



Hippolyte d'ALBIS,* Ekrame BOUBTANE**

Characteristics of Migration Flows to France Based on Residence Permit Data (1998-2013)

Migration flows are more difficult to measure statistically than other demographic variables. While birth, marriage and death are clearly defined events, migration is less easy to pinpoint. It cannot simply be defined as a stay in another country: we do not consider tourists and business travellers as immigrants, for example. A person must stay for a sufficiently long time, and – according to international guidelines on migration statistics – have the intention of settling in the host country. Length of stay and individual motivations are hard to incorporate into a statistical estimation, added the simple fact that no democratic country is able to record every single entry and even less every single exit.⁽¹⁾ Inflows and outflows of goods are tracked more closely by the customs administration than inflows and outflows of people. Compounding those methodological difficulties, migration is a highly sensitive political and media issue. When multiple sources and indicators are used to measure migration, this is sometimes interpreted as an attempt to cover up the “reality” of the situation, or as the government’s inability to monitor migration flows effectively. Yet it is through wealth and diversity of statistics that we can shed light on the complex phenomenon of migration, whose many facets can never be encapsulated in a single figure.

This article uses administrative data on residence permits issued to foreign nationals resident in France to define the characteristics of migration flows. A residence permit is an administrative document that authorizes a foreign national to reside in France for a specified length of time. It differs from a visa, which authorizes entry and a short-term stay in the country. Although some long-stay visas are now equivalent to residence permits, as explained below, in most cases a residence permit is required to reside legally in France after a visa has expired.

(1) On this subject and many others related to migration, see Héran (2007).

* Paris School of Economics – Université Paris 1, French Institute for Demographic Studies (INED).

** CERDI – Université d’Auvergne, France.

Correspondence: Hippolyte d’Albis, Centre d’économie de la Sorbonne, 106 boulevard de l’Hôpital, 75013 Paris, France, email: hdalbis@psemail.eu

This article looks in detail at the advantages and disadvantages of using residence permit data to construct statistical series on migration. It then presents migrant inflows and outflows, broken down by several criteria, for a sixteen-year period from 1998 to 2013.

The migrants included in the study

By using residence permit data to characterize migrant flows, we consider only a fraction of the people who move to France. Firstly, the migrants included in our study are all foreign nationals. French citizens who return to France after having lived abroad are not recorded in these inflows. Secondly, some foreign nationals resident in France – European nationals, in particular – are not required to hold a residence permit. The right to move and reside freely within the European Union was introduced in 2003 and has been gradually extended to new member countries since then. Citizens of most European countries now have the right to live and work in France without a residence permit. Thirdly, among non-European citizens, residence permit data only cover those third-country nationals who are living legally in France. The only undocumented migrants recorded in the administrative database used here to measure inflows are those who have legalized their status by successfully applying for a residence permit.

Inflows and outflows of foreign nationals who hold a residence permit are therefore smaller than total migration flows. In this article, the term “inflows” refers to entries into a legal status, not entries into the country. The status in question is that of legal, long-term migrant. It should be noted that the start date of a residence permit does not necessarily correspond to the date of entry into the country, especially if the migrant entered illegally. Similarly, the holder of a valid residence permit may have left France. The term “outflows” therefore refers here to the expiry of the right to legal, long-term residence as a foreign national in France. To sum up, residence permit data provide a measure of migration via rights granted to foreign nationals, specifically the right to reside, rather than through observation of physical residence. The concept of legal migrant and the associated rights are very important in the French political and social arena, as shown by the popularity of the term *sans-papiers* (without papers) to refer to undocumented migrants who lack the necessary official paperwork.

The residence permit database

The administrative database that contains information on residence permits and their holders is known by the initials AGDREF, which stand for *Application de gestion des dossiers de ressortissants étrangers en France* (application for managing files of foreign nationals in France). The database was created by decree on 29 March 1993 “to manage the files of foreign nationals in France from their application for a residence permit to granting thereof; to maintain records of

foreign nationals resident in France; and to produce statistics on migration flows".⁽²⁾ AGDREF data are processed by the Department of Statistics, Research and Documentation (DSED) of the Ministry of the Interior. A decree of 8 December 2009 authorized the National Institute for Statistics and Economic Studies (INSEE) and the French Institute for Demographic Studies (INED) to obtain anonymous extracts from the database for statistical purposes. AGDREF is a national database containing information supplied by the local databases of each prefecture in France. For the characterization of migration flows, the AGDREF database contains exhaustive data on all the migrants within its scope and is thus free of the traditional biases of datasets drawn from surveys.⁽³⁾ Data extractions⁽⁴⁾ from AGDREF have been performed at regular intervals since 2000 and are supplied to INED. They are used to construct statistics on flows of third-country nationals and are published in INED's annual articles on the demographic situation in France (Mazuy et al., 2013, 2014, 2015). INED also has another statistical series, covering the period 1994-2008, produced from files extracted from the database between 2000 and 2009 (Thierry, 2001, 2004, 2010).

