Chapter 10

Surveying irregular migrants: Challenges and approaches

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Surveying irregular migrants: Challenges and approaches



Key points

- Irregular migrants are difficult to capture in statistics because of their absence from
 official sampling frames, mobility, and fear of detection. Surveying them requires tailored
 approaches, including non-probability sampling, trust-building strategies and ethical
 safeguards.
- This chapter reviews three types of surveys that can yield data on irregular migrants: those that explicitly include them in the sampling design, those that target applicants of regularisation programmes, and retrospective surveys that reconstruct past legal trajectories.
- Drawing on examples from France, Italy, Spain and the United States, this chapter shows
 how innovative designs and context-specific adaptations can improve coverage and data
 quality.
- Each approach has its own strengths and limitations. A combination of methods, applied thoughtfully, is needed to strengthen the evidence base and support more accurate data collection and analysis.

Introduction

Understanding irregular migration processes is crucial in contexts where legal barriers to long-term immigration are prominent, such as Western migrant-receiving countries. Policymakers not only need techniques to estimate irregular migration flows and stocks, but also data on the lived experiences of undocumented migrants. This includes how legal status interacts with various dimensions of settlement (e.g., health, labour market, family formation, crime, attitudes). Surveying undocumented migrants is one way to

investigate these issues. However, while traditional migration surveys are already challenging (Vickstrom and Beauchemin, 2024), these challenges are amplified when the target population lacks legal status, due to structural, methodological, and ethical issues that distinguish this population from most others.

A fundamental difficulty is that irregular migrants are not generally included in official population registers or sampling frames, leading to identification challenges for researchers. Without a known universe from which to draw a representative sample, it is not possible to apply standard probability sampling methods. Moreover, the lives of irregular migrants tend to be embedded in informal networks and practices. Mistrust can be a pervasive issue: irregular migrants often avoid contact with entities perceived as linked to official institutions due to fear of detection, detention, or deportation. This leads to high levels of non-response and answers shaped by mistrust, especially if anonymity is not fully guaranteed. Building trust requires time, cultural sensitivity, and in many cases, collaboration with community-based actors or mediators.

Even when undocumented migrants are—whether by design or by chance—included in a survey sample, legal status is rarely collected, and if it is, the data are often unreliable. High mobility and precarious living conditions further complicate data collection. Frequent changes in housing and employment, geographic mobility, and periods of complete inaccessibility due to informal work patterns make it extremely difficult to trace respondents over time, particularly in longitudinal studies (Peitz et al., 2024). Finally, undocumented migrants are likely

to differ from the other migrants on the basis of observable and unobservable characteristics. This selectivity can affect the representativeness of any resulting sample.

Altogether, these factors combine to make irregular migrants one of the most difficult populations to study using conventional social science methods. Accurately capturing their living conditions requires not only adapted methodological tools, but also a deep ethical commitment to protection, confidentiality, and respectful engagement. For all these reasons, surveys that include undocumented migrants are generally scarce, small, locally based, and targeted to specific migrant subgroups (Bachmeier et al., 2014). However, a limited number of studies have succeeded in targeting undocumented migrants or including them within broader samples of migrant populations. This chapter examines the most commonly used approaches to surveying undocumented migrants and reviews promising practices. Although most of the research has traditionally been conducted in the United States, the chapter places greater emphasis on Europe, where several innovative approaches have recently emerged.

What types of irregular migration surveys are there?

Surveys that include information on the life conditions of current or former undocumented migrants can be broadly grouped into three main categories, based on their methodological approach and target population:

- 1. The first category comprises surveys that explicitly include undocumented migrants in their sampling design. These are the only surveys that can be used to understand the life conditions of current irregular migrants. They typically compare irregular with regular migrants. These surveys use specific data collection techniques—such as centre-based sampling or other network-based methods—designed also to reach undocumented individuals, or they rely on existing sources that indirectly capture segments of the undocumented population without targeting them explicitly.
- A second category consists of surveys conducted in the context of regularisation programmes. These surveys focus on people applying for legal status and often gather information on their legal trajectories and socio-economic conditions. Some include a longitudinal component, following applicants over time to assess the impact of regularisation on their lives.
- 3. A third type includes retrospective surveys conducted with migrants who currently hold a legal status, but which collect data on their past experiences of irregularity, thereby reconstructing their legal trajectory and capturing temporary phases of undocumented residence. These surveys can be used to understand the situation of migrants who have recently regularised and to understand the medium and long-term consequences of irregularity among regularised migrants.

