

Quality Report

Migration

(internal migration, external migration, total migration)



2022

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Summary

1 General information on the statistics

Page 5

<u>Statistical population:</u> migration flow statistics cover all arrivals and departures across municipal or federal borders involving a transfer of the main or sole residence in the reference period.

<u>Statistical units</u>: a migration move is considered to refer to any arrival or departure across municipal or federal borders caused by the following reasons: moving into a sole or main residence, moving out of a sole or main residence, changing the housing status from second residence to sole or main residence across the municipal border

<u>Reference area</u>: territory of the Federal Republic of Germany according to the List of Municipalities of the Statistical Offices of the Federation and the Federal States as at the relevant month, Federal States, administrative districts

Frequency of data collection: monthly and/or yearly, depending on the variable Reference period: month and year

2 Content and user needs

Page 7

<u>Statistical presentation:</u> day of moving in or out or of changing housing status, old and new place of residence (municipality if the place of residence is in the domestic territory, country if the place of residence is abroad), housing status (main or sole residence), sex, age, marital status, citizenship, place and country of birth, legal affiliation with a religious society under public law, day of preceding departure to abroad (in case of arrival from abroad), day of preceding arrival from abroad (in case of departure to abroad), the fact of ex officio registration or deregistration

<u>Classification system</u>: official List of Municipalities of the Statistical Offices of the Federation and the Federal States (GV-ISys) and Classification of States and Territories of the Federal Statistical Office

<u>User needs</u>: ministries and authorities, municipalities, international organisations, business associations, the media and the press, individuals

3 Methodology

Page 9

<u>Source data</u>: complete enumeration based on administrative data (secondary data). It is based on the registrations and deregistrations, which are recorded by the resident's registration offices of the Federal States in accordance with the registration regulations. <u>Data collection</u>: the data are transmitted by the resident's registration offices to the Statistical Offices of the Federal States, where they are checked. The Federal Statistical Office receives data material from the Statistical Offices of the Federal States and produces the federal results.

4 Accuracy and reliability

Page 9

<u>Overall accuracy:</u> the quality of the secondary data for statistical purposes is generally considered to be good. The figures on departures are considered less reliable than those on arrivals.

<u>Non-sampling error</u>: a major source of error is that people do not deregister when moving abroad. Such undercoverage is reduced if the resident's registration offices deregister ex officio the persons no longer living at an address. It cannot be quantified how many departures are not covered.

5 Timeliness and punctuality

Page 11

<u>Timeliness of results:</u> monthly results are available about three and a half months after the end of the relevant month, the annual result in July of the subsequent year.

Punctuality: the monthly and annual results for 2022 were released punctually.

6 Comparability

Page 11

<u>Comparability - geographical</u>: the results for Federal States are generally considered as comparable because uniform rules and statistical procedures are applied.

<u>Comparability - over time:</u> data from migration statistics have been available since the statistics were introduced in 1950. The results from 1991 refer to the new territory of the Federal Republic of Germany. Consequently, their comparability with results of earlier years is limited. In addition, below NUTS-1 level, some limitations are inevitable because of territorial changes.

The year-on-year comparability of monthly and annual results as from 2016 is limited, which is due to methodological changes in the statistics, technical enhancements of data deliveries from population registers and the changeover to a new statistical processing procedure.

7 Coherence Page 12

<u>Coherence - cross domain:</u> migration statistics are the only source that generally shows all migrations of all people in Germany obliged to register. Consequently, other data sources on migrations are not comparable with the results of migration statistics. <u>Input for other statistics</u>: the data from migration statistics are included in the intercensal population updates.

