on a specific group of irregularly staying migrants. On the other side, the evaluation of fully undocumented migrants is most challenging as, by definition, they do not show any sign of life. Nonetheless, Istat also produces national estimates of fully undocumented migrants on a yearly basis. The sources used to produce these estimates have varied over the years, depending on data availability, including sample surveys and data from administrative sources. In recent years, the methodology has been improved by also integrating data of the Ministry of the Interior relating to police stops on the territory or at the border, as well as data relating to actual repatriations to countries of origin.

In contrast, **Germany** presents a unique case in this regard, as it has been using a Central Register of Foreigners (AZR) for over 70 years, which includes comprehensive data on the majority of non-nationals staying in the country, even parts of those without legal residency status. The reason is that in Germany, many migrants who are formally obliged to leave the country are issued a *Duldung* (tolerated status) while their removal is temporarily suspended due to either actual obstacles (e.g.

missing travel documents or illness) or legal reasons (e.g. family unity) preventing deportation. These migrants are well captured in the Central Register of Foreigners, meaning that the register is suited for detailed analyses aimed at specific subgroups of irregular migrants. The rest of this chapter will present the Central Register of Foreigners and the potentials and pitfalls of using its administrative data in irregular migration research.

Box 7.2: Chile's experiences in integrating data for estimating the foreign population with irregular migration status²

Julibeth Rodríguez and Felipe Mallea

Since 2014, Chile has witnessed an increasing migrant flow, which has meant that the country must assume the challenge of officially measuring the phenomenon. To this end, the National Statistics Institute (INE) and the National Migration Service (Sermig) have developed a methodology for estimating the number of foreign nationals residing in Chile between censuses by linking border-control data with residency applications after the 2017 Census.

This study employs a methodology that integrates baseline data from the census with data from post-census administrative records by linking microdata of various government institutions. A critical component is using administrative records to identify populations with a potentially irregular migration status.

2 This work was conducted by the Studies Department at the National Migration Service of Chile and the Demography Subdepartment at the National Institute of Statistics of Chile (team members: Gabriel Santander, Consuelo Salas, Marisol Opazo, Pablo Roessler, Felipe Hugo, Luis Rodríguez, Miguel Ojeda, Francisco González). More details are available at: <https://serviciomigraciones.cl/estudios-migratorios/estimaciones-de-extranjeros/> and <https://www.ine.gob.cl/estadisticas/sociales/demografia-y-vitales/demografia-y-migracion>.