Surveys that explicitly include undocumented migrants in their sampling design

Some surveys designed to collect information on undocumented migrants avoid the use of a conventional sampling frame altogether. A leading example in Europe is the Regional Observatory for Integration and Multiethnicity (ORIM) in Lombardy, Italy. Active from 2001 to 2021, the program collected data on the living conditions of people with a migration background. Explicit efforts were made to include irregular migrants, who – particularly in ORIM's early years – made up a substantial portion of the foreign-origin population in the area.

Every year, ORIM conducted retrospective, faceto-face interviews with a representative sample of foreign residents in the region using the Centre Sampling Technique (CST; see Box 10.1; Baio et al., 2011). A cornerstone of the ORIM model was its participatory and inclusive approach to fieldwork: interviews were conducted by trained cultural-linguistic mediators of migrant background, enhancing trust and communication, which was particularly important when engaging with undocumented individuals.

Over the course of two decades, ORIM generated a unique cross-sectional data series that supported academic research and informed evidence-based policies in integration, social inclusion, and rights protection. Although the program was discontinued in 2021, it has remained a methodological benchmark for research on hard-to-reach populations and a model for how undocumented migrants can be ethically and effectively surveyed. CST has also been used at the national level in Italy and outside the Italian context (e.g. the Immigrant Citizenship Survey ICS).

Box 10.1: The Centre Sampling Technique

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The **Centre Sampling Technique (CST)** is a probabilistic sampling method developed to reach hard-to-survey populations, particularly undocumented migrants who are typically excluded from standard household surveys due to the lack of a sampling frame. The method was first implemented systematically in Italy. CST is based on the idea that migrants—regardless of their legal status—tend to frequent specific **centres** or **aggregation points** in their everyday lives, such as religious institutions, cultural and community associations, consulates, NGOs, migrant help desks, public spaces, and informal meeting places. The method proceeds in three stages.

First, a **mapping phase** is conducted to identify and classify existing centres that are expected to be regularly visited by the target population within the geographic area of interest. Centres are categorised by type (e.g., religious, cultural, associative, consular), estimated relevance (e.g., estimated average attendance) and population specificity (e.g., open to all migrants or nationality-specific), and then stratified accordingly. Then, **a sample of centres** is drawn, and some individuals are selected in each centre either randomly (e.g., systematic sampling upon entry) or via controlled quota sampling if the flow is not randomizable. The unit of analysis is the individual migrant.

After the end of the interview phase, weights are calculated based on the number of centres attended and their importance, which allows for correcting potential overrepresentation of more socially active individuals.

Some surveys have successfully reached undocumented migrants by exploiting administrative sources that, by their nature, include them. One prominent example in Europe is the **Spanish National Immigrant Survey (ENI**; Reher and Requena, 2009), carried out by Spain's National

Statistics Institute (INE) in 2006–07. The ENI drew its sample from the municipal population register (*Padrón Municipal*), which grants all registered residents—including irregular migrants—access to public health care and other services and is considered representative of immigrants living in

Spain irrespective of their legal status. It collected information on the type of respondents' residence permit and immigration status (e.g., asylum applicant).

Similarly, Germany's IAB-BAMF-SOEP¹ (see Box 10.2) and the Feasibility Study on the Im-/Mobility of Rejected Asylum Seekers (MIMAP; Stache et

al., 2024) include groups such as rejected asylum seekers with temporary suspension of removal ('Duldung'), capturing segments of the population who experience forms of de facto irregularity. The MIMAP Survey, in particular, was explicitly designed to target irregular migrants through its sampling strategy and questionnaire items.