The two series are not identical, however, due to methodological differences, particularly regarding the choice of files extracted, the treatment of minors, the nationalities included, and the inclusion of France's overseas *départements* and collectivities. The AGDREF database has also been used to calculate inflows to the labour market (Léger, 2004, 2008; Léger and Breem, 2013).

Other data sources can be used to characterize migration flows. The population census is the source traditionally used by INSEE to measure the components of population change. Net migration can be calculated as the difference in the number of residents between two population censuses, minus natural increase (births minus deaths). This method has two advantages: it measures the population actually living in the country; and flows can be broken down according to the many social and demographic variables in the census. One disadvantage is that it does not distinguish between inflows and outflows. More problematically, it is heavily dependent on the frequency of the census. Before 2006, annual flows were estimated using a rule that combined the number of residence permits issued and an extrapolation based on past trends; these figures were subsequently adjusted after the census had been completed (Héran and Toulemon, 2005). Since 2006, the census statistics have been compiled annually and corrections have not been necessary as net migration is deduced from the difference between two censuses (the averages of the five annual surveys). However, the French census is now a large-scale survey rather than a complete count of the entire population. Over a five-year period, every municipality with a population under

(2) Opinion No. 116 (2010-2011) submitted by Jean-Patrick Courtois and François-Noël Buffet, on behalf of the legislative commission of the Senate, on 18 November 2010.

(3) For a critical discussion of the merits of maintaining records of this type on foreign nationals, see Preuss-Laussinotte (2000).

(4) An extraction is a "snapshot", taken on a given date, of all the residence permits registered in AGDREF.

10,000 is included, along with 40% of the population living in towns and cities of 10,000 inhabitants or more. The new census can be used to estimate the number of foreign nationals living in France, i.e. the stock of migrants rather than flows. To estimate inflows, two questions in the census questionnaire are used. A question on the year of arrival in France is first used to estimate inflows in a given year based on the number of individuals who report having arrived in that year. For respondents who do not answer that question, inflows can be estimated on the basis of a second question on previous place of residence (five years before the survey date for the annual census until 2010, and the year before the survey for the censuses conducted since 2011). This is how INSEE produced the annual statistics on the number of entries for the period 2006-2012 that were transmitted to Eurostat.⁽⁵⁾

The statistics based on residence permit data have advantages and disadvantages with respect to census-based statistics. First, the administrative database contains a record of all individuals who have applied for a residence permit. There is therefore no risk of bias due to an unrepresentative sample.⁽⁶⁾ Second, the period covered is longer. Third, and most importantly, by linking inflows to residence permits issued for stays of one year or more, residence permit statistics reflect an intention to settle, which is one element of the concept of permanent migration. However, the statistics constructed using the AGDREF database do not include European nationals, whose inflows are estimated by INSEE using the population census. By definition, illegal migration is not included in inflows based on granting of residence permits. INSEE's statistics are also likely to overlook illegal migration because census officials probably have limited access to this population.

The trend in migration flows is determined by two factors: the demand for residence permits from foreign nationals wishing to settle in France and the supply of residence permits decided by the French administration. Depending on the status of the applicants, demand or supply may be the dominant factor. For example, granting of residence permits to spouses of French nationals is strongly determined by demand, whereas granting of residence permits for employment is more contingent on the government's immigration policy. The latter changed considerably over the period under review. The years 1997 and 1998 were marked by a major campaign to regularize illegal immigrants. On the legislative front, the Act of 16 March 1998 on Citizenship, and the Decree of 10 March 1999 introduced special provisions on children of foreign nationals living in France, as well as specific documents for them: a foreign-minor identity document (*le titre d'identité républicain*) for those born in France, and a foreign-

(5) Details of the estimation method are presented in Brutel (2014). A comparison with the flows calculated on the basis of residence permits is proposed by Arbel and Costemalle (2015). Eurostat's statistics can be consulted on Eurostat's website:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr_resfirst&lang=en

(6) On the impact of estimation biases on the calculation of migration flows, see Martí and Ródenas (2012).

minor travel document (*le document de circulation*) for those born in another country. The Act of 11 May 1998 on the Admission and Residence of Foreign Nationals and the Right of Asylum eased the conditions for family reunion and created new types of residence permits. A few years later, policy changed again, however. In particular, a longer period of residence in the country was required in order to qualify for permanent residence (Act of 26 November 2003 on Immigration Controls, Residence of Foreign Nationals and Citizenship), conditions on family reunion and regularization were tightened, while those for students and workers with specific skills were eased (Act of 24 July 2006 on Immigration and Integration, and Act of 20 November 2007 on Immigration Controls, Integration and Asylum). In 2011 and 2012, an act and several circulars specified the conditions of admission for residence of students, skilled workers, undocumented migrants and asylum seekers.