8 Dissemination and communication

Page 13

- ·Theme site on migration flows (Link)
- ·Data on national level and on level of the Federal States are available at GENESIS-Online (Link)
- ·Data on NUTS3- and on municipality level (LAU2) are available at Regionaldatenbank (Link)
- ·Theme site on migration from Ukraine (Link)
- ·Last annual migration data compendium (Fachserie) for the reporting year 2021 (Link)

9 Comment Page 13

None

1 General information on the statistics

1.1 Statistical population

The survey population is the total of all cases covered by the resident's registration offices and regarding the arrivals and departures across municipal or federal borders involving a change of the main or sole residence. This includes the change of the main residence if a second residence becomes the main residence (change in housing status). Not included are changes of residence within a municipality and cases of moving into or out of a second residence. The migration statistics include cases of migration across the municipal borders to other municipalities within Germany as well as the cases of migration across the federal borders. Arrivals and departures without information on the previous or new place of residence are also included in the statistics. Arrivals and departures of German and non-German people are covered. For migrations across the borders of the Federal Republic of Germany, the territory as at October, 3rd, 1990 has been applicable since reference year 1991.

Covering an arrival or a departure is not directly linked to a minimum duration of stay, but to the recording of a registration, deregistration or change in housing status by the resident's registration offices in accordance with the registration regulations. Since November 1st, 2015, the obligation to report has been uniformly regulated nationwide.

Based on § 17 (1) Bundesmeldegesetz (BMG) registration is mandatory within 2 weeks after occupancy of a new dwelling since then. However, exceptions to the registration requirement exist (e.g. for stays of up to 6 months for residents with another place of residence in Germany and up to 3 months for people with a resident abroad according to § 26 (2) BMG). The statistics do not include persons who are exempt from the obligation to register (members of the foreign missions, their family members or on the basis of international agreements according to § 26 (2) BMG).

Refugees and asylum seekers have to register and, consequently, are generally included in migration flow statistics.

According to § 17 (2) BMG there is a general obligation to deregister when leaving a residence without taking a new residence in Germany, i.e for persons leaving Germany or having no fixed residence anymore. Moving out is defined in the administrative regulation for the implementation of the Federal Registration Act as "the actual, final leaving of an apartment. There is no moving out, but only a temporary interruption in the use of an apartment if there is the intention and the actual possibility of continuing to use the apartment. As a rule, moving out is to be assumed if furnishings required for use are removed from the apartment or if the expected absence is longer than a year" (BMGVwV § 17 (2)).

1.2 Statistical unit

The survey units are registrations and deregistrations, including ex officio registrations and deregistrations, and changes in housing status from second residence to main residence that have been recorded by the resident's registration offices.

The presentation units are migration moves, that is, every arrival and departure across municipal or federal borders: moving into or out of a sole residence or main residence, including changes in housing status (changing a second residence into a main residence). Not included are changes of residence within a municipality as well as registrations and deregistrations of secondary residences.

This means that migration moves are shown, rather than persons migrating. The number of migration moves in a specific year is slightly larger than the number of persons migrating because people may move - or change their housing status - several times during one year.

1.3 Reference area

The migration moves are broken down by level of administrative units, depending on the geographical distance covered: migration moves across Federal (NUTS-0), Federal State (NUTS-1), administrative region (NUTS-2), administrative district (NUTS-3), and municipal borders (LAU-2). For the delimitation of regional units, the List of Municipalities of the Statistical Offices of the Federation and the Federal States is used, with the territory as at the last day of the relevant month

(https://www.destatis.de/DE/ZahlenFakten/LaenderRegionen/Regionales/Gemeindeverzeichnis/Gemeindeverzeichnis.html) (Available in German language only).

The data for Germany refers to the Federal Republic of Germany from 1950 onwards according to the territorial status since October 3, 1990. Since the reporting year 2000, the data for the former federal territory refer to the Federal Republic of Germany with the territorial status up to October 3, 1990 without West Berlin. The data for the new Federal States refer to the states of Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia and the data for Berlin to Berlin as a whole. The Federal Statistical Office publishes the data down to district level, and the Statistical Offices of the Federal States have more detailed regional breakdowns.

As regards the data on migration moves involving foreign countries, the territories of origin and of destination are broken down by means of the current Classification of States and Territories of the Federal Statistical Office (https://www.destatis.de/DE/Methoden/Klassifikationen/Staat-Gebietsystematik/staatsangehoerigkeit-gebietsschluessel.html) (Available in German language only).