Box 10.2: Surveying irregular migrants with an existing sampling frame – The IAB-BAMF-SOEP survey of refugees

Randy Stache

As in any survey, a suitable sampling frame that includes the entire target population and enables sample selection as well as contact details is crucial for reliable survey data collection on irregular migrants and for generalizing empirical results. In Germany, the Central Register of Foreigners (see Chapter 7) offers such a sampling frame for subgroups of irregular migrants, enabling representative samples and the use of traditional survey methods. Since 2016, **the IAB-BAMF-SOEP Survey of Refugees** is annually surveying refugees who arrived in Germany since 2013 in a panel study, regardless of the outcome of their asylum procedures. As a result, the data include irregular migrants known to the authorities whose deportation has been temporarily suspended (tolerated/*Duldung*).

The dataset offers several advantages to analyse the living situation of irregular migrants: 1) Accessibility to external researchers via a data usage agreement. 2) Broad thematic coverage, including migration trajectories, housing, employment, language acquisition, health, attitudes, religion. 3) Longitudinal design, allowing for the observation of individual developments over time. 4) A heterogeneous group of irregular migrants in terms of age, gender country of origin, and other characteristics. 5) Comparative potential, enabling systematic analyses of differences between individuals with tolerated status and other groups (recognized refugees or migrants and natives—when using the compatible SOEP-CORE and IAB-SOEP MIG data), and the identification of influencing factors across domains.

However, when using the data for research on irregular migrants some limitations arise: 1) The dataset **includes only a specific subgroup** of irregular migrants – those with tolerated status following an asylum application. Additionally, this group tends to participate less often in follow-up surveys and had higher non-response. 2) Additionally, **not all topics are covered in every survey wave**. 3) As a result, **representativeness and reliable estimations may be limited** for certain research questions. However, statistical techniques such as weighting, pooling of waves, or propensity score matching can help mitigate vthese issues. 4) There is **inherent selectivity**: irregular migrants who have returned, moved to another country, or gone into hiding are not captured in the data. 5) Some **questions central to the lived experiences of irregular migrants** – such as work permits, life in irregularity, coping with the threat of deportation, or expectations regarding their country of origin – are either absent or not asked in a way that avoids possible bias, like social desirability.

¹ This survey is undertaken by the Research Centre of the Federal Office for Migration and Refugees (BAMF-FZ) in cooperation with the Institute for Employment Research (IAB) and the Socio-Economic Panel (SOEP) at German Institute for Economic Research (DIW Berlin). Further information can be found at https://www.diw.de/en/diw_01.c.930532.en/iab-bamf-soep_survey_of_refugees.html

The **Brief Analysis 3/2024** published by the Research Centre of the Federal Office for Migration and Refugees illustrates how this data can be used to **study the living conditions of tolerated persons** in comparison to recognized refugees, using propensity score matching. The comparison shows that both groups are similarly integrated in terms of language skills and employment. However, the tolerated are more likely to live in shared accommodations and report much lower life satisfaction, which further declines over time (Stache, 2024).

References:

Stache, R. (2024). Auswirkungen einer Duldung auf Lebenssituation und Lebenszufriedenheit. (BAMF-Kurzanalyse, 3-2024). Nürnberg: BAMF.

https://doi.org/10.48570/bamf.fz.ka.03/2024.d.2024.duldung.1.0

In the US, nationally representative surveys have been used to identify 'likely undocumented' immigrants through imputation. For example, using the Survey on Income and Program Participation (SIPP), a longitudinal study investigating occupational-related aspects in the US, some scholars exploited limited information on visa status (concerning citizenship and legal permanent

resident (LPR) status) and participation in welfare programs to infer immigrant respondents' current legal status (Hall et al., 2010). Other studies have developed imputation methods based on observable characteristics unrelated to legal status, which have been applied to the **Current Population Survey (CPS)**, the American labour force survey (Passel and Cohen, 2014).

Surveys targeted to applicants of regularisation programmes

Surveys targeting applicants of regularisation programmes are a key source of empirical evidence on migrants who have experienced irregularity. However, they only capture information on those who successfully applied, and therefore exclude non-applicants or rejected cases. These surveys are typically conducted in the process of major legalisation programmes and are designed to capture individuals' socioeconomic characteristics, labour market trajectories, and integration patterns.