Statistics on migration flows are useful for quantitative analyses of migration. They complement academic studies that, in most cases, use the number of foreign nationals living in France at a given point in time. The temporal dimension of data on flows is particularly valuable in econometrics for addressing the problem of endogeneity between migration variables and economic variables due to two-way causality. Gross (2002), Gross and Schmitt (2012) and d'Albis et al. (2016), in particular, use these flow series to estimate the economic impact of migration in France.

I. Data and method

Several important methodological choices were made when constructing the series of migration flows based on residence permit statistics. The flows can be broken down by the characteristics of the residence permit holders, or of the permit.

Choice of individuals counted in migration flows

The first methodological choice concerns the distinction between a foreign national and an immigrant. In line with international institutions that produce migration statistics, INSEE defines an immigrant as “a person who was born a foreign national in a foreign country and who resides in France”. Under that definition, not all immigrants are foreign nationals because some have acquired French citizenship; and not all foreign nationals are immigrants because some were born in France.⁽⁷⁾ French-born foreign nationals are therefore excluded

(7) French-born foreign minors (children whose parents are foreign nationals) cannot apply for French citizenship until they turn 13, at the earliest, and certain conditions apply, notably regarding the number of years of residence in France. By presenting the *livret de famille* (family booklet), the legal guardians of these minors can request residence permits on their behalf for certain administrative formalities or travel. Under the Citizenship Act of 16 March 1998, all French-born children of foreign nationals who hold a residence permit are entitled to an identity document.

from the statistics on migration flows. Although the AGDREF database contains data on residence permits issued to French-born foreign nationals, only the data on foreign-born individuals are used. It should be noted that foreign-born children of foreign nationals who have been adopted by French parents are considered to be French by birth and are therefore also excluded from the statistics on migration flows.

The second methodological choice concerns the range of nationalities taken into account. This is an important choice because the requirement to hold a residence permit has applied to different nationalities over time. The term “third-country nationals” is commonly used to refer to citizens of countries whose nationals are required to hold a residence permit to live in France. However, over the period under review, the rules on some countries were changed. The Immigration Act of 26 November 2003 abolished the residence permit requirement for nationals of European Union countries, the Swiss Confederation and the states party to the Agreement on the European Economic Area. Citizens of countries admitted to the European Union after that date were also exempted from residence permits after an initial transition period. By 1 January 2014, Croatia was the only EU country whose nationals wishing to work in France were required to hold a residence permit. For an unbiased estimate of flows of foreign nationals over time, the statistics presented must have a constant geographical scope. As a consequence, numbers given for past dates are smaller than those presented previously. The analysis thus excludes countries that were EU members on 30 June 2013, as well as the Vatican City State, Iceland, Liechtenstein, Norway, the Principalities of Andorra and Monaco, the Republic of San Marino, and Switzerland. For information purposes, we also show flows of residence permits issued to nationals of those European countries separately. However, the trend in those flows over time is not particularly interesting. It has automatically decreased as more European countries have been exempted from residence permits. It is worth noting that a third-country national who holds a residence permit issued in another country in the Schengen Area has the right to stay in France for a short period, but if that person wishes to settle in France, he/she must apply for a French residence permit. The statistics presented in this article also include entries of individuals who had previously resided in another Schengen Area country.

Granting of residence permits

In order to understand our methodological choices, it is useful to recall the typical process leading to the granting of a residence permit. A foreign national may enter France legally after obtaining a visa that authorizes the holder to stay in France for a period of time, usually three months, although this may vary. If the person wishes to remain in France for family or employment reasons after the visa has expired, he/she needs to apply for a residence permit at the prefecture. If the application is valid and complete, the applicant is issued with a receipt which entitles him/her to reside in France for a renewable period,

generally of three months. The application may subsequently be accepted or rejected. If accepted, a residence permit is issued to the applicant in person at the prefecture. The permit has a start date and an expiry date. There are several types of residence permit, depending on the authorized length of stay, the applicant's nationality, and the purpose of stay. The resident's card (*carte de résident*) entitles the holder to reside legally in France for ten years. When a residence permit expires, it can be renewed through a similar procedure to the initial application. In 2009,⁽⁸⁾ an alternative procedure was introduced, mainly for applications from students and families. French consulates abroad now issue long-stay visas equivalent to residence permits (VLS-TS). These are usually valid for longer than a traditional three-month visa. If holders of a long-stay visa wish to extend their stay in France beyond a year, they must apply for a residence permit renewal at the prefecture.

Method used to calculate inflows and outflows

Migration flows are calculated on the basis of statistics on granting of residence permits. The AGDREF database contains information on all currently valid residence permits, all long-stay visa holders who have applied for a renewal at the prefecture,⁽⁹⁾ as well as some expired residence permits.