1.4 Reference period

Data on migration flows are attributed to reporting months and years. Migration moves are assigned to a reporting month, considering the date it took place/event date (arrival or departure date) and the delivery month: For migration cases with event date in the delivery month, the delivery month is the reference period; for migration cases with an event date before the month of delivery, the month before the delivery is taken as the refrence period. From 2016 onwards, only arravials and depatures with an arrival oder depature date in the reference periode or in the previous year will be considered in the final results of the migration flow statistics.

1.5 Frequency of data collection

Monthly and yearly.

1.6 Legal acts and other agreements

- What applies at the level of federal law, is §4 of the Act on the Statistics of Population Change and on Intercensal Population Updates Population Statistics Act (BevStatG) from April, 20th 2013 (Federal Law Gazette I, p. 826), amended by Article 5 from Dezember, 22nd 2022 (Federal Law Gazette I, p. 1649).
- Also applicable are the Act on Statistics for Federal Purposes Federal Statistics Act (BStatG) from Oktober ,20 th 2016 (Federal Law Gazette I, p. 2394), last amended by Article 5 from December 20th, 2022 (Federal Law Gazette I, p. 2727).
- Legal acts applying at the European level are Regulation (EC) No 862/2007 of the European Parliament and of the Council of 11 July 2007 on Community statistics on migration and international protection and repealing Council Regulation (EEC) No 311/76 on the compilation of statistics on foreign workers and Regulation (EU) No 1260/2013 on European demographic statistics.
- Data transmission ordinances of the Federal States are applicable for the reference period.

1.7 Confidentiality

1.7.1 Confidentiality - policy

Pursuant to Section 16 of the Federal Statistics Act (BStatG), collected individual data are always kept confidential. Only in a small number of exceptional cases explicitly regulated by law may individual data be passed on. Universities or other institutions tasked to perform independent scientific research may be supplied with individual data, in accordance with the BStatG, Section 16 (6), for the conduct of research projects. Such individual data have to be anonymised in a way that identifying the relevant respondents or parties concerned requires unreasonable effort in terms of time, cost and manpower. Persons receiving individual data are also obliged to maintain confidentiality.

1.7.2 Confidentiality - data treatment

The official migration flow statistics do not identify people migrating, but cases of migration and do not publish any data below the municipal level. Until the reporting year 2017, it was assumed that even if the number of cases was less than three and with the help of the other published variables, no conclusions could be drawn from migration cases to individual persons. However, in times of ever more flexible data offerings, the previous approach is currently reaching its limits. From the reporting year 2018 onward, case numbers of less than three will be avoided in the publications on migration statistics by coarsening the previous records and blocking cells. Where, for reasons of ensuring statistical confidentiality, individual data cannot be released, this is explicitly indicated.

1.8 Quality management

1.8.1 Quality assurance

The Statistical Offices of the Federal States performs comprehensive checks regarding the completeness and plausibility of the data received. At regular meetings, the Statistical Offices of the Federation and the Federal States coordinate quality assurance measures and ensure consistent procedures.

Corrections made by resident's registration offices in the population register data are reported to the Statistical Offices of the Federal States. Corrections communicated after the end of the monthly compilation but before the end of the annual compilation are considered in the annual results from 2016 onwards. The few corrections reported later are not included in the migration flow statistics.

With the further development of the standard for data delivery from the resident's registration offices to the Statistical Offices from 2016 onward, extensive quality checks were carried out in order to identify and correct IT-related, systematic errors in the data transmissions.

1.8.2 Quality assessment

Generally, the results of migration flow statistics, which are based on a complete enumeration, are considered as precise. However, the quality and completeness of the underlying data depends on the citizens' compliance with registration regulations and on the resident's registration offices' compliance with their legal duty to report data to the Statistical Offices. The main source of error is the failure to deregister when moving abroad.

As a result of methodological changes, the technical advancements in data transmissions from the reporting system as well as the switch to a new statistical processing method, the results from 2016 are only partially compatible with the previous year's results (see 6.2). As a result of the methodological changes, there are special impacts on the migration of Germans (to other countries) that must be considered (see chapter 3.3).