One of the most prominent examples is the **Legalized Population Survey (LPS)**, a longitudinal survey launched in the US after the 1986 Immigration Reform and Control Act (IRCA), which granted legal status to nearly 2.7 million undocumented migrants. Conducted in two waves, the LPS collected detailed data on pre- and post-

legalisation employment, mobility, income, and legal trajectories, and remains a foundational source for studying the economic impacts of legalisation. The first wave of the survey (LPS1) gathered data from 6,193 individuals who had applied for temporary residence status by January 31, 1989. Respondents were asked to report their employment status during the week preceding the submission of their amnesty application. In the second wave (LPS2), conducted in 1992, a followup was carried out with 4,012 participants from LPS1 who had since obtained lawful permanent residence. While the sample is not representative of all individuals who received amnesty under IRCA, the longitudinal design remains a major strength for analysing changes in employment outcomes over time, specifically around the critical transition from undocumented to legal status.

Another smaller scale example is the **Parchemins Study**, a prospective, mixed-methods panel survey conducted alongside Operation Papyrus, the 2017–2018 regularisation scheme for undocumented economic migrants in the Swiss canton of Geneva.

It tracked approximately 400 individuals up to 3 years after regularisation, focusing on the effects of regularisation on their health and well-being (Lives Centre, 2020).

Retrospective surveys on migrants who currently hold a legal status collecting data on their past experiences of irregularity

A third type of survey focuses on the past irregular experiences of migrants who now hold legal status. By working with immigrants holding legal status, these surveys simplify sampling design, but rely on respondents' recall and willingness to disclose prior undocumented residence through direct questions (e.g., 'Have you ever been irregular?') and collecting information on how their legal status changed over time (e.g., the types and timings of residence permits).

Examples include the **Social Condition and Integration of Foreign Citizens (SCIF)** survey, conducted by the Italian National Statistical Office

(Istat) in 2011-12, and **Trajectories and Origins 2 (TeO2)**, carried out by the French Institute for Demographic Studies (INED) and the National Institute of Statistics and Economic Studies (INSEE) in 2019-20 (see Box 10.3). One of the main limitations of these studies lies in their exclusive focus on the initial phase of irregularity (i.e., between arrival in the destination country and the acquisition of a first permit) without reconstructing respondents' full legal status trajectory. To address this limitation, one could extend the time frame by combining retrospective questions about past legal status with longitudinal or prospective data that track respondents over time.

Box 10.3: Reliability in measuring migrants' legal trajectories and experiences of irregularity in a retrospective survey: The case of "Trajectories and Origins 2"

Julia Descamps

In a retrospective survey, how much can we rely on the data collected on legal status and past episodes of irregularity? Drawing on the example of the French Trajectories and Origins survey (Ined, INSEE, 2019-2020), the potential biases were considered (Descamps, 2024). Two of these are particularly challenging in the context of surveying irregular migration. Memory bias, which occurs when the content of a response depends on the ability to recall information, could affect migrants with insecure and bumpy legal trajectory. Social desirability bias, a tendency to present oneself in a favorable light to others, might be more prevalent among migrants who have experienced irregularity, an experience on the legal margins, therefore particularly sensitive. Those biases are tested using TeO2 survey, by examining the non-response rates, and quantifying the under-reporting of irregularity, on a sample of 7,057 immigrants arrived to France after the age of 18.

Non-response to the question "Have you ever been irregular?" is low (1%), and does not increase with the length of time since arrival, unlike the non-response rate on the first legal permit in France. Regarding irregularity, memory bias appears to be minimal: respondents found it more difficult to recall events from the early stages of their legal journey, but were less hesitant when it came to irregularity.

The length of time that respondents declare they spent as irregular migrants is then compared with a proxy for irregular status on entry: the time it took them to obtain their first residence permit (from the year they entered France to the year they obtained their first residence permit). Positive differences between the two figures (reported time with undocumented status inferior to time before first residence permit obtained) are taken as evidence of under-reporting of periods of irregular status by respondents. Taking only those respondents with a gap between accessing France and obtaining their first permit – who could therefore underreport this situation – 70% of cases match within one year. The proportion of under-reported irregularity is 27%. This rate is an estimate of the social desirability bias. This bias appears to be more prevalent among educated migrants. The feeling of downward social mobility associated with irregular status, stronger when the social status in the home country is high, can lead respondents to regain control over their migratory narrative. The same is true of asylum applicants who were denied refugee status: they also tend to under-report irregularity. Their experience of administrative domination could lead them to modify their account of their irregular status. Social desirability bias could also overlap with memory bias, with partial answers being due to the often precarious and rocky migration trajectories of asylum seekers.