Flows of foreign nationals are calculated from AGDREF data as follows. INED has access to the data extracted annually since 2000 in June or July, with the exception of 2001 and 2011. Each extraction contains all information about residence permits contained in the AGDREF database on the date it was extracted. This is the information used to calculate migration flows. However, for the same variable – e.g. the number of residence permits issued in a given year – the statistic may change from one extraction to the next: if the extraction is done a long time after the year of interest, some permits issued in that year will have been removed from the database, in particular those whose holders have died or been naturalized; conversely, a file extracted only a short time after the year of interest could lead to an underestimate because of the time required for the prefectures to supply their data on new residence permits to AGDREF. We therefore made the following methodological choice: we calculated flows for the year n using the file extracted in the year $n+2$; this means that the period covered is 1998-2013.⁽¹⁰⁾ Note that the Ministry of the Interior made a similar methodological choice for the final data on first-time residence permits issued in 2013 (DSED, 2015).

We calculated inflows in two phases. In the first phase, we considered only permits that are valid for at least one year. This eliminated short-term permits associated with temporary migration, as well as permits in the form of application

(8) Decree of 27 April 2009.

(9) For more details on the inclusion of long-stay visas in the AGDREF database, see Papon (2012).

(10) The exceptions are the years 1999 and 2009, for which we used the files extracted in 2002 and 2012 because there were no extractions in 2001 or 2011.

receipts or other provisional authorizations to stay. In fact, our definition of “residence permits valid for at least one year” covers all residence permits where the difference between the start date and the expiry date is at least 364 days. For many of the residence permits, the difference is exactly 364 days. If we had included only permits valid for 365 days or more, we would have severely underestimated migration flows. In the second phase, out of that set, we considered only permits issued for the first time to a given individual. For example, a migrant may have successively held a three-month provisional permit, a one-year permit, and a ten-year resident’s card. The first phase eliminates the three-month permit, while the second phase eliminates the ten-year permit. The second phase is necessary to avoid counting the same migrant more than once. These choices also mean that a person who was legally resident in France for more than a year and who then, for any reason, lived in France without a valid permit but for a period of less than five years, is not counted as a new entry if he/she was issued with a new residence permit.⁽¹¹⁾

The order of the phases is important. Choosing first-time permits from the set of permits issued for one year or more is not the same as choosing permits issued for one year or more from the set of permits issued for the first time. Moreover, the number of permits counted also depends on the duration chosen. Table 1 shows the number of first-time residence permits issued in 2013 by period of validity. The number of individuals receiving only ten-year permits for the first time (101,276 individuals) is less than half the number receiving a permit of any duration for the first time (228,203 individuals).⁽¹²⁾ The choice of a duration of at least one year produces a smaller figure than the total number of permits because it eliminates individuals who were issued with a permit valid for less than a year who have never held a permit valid for one year or more.

Table 1. Number of first-time residence permits issued in 2013 by period of validity

All periods of validity	228,203
Valid for more than 1 year	192,419
Valid for more than 10 years	101,276
<i>Source</i> : Authors’ calculations based on AGDREF data.	

The set of permits valid for more than one year issued for the first time is the stock of permits in AGDREF on the date when the file was extracted. We used the extraction of year $n+2$ to calculate inflows for the year n (see Footnote 11). Inflows are determined by counting all the residence permits (including long-

(11) The file of a foreign national is deleted if it has not been updated within a five-year period from the registration of the initial data about the applicant (Article R611-7-1 of the Code on the Admission and Residence of Foreign Nationals and Right of Asylum).

(12) This is not the same as the figure calculated by the DSED (2015), which only takes adults into account.

stay visas) with a start date in year n . There are two reasons for choosing the start date. Technically, it is the most reliable time variable in AGDREF: the non-response rate is zero, and it is not based on self-reporting by migrants. More fundamentally, the start date indicates entry into the status of permanent migrant. Moreover, this date is often, although not always, the date of entry into France.

The AGDREF database can also be used to estimate outflows. However, this is a less reliable measure than the estimate of inflows and should be considered as an order of magnitude only. The outflow series was constructed as follows. The file extracted in year $n+2$ was used to calculate the number of individuals holding a residence permit of more than one year valid on 1 January of year $n+1$ and on 1 January of year n . As it is possible for the same person to hold more than one valid permit simultaneously, we eliminated duplicates so as to count only one permit per person. The difference between the two stocks, from which we subtracted inflows in year n , provides an estimate⁽¹³⁾ of outflows in year n . The same extraction from the AGDREF database is used to estimate both inflows and outflows in a given year. Since the elimination of duplicates is random, outflows can only be broken down by the characteristics of the residence permit holders, not the residence permits. The same precaution applies to outflows as to inflows here. Outflows represent exits from the status of permanent migrant, not necessarily exits from the country. Indeed, a person may hold a valid residence permit but no longer be physically present in France on the date considered. Equally, a person may no longer have the status of permanent migrant due to death or naturalization.

Characteristics of the immigrants

Migration flows can be broken down by the nationalities of the permit holders. We grouped nationalities together to make the statistics easier to read. Group 1 consists of the countries of the Maghreb in the strict sense, namely Algeria, Morocco and Tunisia. Group 2 consists of all other African countries. Group 3 comprises all Asian countries, including Turkey. Group 4 comprises all European countries, including the Russian Federation, whose nationals needed a residence permit to live in France on 30 June 2013. Group 5 consists of all countries in the Americas and Oceania. For a small number of cases – fewer than 350 permits per year – no nationality is recorded. This may be due to a data entry error or may correspond to stateless migrants.