2 Content and user needs

2.1 Statistical presentation

2.1.1 Data description

Migration flow statistics show the spatial mobility of the population. In addition, the migration flow statistics are a component in the accounting procedure for calculating the population figures within the framework of the intercensal population updates.

Pursuant to § 4 of the Population Statistics Act, the following variables are continuously covered for migration statistics:

- day of moving into the new dwelling or moving out of the old dwelling
- housing status (main or second residence)
- old and new municipality of residence
- for migration moves across the German border: country of origin or destination
- sex, day of birth, marital status
- legal affiliation or non-affiliation to a religious community under public law
- citizenship
- place and country of birth (from August 2008)
- for arrivals from abroad: day of preceding departure from Germany to another country (from August 2008)
- for departures to another country: day of preceding arrival from abroad in Germany (from 2014)
- the fact of ex officio registration or deregistration (since 2014)

Monthly results show just a part of the variables: sex, citizenship (German/foreign), country of origin or country of destination (selection), regional breakdown (federal territory and federal states)

For the annual results, all variables are available: sex, age, citizenship, country of origin or country of destination, country of birth, marital status, legal affiliation or non-affiliation to a religious community under public law, registration or deregistration ex officio, spatial structure (federal territory, federal states and districts). Data for the variables "country of birth", "day of the previous departure (in the case of arrivals from abroad)" and "day of the previous immigration (when moving abroad)" are currently not available due to insufficient quality reasons (see chapter 4.3).

In the case of ex officio registrations and deregistrations, the date of registration or deregistration will be considered (instead of date of moving in or out).

2.1.2 Classification system

For geographical breakdowns the List of Municipalities of the Federal Statistical Office (GV-ISys) is used. The regional classification is based on the territorial status of the respective month (see chapter 1.3). In publications on east-west migration, information for the new Federal States refers to Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia and the information for Berlin to Berlin as a whole. From 1990 up to and including 2000, East-Berlin was assigned to the new Federal States and West-Berlin to the former federal territory.

For the classification of results by country of origin and by country of destination, the citizenship and the country of birth, the Classification of States and Territories of the Federal Statistical Office is used (see chapter 1.3).

Seven marital statuses are recorded: single, married, divorced, widowed, living in a civil partnership, civil partnership dissolved, partner deceased. Persons with a different or unknown marital status are listed under "single". Due to the small number of cases, in publications the marital status of civil partnerships is usually combined with the status "married".

2.1.3 Statistical concepts and definitions

Internal migration flow statistics of the Federation cover migrations within Germany. External migration flow statistics comprise arrivals and departures across the borders of Germany or across the borders of the former territory of the Federal Republic of Germany. External migration flow statistics include migration moves involving foreign countries and migration moves with unclear territory of origin and/or destination.

Total migration is composed of internal migration and external migration and shows arrivals and departures by category of geographical distance covered. The total of migration moves is referred to as the volume of migration. The volume of migration is determined by adding arrivals and departures of external migration to internal migration moves (only arrivals) of the relevant territorial units. The difference between arrivals and departures is referred to as net migration. Positive net migration means that there is a net migration gain, while negative net migration means that there is a net migration loss.

Persons considered as foreigners are all persons who are not Germans as defined in Article 116 (1) of the Basic Law. The group of foreigners include stateless persons and those with uncertain citizenship. Germans who also have a foreign citizenship are considered as Germans rather than as foreigners. People who have several nationalities are only shown with their first nationality. The definition of the sequence in the resident's registration offices is as follows: German nationality, EU citizenship, citizenship of a country from the rest of Europe, citizenship of a country from the rest of the world.

The entry of ethnic German repatriates and their spouses and children from their country of origin to Germany is recorded as arrivals of Germans since 2000, while the entry of family members accompanying ethnic German repatriates is recorded as arrivals of non-Germans from their country of origin. They enter through the municipality of Friedland in Lower Saxony and are then distributed to the Federal States. Such distribution is statistically covered as internal migration.