These results highlight the importance of statistically surveying migrants about their various legal statuses and experiences of irregularity. Particular attention should be paid to the effects of categorisation and the leeway it provides.

References:

Descamps, J. (2024). Can We See Their ID? Measuring Immigrants' Legal Trajectory: Lessons From a French Survey. International Migration Review, 0(0). https://doi.org/10.1177/01979183241295995

Another notable example is the ELIPA 2 French panel, conducted by the Ministère de l'Intérieur et des Outre-Mer in three waves (2019, 2020, and 2022) with a representative sample of immigrants who obtained their first residence permit in France in 2018. In addition to other topics, the survey collected both retrospective and ongoing information on the administrative process of respondents, allowing researchers to reconstruct their legal status trajectories over a four-year period.

A common limitation of these surveys is that they only include immigrants who have obtained legal

status at some point, thereby excluding those who remain undocumented. However, retrospective surveys also offer several advantages. First, instead of treating legal status as a fixed condition, they make it possible to investigate specific phases of irregularity, which is particularly valuable in contexts characterised by recurrent regularisations. Second, by relying on large samples and rich questionnaires, they enable long-term analyses of the consequences of irregular status over multiple time periods and dimensions of migrants' lives.

¹¹ See https://mixedmigration.org/resources/

¹² See https://mixedmigration.org/4mi/4mi-interactive/

¹³ More information on 4Mi can be found at https://mixedmigration.org/wp-content/uploads/2021/08/4Mi-Introduction.pdf

Conclusion

Efforts to survey irregular migrants will always face trade-offs between coverage, data quality, and ethical safeguards. No single method can fully overcome the challenges of sampling, trust, and mobility, so mixed approaches tailored to specific contexts are essential. Well-designed surveys can

generate robust evidence to inform more balanced debates and better-targeted policies, but only if they are grounded in careful methodological choices and genuine engagement with the communities concerned.



References

Bachmeier, J.D., Van Hook, J. & Bean, F.D. (2014) Can we measure Immigrants' legal status? Lessons from two U.S. surveys. International Migration Review, 48(2), 538–566

Baio, G., Blangiardo, G. C., & Blangiardo, M. (2011). Centre Sampling Technique in foreign migration surveys: A methodological note. Journal of Official Statistics, 27(3), 451–465.

Hall, M., Greenman, E. & Farkas, G. (2010) Legal status and wage disparities for Mexican immigrants. Social Forces, 89(2), 491-513.

Lives Centre (2020). "Parchemins" Project - Assessing the health and well-being of undocumented migrants. Online Resource https://www.centre-lives.ch/en/project/parchemins-project-assessing-health-and-well-being-undocumented-migrants?chapter=195-project-description-parchemins

Passel, J.S. & Cohn, D. (2014) Unauthorised immigrant totals rise in 7 states, fall in 14: decline in those from Mexico fuels Most states decreases. Washington, DC: Pew Research Centre's Hispanic Trends Project. November.

Peitz, L. and Stache, R. & Johnson, L. (2024) How to Survey Hard-to-Reach Populations: A Practical Guide to App-Based Respondent-Driven Sampling. Robert Schuman Centre for Advanced Studies Research Paper No. 2024/23, http://dx.doi.org/10.2139/ssrn.4901241

Reher, D., & Requena, M. (2009). The National Immigrant Survey of Spain: A New Data Source for Migration Studies in Europe. Demographic Research, 20(12): 253–278. https://doi.org/10.4054/DemRes.2009.20.12

Stache, R., Peitz, L., & Johnson, L. (2024). The MIMAP Survey on Im-/Mobility Aspirations of Rejected Asylum Seekers: Survey Instruments & Codebook. Nürnberg: Bundesamt für Migration und Flüchtlinge. https://doi.org/10.48570/bamf.fz.fragebogen.mimap.en.2024.1.0

Vickstrom, E. & Beauchemin, C. (2024). Quantitative surveys on migration. In Sciortino, G., Cvajner, M., & Kivisto, P. (Eds.) Research Handbook on the Sociology of Migration, Edward-Elgar, pp 227-242.