Migration flows can also be broken down by the usual demographic characteristics – namely, age and sex – of the residence permit holders. With respect to age, we made the methodological choice of the age of the person on 31 December of the year of the residence permit start date. This enabled us to distinguish between adults – who turned 18 or older during the year – and

(13) A person whose permit expired and who applied for a new permit between one and five years after the expiry of the previous document is counted as an exit, not as a new entry.

minors. This is a different choice from the one made to produce INED's previous series, which used AGDREF data to determine flows of residence permits issued to individuals who entered France at age 19 or above. The new series therefore cover a broader scope. They also use a single source to determine flows of both adults and minors. Note that minors who do not work are not required to hold a residence permit in France. A residence permit is useful, however, if they wish to travel outside France or for certain formalities, so many minors do in fact hold one. The flow statistics may underestimate entries of minors and overestimate entries of adults because they include individuals who entered France as minors but who waited until age 18 to apply for a residence permit. This bias in the breakdown of the flows by age does not undermine the essential principles used to construct the flow statistics, since all individuals are counted, and counted only once.

The AGDREF data also include information on the marital status and children of residence permit holders. The resulting statistics should be approached with caution, however, because this information is not systematically recorded. Depending on the year, the non-response rate hovers around 10% and is sometimes as high as 14%. For this reason, the statistics presented below are expressed as a percentage of the total permits for which these data are available. Moreover, the information recorded in AGDREF indicates the marital status and number of children known to the prefecture on the date of the extraction, not those reported on the date the migrant entered France.

Characteristics of the residence permits

The AGDREF database contains detailed information on the residence permits issued. Firstly, we know whether a residence permit was issued in France or in another country, and whether the holder's file is managed in metropolitan France or in one of the overseas *départements* or collectivities. Other residence permit information can be used to break down migration flows into different categories. The first is the type of permit issued. There are three main types of residence permit: "permanent" residence permits (resident's card and retiree's card, valid for ten years); temporary residence permits (temporary residence card, skills and talents card, long-stay visa/residence permit, etc.); and residence permits for minors.

The second piece of information is the legal category of the residence permit, which indicates the reason for admission. There are many possible reasons, which may change over time. It is therefore important to group them into categories, depending on their economic and welfare implications, notably if they include the right to work.⁽¹⁴⁾ Category 1 comprises permits issued for employment reasons, so directly linked to labour migration. This category includes seasonal workers whose residence permit is valid for at least one year, even if it only entitles them to live in France for certain periods of the year.

(14) For the economic implications of this breakdown, see d'Albis et al. (2016).

Category 2 covers residence permits issued for family reasons. It includes permits issued to “family members” – i.e. spouses and children – of foreign nationals resident in France, notably within the framework of a family reunion procedure, as well as to “family members of a French national” and “ascendants and descendants of a French national”. It also includes residence permits issued for reasons of “private and family life”, which applies, for example, to families accompanying holders of a “skills and talents card” and scientists. Although the application procedure for a residence permit is different for family members of foreign nationals and family members of French nationals, in both cases the permit entitles the holder to work in France. Category 3 consists of “student” residence permits, which entitle the holder to work part-time. International classifications usually consider students as temporary migrants, even when they stay for more than one year. Category 4 is a general humanitarian category that groups “refugees and stateless persons” and “foreigners admitted for health reasons”. Category 5 covers all other reasons, in particular, “retired”, which has only existed since 2004 and does not entitle the holder to work or to obtain healthcare coverage under the French social security system.

The AGDREF note next to the legal category of the residence permit also indicates whether the permit was granted as part of a regularization campaign, further to the circulars of 24 June 1997 or 28 November 2012 in particular. Exceptional admissions are also indicated. These are mainly regularizations of undocumented migrants who have been habitually resident in France for at least 10 years (or 15 years if the person was a student in France). AGDREF data do not identify “ad hoc” regularizations that do not correspond to either of these AGDREF notes.

II. Migration flows since 1998

Migration flows and their breakdowns are described below, distinguishing between inflows and then outflows. The Appendix Tables provide a detailed presentation.