Asylum seekers and other people seeking refuge in Germany are generally obliged to register and, consequently, are included in migration flow statistics. However, they are not covered or shown separately in this set of statistics because this is not provided for in the legal basis. Usually the obligation to register applies already at the initial reception centre. However, this is subject to individual law of the Federal States. Specific regulations of the Federal States may suspend the obligation to register at initial reception centres, for example, for short-term stays.

Until reporting year 2021 the calculation of age was defined as the difference between reporting year and year of birth. Thereby the age of migrating persons was accounted. Since reporting year 2022 the age of migrating persons is recorded according to the point of time of migration. A comparison of both methods shows only little variations, mostly less than 1%. Higher relative variations can be recorded for babies aged below one year and age cohorts of elderly people.

2.2 User needs

Key users of migration flow statistics include federal ministries and federal authorities, especially the Federal Ministry of the Interior and Community, the Federal Office for Building and Regional Planning, the Federal Government Commissioner for Migration, Refugees and Integration, the Federal Office for Migration and Refugees, the municipalities, ministries and authorities of the Federal States, and international organisations. Other users of migration flow statistics are business associations, the scientific community, special interest groups, the media and the press and individuals.

2.3 User satisfaction

User satisfaction is achieved by several ways. Changes to the existing survey programme requested by ministries or the European Commission are implemented at national level by amending the respective legislation. Furthermore, the federal ministries, Statistical Offices of the Federal Staties, municipal central associations and economic and scientific communities are represented in the Statistical Advisory Committee which, in accordance with Section 4 of the Federal Statistics Act, provides the Federal Statistical Office with consultation in basic matters. Subject-matter related issues and suggestions are addressed by the specialist committee on population statistics set up by the Statistical Advisory Committee.

3 Statistical processing

3.1 Source data

Migration flow statistics are secondary statistics and refer to the obligation to register for people living in Germany. They are based on a complete enumeration. The frame of migration flow statistics is the registration and deregistration forms that are completed at the resident's registration offices when a sole or main residence is transferred across municipal borders. To cover the arrivals and departures across the German borders, the registration or deregistration sheets are used, while for the coverage of migrations within Germany only the registration sheets are used. Every case of moving into a sole or main residence in a new municipality is also counted as a departure from the previous municipality of residence. When people move from one Federal State to another, the Statistical Offices of the Federal States exchange their data, so that departures can be recorded. A change in housing status from a second residence to a main or sole residence is also reported by the resident's registration offices and is recorded in the statistics as an arrival from the previous main residence to the new main or sole residence.

3.2 Data collection

Data collection is a decentralised procedure based on data transmission from the resident's registration offices to the Statistical Offices of the Federal States. The data, including corrections regarding data supplied earlier, are transmitted digitally via XMeld. The results of the Federal States are transmitted to the Federal Statistical Office, which compiles the federal results on that basis.

3.3 Data compilation

During processing by the Statistical Offices of the Federal States, plausibility checks are made as to whether migration cases have been delivered more than once. During processing, the compulsory variables are checked for plausibility and completeness and are corrected or completed through queries with the resident's registration offices. Corrections communicated by the resident's registration offices are included in the results if the migration move concerned took place in a month for which no data have been published yet. For foreigners who deregistered without indicating a new residence, their country of citizenship is entered (imputed) as the territory of destination. Exceptions will be made from the year 2016 to 2022 for deregistrations to unknown by people whos nationalities are from the main countries of protection seekers, since a return to the home country is highly unlikely (Syria, Iraq, Pakistan, Afghanistan, Iran, Eritrea, Somalia, Nigeria). For registrations from unknown from foreigners, an imputation is also carried out according to comparable rules. In migration flow statistics immigration and emigration of Germans from or to "Unknown/unspecified" is consideres as part of the external migration since January 1st, 2016. Previously, these cases were not included in the migration flow statistics or the population projection.

German people who were previously deregistered to unknown and then register again are only statistically counted if the previous deregistration is also to unknown in previous statistics (i.e. took place from 2016). Because in return all cancellations from Germans to Unknown were considered without restrictions the number of registrations "from unknown" was low and thus increased net emigration of Germans in the years after this change.

