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Closing disparities between European sending and receiving international migration flow data

Guy J. Abel ^{a,b} and Dilek Yildiz ^b

ABSTRACT

Evidence-based policies to monitor and manage migration flows require accurate data. Data collection on international migration flow statistics is based on a range of data sources and measures. Discrepancies in reported migration flow data are apparent when comparing flow statistics from receiving countries on the number of arriving migrants by their country of origin with statistics from sending countries on the number of departing migrants by their country of destination. In recent decades the relative incompleteness and non-comparability in reported migration statistics have motivated a number of initiatives to improve data in European countries. In this paper we illustrate graphically the discrepancies between sending and receiving migration flow statistics provided to Eurostat by European countries. We find a reduction of the discrepancies between receiving and sending migration flow data after the implementation of regulations to improve the availability and comparability of migration data.

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KEYWORDS

international migration; official statistics; Europe; migration flows; bilateral migration data; origin-destination migration data; emigration data; immigration data

Evidence-based policies to monitor and manage international migration flows require accurate data. The quality and availability of migration statistics has been an issue of concern in Europe since the early 1970s (Kelly, 1987). These concerns have risen as migration has become a prominent political issue, reflected in a number of agreements, formations of networks and regulations to encourage national statistical offices to provide harmonized migration measures. In 2007, the European Parliament implemented a legal framework for improved statistics on migration via Regulation No. 862/2007, which included a requirement to report international flow data to a harmonized 12-month definition (European Commission, 2007).

Data on European international migration flow statistics are collated by national statistical offices. Countries rely on different data sources and consequently reported statistics vary in their accuracies, populations covered and levels of underreporting. Bilateral migration flow data, for the number of persons migrating from a given origin country to given destination country, allow for measures of discrepancies between the reported migration flow statistics to be observed, as the same migration flow can be measured at both ends of the migration corridor. Over 20

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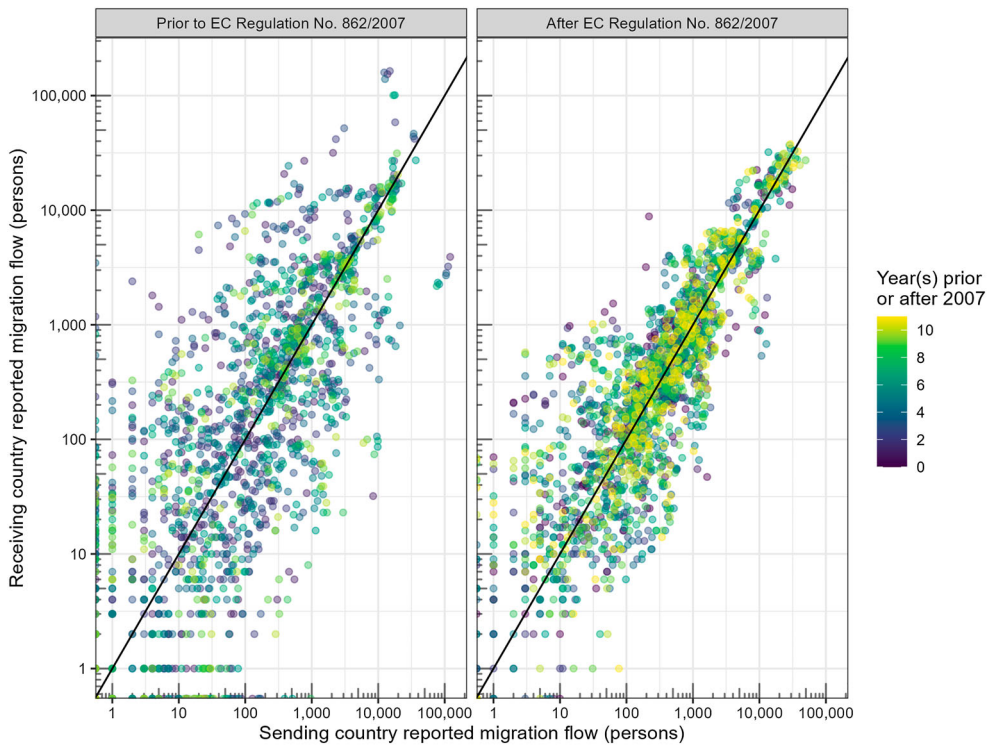


Figure 1. Double reported European migration flows statistics before and after European Commission Regulation No. 862/2007.

European countries now provide Eurostat with reported bilateral flow statistics on the number of arriving migrants received and sent, broken down by their country of origin and destination, respectively. There has been little research into how discrepancies in double-counted migration flow data have changed over time, and the impact of regulations on the provision of migration statistics to Eurostat (Yildiz & Abel, 2021).

Figure 1 plots the reported migration flow statistics from receiving destination countries against the equivalent reported migration flows statistics from sending origin countries, using the *ggplot2* package in R (Wickham, 2009). Data were downloaded from the Eurostat website and cover 4143 observations of double-counted origin–destination migration flows. In the left panel of Figure 1, data from 1998 until 2007 are plotted on logarithmic axes. The right panel of Figure 1 plots data from 2008 until 2019. The more recent data in the right panel show a closer correlation on the log scale (0.897 compared with 0.795) based on smaller average differences (100.9 persons compared with 373.4) and larger number of observations (2271 compared with 1882).

The recent reduction in the discrepancies in the Eurostat migration flow data has coincided with their increased use. For example, in the latest round of demographic projections produced by Eurostat, flow totals (aggregated to non-European Union and European Union flows) were used for the first time in an extended method that incorporates immigration and emigration base data and developing future migration assumptions (Lanzieri, 2020). In addition, the bilateral data have been used as inputs for evolving versions of statistical models to estimate complete and harmonized series of migration flows between all European countries (Raymer & Abel, 2008; Abel, 2010; Raymer et al., 2013; Del Fava et al., 2019).

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

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