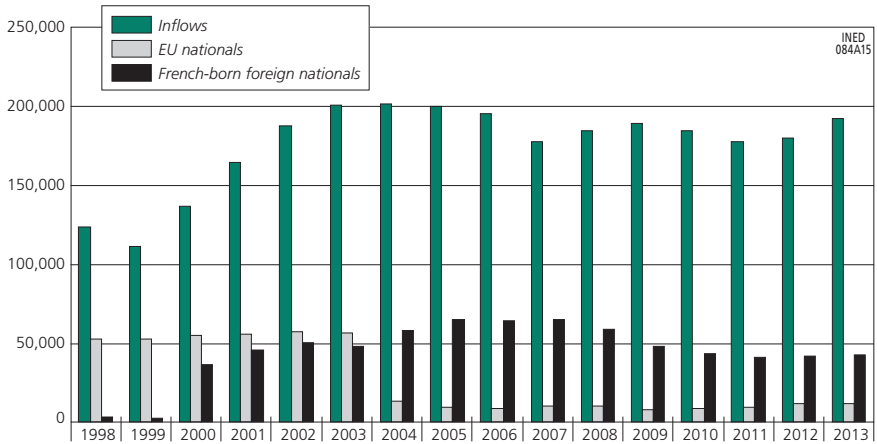
Inflows

The AGDREF database can be used to reconstitute inflows of foreign nationals to France. “Inflows in year n ” represent the number of residence permits and long-stay visas valid for at least one year issued in year n to foreign-born third-country nationals for the first time.

In 2013, inflows consisted of 192,419 individuals, i.e. less than 0.3% of the population living in France on 1 January 2014. On a constant geographical basis, the trend shown in Figure 1 reveals a sharp increase between 1998 and 2003, followed by stabilization in 2003-2005, when approximately 200,000 entries were recorded each year, then a 10% decrease until 2012 (Appendix Table A.1).

Current inflows are much higher than in the late 1990s. The trend of inflows over the period mirrors fairly closely the changes in immigration policy described in the introduction. The easing of the conditions for certain types of residence permit after 1998 was followed by a tightening in 2003.

Figure 1. Total inflows, flows of residence permits issued to European Union nationals and to French-born foreign nationals



Coverage: Residence permits and long-stay visas valid for at least one year issued in year *n* to a foreign national for the first time.

Source: Authors' calculations based on AGDREF data.

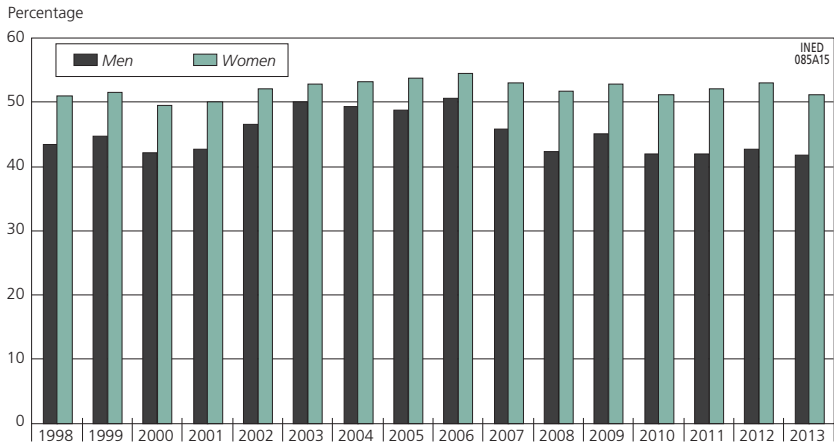
For comparison, Figure 1 also shows residence permits issued to European Union nationals. Since 2004, they have no longer been required to hold a residence permit to live in France, so few are now issued with one. A total of 11,659 residence permits were issued to EU nationals in 2013, down from 52,528 in 1998. Since 2000, a large number of specific residence permits, introduced in 1998, have also been issued to foreign nationals who were born in France. These are mainly under-age children of foreign nationals who need a residence permit for certain formalities or to travel outside France. They are not considered as immigrants so are not included in inflows, but are shown in Figure 1 for the sake of comparison (42,758 individuals were in this situation in 2013). The breakdowns that follow show only inflows of migrants, not residence permits issued to European Union nationals or French-born foreign nationals.

A majority of migrants are female (Appendix Table A.1). Females accounted for 52.2% of entries in 2013, a percentage that has increased overall since the early 2000s. Over the period 1998-2013, 50.9% of all entries were female. Migrants are young (Appendix Table A.2). Migrants aged 18-34 have made up roughly two-thirds of entries since 2007 (62.8% in 2013). The remainder can be divided into minors (9.5% in 2013) and over-35s (27.7% in 2013). Among the latter group, migrants aged 65 and over represent a small fraction (1.5%

in 2013 or 2,805 individuals). Inflows of migrants aged 18-21 include some who entered France as minors but who waited until they were adults to apply for a residence permit.

The percentage of married migrants varies with gender (Appendix Table A.3). Over the period, a majority of female immigrants were married, whereas a majority of male immigrants were unmarried. We observe a decrease in the percentage of married male immigrants after a peak in 2003-2006 (Figure 2). Furthermore, divorced, separated or widowed men are a tiny minority, accounting for only around 1% of inflows of male immigrants.

Figure 2. Inflows: married migrants as a percentage of those whose marital data are recorded



Coverage: Residence permits and long-stay visas valid for at least one year issued in year n to a foreign national for the first time.