Due to the Russian war of aggression against Ukraine the Federal Statistical Office conducts since the reporting year 2022 a temporary analysis of migration raw data of immigration from Ukraine. Basis of this temporary analysis is an enumeration of registered immigration and emigration by the resident's registration offices without the common plausibility checks of the Statistical Offices of the Federal States. Corrections of registrations and deregistrations as well as other relevant corrections are considered. For the monthly results all registrations and deregistrations that are submitted until the end of the following month are included.

3.4 Adjustment

None

3.5 Cost and burden

No statistical response burden is placed on citizens because the data transmitted to the Statistical Offices of the Federal States are extracts from the population registers of the resident's registration offices.

4 Accuracy and reliability

4.1 Overall accuracy

Generally, the results of migration flow statistics (complete enumeration) are considered as precise. The quality and completeness depend on the citizens' compliance with registration regulations and on the registration offices'

compliance with their legal duty to report data to the statistical offices. As regards departures to foreign countries by country of destination, it should be noted that part of the departures of foreigners to their country of citizenship are imputed (see 3.3).

On the whole, the coverage of arrivals is more reliable than that of departures because many people register when arriving but do not deregister when moving abroad. Part of such missing deregistrations are subsequently performed ex officio with a time delay by the resident's registration offices. However, they are recorded for the reference period of the ex officio deregistration, rather than for the reference period of the departure. Ex officio registrations also occur, but are rare.

Ex officio deregistrations normally do not include any information on the destination area. Deregistrations to unknown are included in the external migration flow statistics. However, for some foreigners who deregistered without indicating a new residence, their country of citizenship is imputed (see chapter 3.3). The same procedure occurs with deregistrations of foreigners with an unknown last place of usual residence. An unknown date of departure will be replaced by the date of ex officio deregistration.

Since the reporting year 2017 ex officio deregistrations and regular deregistrations are reported separately. 41% of all external migrations in the reporting year 2022 were registered as ex officio deregistrations.

There is no direct way to quantify the number of missing deregistrations which remain undetected by the resident's registration offices for a reporting period. It is only possible to estimate a range of the number of persons who were registered but not residing in Germany on the reference date of a census.

Monthly resuts are provisional. The final annual external migration results for 2022 recorded 0.2% less arrivals and 1.1% less departures as the cummulated provisional results from January 2022 until December 2022. Regarding internal migration across the borders of the Federal States, the final results of the arrivals are 0.1% higher than the cumulated provisional results.

4.2 Sampling error

As this is a complete count, sampling errors cannot occur.

4.3 Non-sampling error

All resident's registration offices supply data to the Statistical Offices of the Federal States. When people move out and do not register at a new place of residence in Germany, the departure is not recorded by the resident's registration offices and, consequently, is not covered by the Statistical Offices of the Federal States. Missing values in the data records are reported to the resident's registration offices by the Statistical Offices of the Federal States together with a request to resend complete data records. The variables sex, age and country of citizenship should be fully covered by the the resident's registration offices. Ex officio deregistrations normally do not include any information on the destination area which may then be inputed by the Statistical Offices (see chapter 3.3). Data for the variables "country of birth", "day of the previous departure (in the case of arrivals from abroad)" and "day of the previous immigration (when moving abroad)" are currently not available due to the insufficient quality reasons.

Non-sampling errors may occur because of systematic errors in IT-software used for data transmission processes by the resident's registration offices. These errors lead towards undercoverage (missing transmissions), overcoverage (multiple transmissions of a single migration case) or missing values.

4.4 Data revision

4.4.1 Data revision - policy

Neither the monthly results nor the annual results are revised. Annual results differ from the sum of the monthly results of one year due to interannual inclusion of correction sent by the resident's registration offices since the reporting year 2016.

However, the annual results for a territorial unit may differ from the total of the monthly results, which is mainly due to territorial changes that have occurred in the meantime (see chapter 6.2).

4.4.2 Data revision - practice

None

4.4.3 Data revision - analysis

None

5 Timeliness and punctuality

5.1 Timeliness

Monthly and annual results are published.

The monthly results and a provisional annual result including December results are generally available three and a half months after the end of the reference month. The annual result may slightly differ from the total of the monthly results. This is why the monthly results are considered as provisional. The final annual results are generally available by July of the subsequent year.

5.2 Punctuality

The monthly and annual results for the reporting year 2022 were published according to schedule.

6 Comparability

6.1 Comparability - geographical

The results of the Federal States are generally comparable because of consistent regulations and statistical methods. Until October 2015 the Federal States had partly different registration regualtions which caused limited geographical comparability.

Basis of the annual compilation for the annual results is the German territory status by December 31st. For territorial units that are affected by territorial changes within the reporting year migration records are assigned to the new territorial unit even if the migration occurred in the old territorial unit. Hence, results can be compiled for a new territorial unit annualy.

6.2 Comparability over time

6.2.1 Restrictions in comparability due to technical and methodogical changes in 2016

Due to technical and methodogical changes in 2016 comparability with monthly and yearly results before 2016 are limited.

- a.) For arrival/departure of german citizens to/from unknown the following restrictions apply:
- 2022 results of departures to/from unknown are not comparable with those from 2015 and before but almost comparable with the period 2016 to 2021. For 2019 further restrictions apply (see below).
- 2022 results of arrival from unknown are not comparable with those from 2019 and before. This is due to the consideration of arrivals from unknown of german citizens only when an earlier deregistration to unknown was reported to the Statistical Offices (i.e. occurred in 2016 or later). In return all deregistrations of german citizen to unknown are considered without any restrictions.
- Thus, the results for registrations from unknown of german citizens are too low compared to deregistration to unknown with the consequence of a higher net-departure of german citizens. This methodologically caused and unevitable effect can be observed especially in the reporting year 2016. Reduced effects are expected until 2019.
- External migration data of german citizens broken down by country of departure or country of arrival are not affected by this methodological change. However, the change in methodology has significant impacts on the total values of external migration of german citizens.
- b.) Until the reporting year 2015 results of a reporting month consist of all arrivals and departures that were processed by resident's registration offices and submitted to the Statistical Offices. Since 2017 monthly statistical processing of arrivals and depatures is only allocated to the reporting month when occurred in this month. Otherwise the migration is allocated to the month before. For example, an arrival that occurred in March and that is reported to the Statistical Offices in March is allocated to the reporting month March. Whereas an arrival in March that is reported in June is allocated to the reporting month May. During January 2016 und May 2017 this method could not be applied yet. This had an effect on arrivals and depatures that happened in 2016 or earlier but were submitted to the Statistical Offices only in 2017 (until May). These records were allocated to the reporting year 2016. Consequently, migration results for 2016 are higher and for 2017 lower according to the methodological concept.
- c.) Another effect that reduces the comparability of results from 2015 and before is that since 2016 only those arrivals and departure were considered when the date of arrival/departure was in the reporting year or the year before. In 2015 and before even older migration data was considered. Deadlines were the census day in 1987 in West-Germany and Oktober 3rd, 1990 (count of registry entries in the central resident's registration office) for the territoriy of the former GDR.

6.2.2 Restrictions in comparability due to territorial changes

Minor impacts on comparability are inevitable due to territorial changes, especially on a municipality (LAU-2) or administrative district (NUTS-3) level.

6.2.3 Restrictions in comparability due to validation work done by resident's registration offices

Impacts on the comparability over time may also result from validation work done by resident's registration offices with an effect of a higher amount of departures due to ex officio deregistrations.