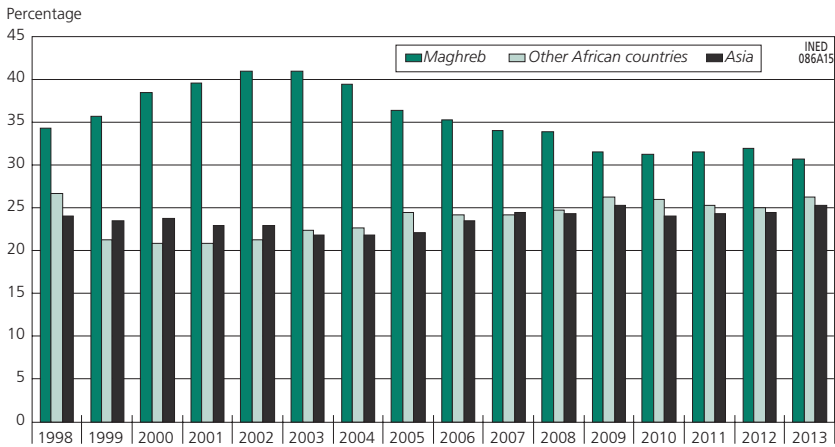
Source: Authors' calculations based on AGDREF data.

According to the AGDREF data extracted in May 2015, the 100,372 women who were issued a residence permit in 2013 had a total of 67,454 children at that time, of whom 44.5% were born in France. The percentage has increased from around 32% in the early 2000s (Appendix Table A.4).

The nationalities of migrants changed considerably over the period 1998-2012 (Figure 3, Appendix Table A.5a). Nationals of African countries remained a large majority, accounting for 57% of all entries in 2013, but their share decreased steadily after a high of 63.3% in 2003. Among African nationals, those from the Maghreb were the biggest group (59,052 individuals in 2013, or 30.7% of the total), although their share in total inflows also fell. Nationals from other African countries increased to 26.3% of the total in 2013, or 50,613 people. The percentage of nationals from Asian countries increased very slightly to 25.3% of total entries in 2013 (48,770 people, including 5,738 Turkish nationals). A minority of migrants were nationals of other countries. Nationals from the Americas accounted for 10.8% of total entries in 2013, a percentage

that was relatively constant over the period 1998–2013. Nationals from European countries subject to the residence permit requirement on 30 June 2013 increased in number after the early 2000s and accounted for 6.2% of total entries in 2013. A more detailed breakdown by nationality reveals that Algerians and Moroccans were the biggest groups of migrants, followed by Chinese and Tunisians. Other nationalities accounted for fewer than 6,000 annual entries (Appendix Table A.6).

Figure 3. Inflows: breakdown by main nationality groups



Coverage: Residence permits and long-stay visas valid for at least one year issued in year *n* to a foreign national for the first time.

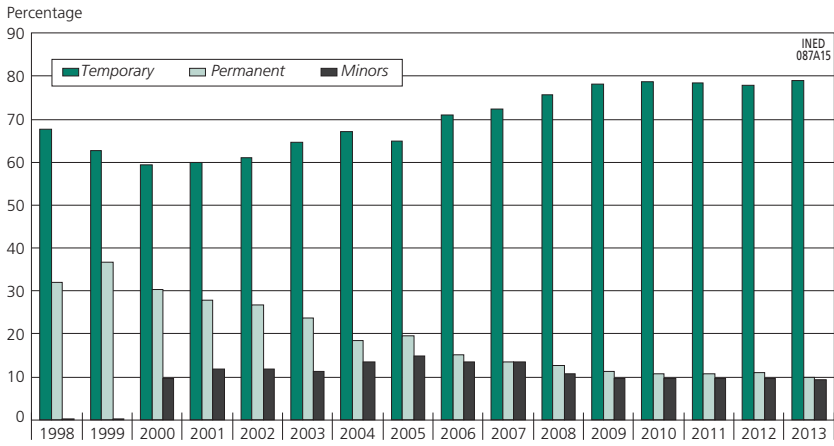
Source: Authors' calculations based on AGDREF data.

The percentage of females in inflows varies considerably from one continent of origin to another (Appendix Table A.5b). Females represented a minority of immigrants from Africa (47.5% over the whole period), but a majority of immigrants from Asia (53.6%) and an even larger majority of immigrants from the Americas (58.3%). These percentages remained fairly stable over the period. The increase in the number of females in migration flows can be attributed to an increase in the percentage of females from Africa since 2008 and to the growth of migration from Asia.

Most of the migrants received their residence permits in France. The rest were issued with a long-stay visa equivalent to a residence permit at a French consulate in another country. The long-stay visa/residence permit, introduced in 2009, has been used since 2010 by more than 36% of total immigrants. In 2013, 95.5% of entries were to metropolitan France, versus 4.5% to the overseas *départements*. The latter percentage rose over the period under review.

The vast majority of migrants were issued with a temporary permit, valid for at least one year but for less than ten years (Figure 4): 79.1% in 2013 compared with 54.9% in 2000. Symmetrically, the percentage of those issued with a permanent residence permit (valid for ten years) as their first long-term residence

Figure 4. Inflows: breakdown by type of residence permit



Coverage: Residence permits and long-stay visas valid for at least one year issued in year n to a foreign national for the first time.