- 2008 to 2010: The launch of the personal tax-ID in Germany in 2008 caused extensive corrections in resident's registration offices that resulted in extensive ex officio deregistrations. The amount of this validation work is not reported to the Statistical Offices but it can be expected that this effected dropped from 2010 onward.
- 2019: Associated with the EU election in 2019 there was an increase of ex officio deregistrations of EU-citizens that obviously didn't live at their registered addess in Germany anymore. The amount of ex officio deregistrations including german citizens in 2019 was 59000 cases higher than in 2018. Consequently, the increase of departures of EU-citizens in 2019 is probably overestimated. Regional differences in the validation work on the resutls are likely.
- 2020/2021/2022: A drastic decline in registered arrivals and departures can be observed between March 2020 and December 2022 and are caused by worldwide restrictions associated with the coronavirus pandemic. Restrictions in travelling and economic reasons have an effect on the amount of registered arrivals and departures. Arrivals and departures may have been registered and submitted to the Statistical Offices behind time with consequences on the monthly results. This effect may vary regionaly due to different regional restrictions and regulations and may have an effect on the annual results for 2020 and 2022.

In summary, adequately comparable time series are available for:

- Internal migration: 67 months (since June 2017)
- External arrivals of non-german citizens: 67 months (since June 2017)
- External departures of non-german citizens: 67 months (since June 2017)
- External arrivals of german citizens: 36 months (since January 2020)
- External departures of german citizens: 67 months (since June 2017)

7 Coherence

7.1 Coherence - cross domain

Migration flow statistics are the only source showing all migrations of all people in Germany at this detailed level of breakdown. Data from other sources (e.g. statistics of ethnic German repatriates, statistics of asylum seekers, Central Register of Foreigners) refer only to specific groups of foreigners and, consequently, are not comparable with the results of migration flow statistics.

The Federal Statisical Office puplishes results of the external migration of foreigners from two different sources. Migration flow statists deliver results on arrivals and departures of foreigners recorded by the resident's registration offices. Information on external migration of foreigners compared to the previous year can be derived from the Central Register Of Foreigners (AZR) by utilising a flow balance. Results based on the Central Register Of Foreigners differ from migration flow statistics due to different statistical units, reporting system and methodology.

The statistics on migration, which are compiled in accordance with European requirements laid down in EC Regulation 862/2007, cover migration moves involving a transfer of residence for at least 12 months and, consequently, are not comparable with the results of the migration statistics described here. However, they are comparable with the figures of other EU countries.

Results on external migration are not comparable with results of other countries due to different definitions on migration (e.g. different time criteria).

7.2 Coherence - internal

The coherence of internal migration flow statistics is reliable due to the requirement of a registered departure in the departing municipality in case of a registered arrival. In case of migration between the Federal States a data transmission between the concerned Statistical Offices applies. However, in case of corrections differences between monthly results may occur. These possible differences are corrected in the compilation process for the annual results.

7.3 Input for other statistics

Migration flow statistics provide migration data for intercensal population updates. Also, they are included in the calculation of the statistics on migration in accordance with European requirements.

8 Dissemination and communication

8.1 Dissemination format

News release

The regular press releases on annual results for 2022 was published on June 27th, 2023.

Publications

- last annual Fachserie for the reporting year 2021.
- results of migration flow statistics are published online and can be accessed through this link:

https://www.destatis.de/EN/FactsFigures/SocietyState/Population/Migration/Migration.html.

Online database

Once published, the data are permanently accessible through the GENESIS-Online database and the Regionaldatenbank Deutschland (Regional Database Germany):

https://www.regionalstatistik.de/genesis/online?operation=statistic&levelindex=0&levelid=1607327731422&code=12711#abreadcrumb

Micro-data access

Micro-data of migration flow statistics are available at the research data centre.

Other

Migration data for individual municipalities are available at, and published by, the Statistical Offices of the Federal States. The results of migration flow statistics are shown in cross-section publications (e.g. Data Report).

8.2 Documentation on methodology

Feuerhake, J., Lange, K., Siegismund, A., & Vigneau, E. (2020). Kodierung des Geburtsstaats in der Wanderungsstatistik: Ein Vergleich regelbasierter Signierung mit Verfahren des maschinellen Lernens. WISTA-Wirtschaft und Statistik, 2020/03.

8.3 Release policy

Release calendar

None

Release calendar access

None

User access

For enquiries on migration flow statistics please use the contact form of the Federal Statistical Office:

https://www.destatis.de/EN/Service/Contact/_Contact.html

9 Comment

None