Source: Authors' calculations based on AGDREF data.

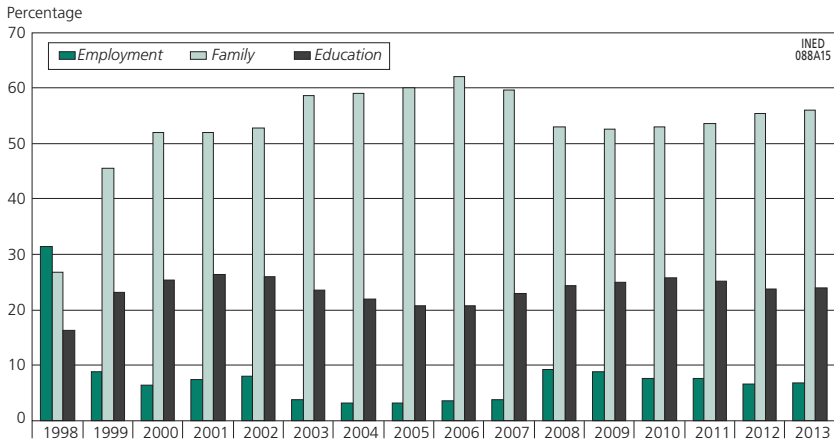
permit fell sharply, from 30.4% in 2000 to just 9.9% in 2013. This trend began when immigration policy was tightened,⁽¹⁵⁾ and the average period of validity of residence permits issued has decreased as a result. Among residence permits valid for one year or more, the percentage of permanent permits was 10% in 2013, compared with 32.1% in 1998, and has been always higher for females than for males. Lastly, residence permits for minors accounted for around 10% of permits issued after 2000.

The vast majority of immigrants come to France for family or educational reasons (Figure 5, Appendix Table A.7a). Family reasons alone account for the majority of entries after 2000: in 2013, 107,894 people were admitted for this reason, representing 56.1% of total entries. More than 20% of entries after 1999 are for educational reasons. In 2013, 46,055 people entered France to study, representing 23.9% of total entries. Admissions for other reasons were proportionately fewer. Some 12,970 people were admitted for employment reasons in 2013, i.e. 6.7% of total entries. It is important to note that residence permits granted for employment reasons include permits issued to seasonal workers that are valid for a year or more but that do not entitle them to reside in France for the entire year. First introduced in 2008, seasonal-worker residence permits have been issued to around 1,000 people annually since 2010, who account for less than 10% of inflows for employment reasons. Lastly, 17,063 people were admitted in humanitarian grounds in 2013, accounting for 8.9% of the total. Refugees are included in this category.

The proportion of females varies strongly by reason for admission (Appendix Table A.7b). There are fewer women in inflows for employment reasons: women

(15) Act No. 2003-1119 of 26 November 2003 on Immigration Controls, Residence of Foreign Nationals in France and Citizenship.

Figure 5. Inflows: breakdown by reason for admission



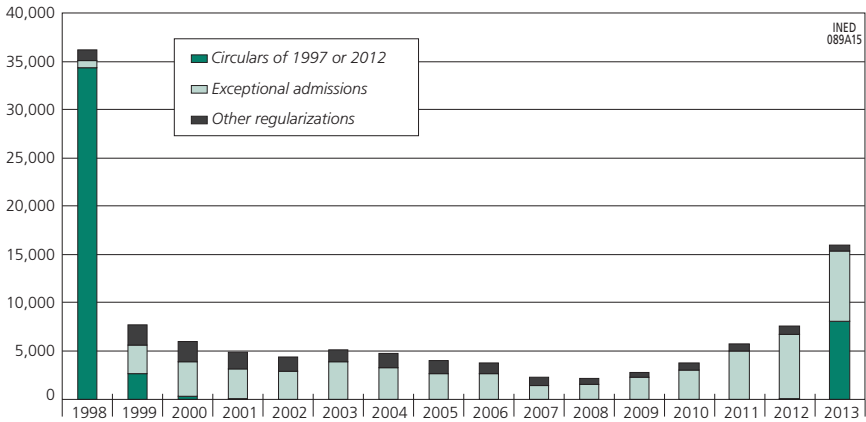
Coverage: Residence permits and long-stay visas valid for at least one year issued in year *n* to a foreign national for the first time.

Source: Authors' calculations based on AGDREF data.

make up one-quarter of work-related flows among migrants from Asia and one-third among migrants from the Americas. The trend for African females changed direction over the period, with a sharp decrease until 2008 and an increase after that date. Women accounted for 18.7% of work-related flows among African migrants in 2013. They account for a majority of inflows for family reasons and their proportion increased over the period. The percentage of females receiving permits for family reasons was higher among Asians and Americans than among African migrants. In 2013, females from Africa accounted for 55.5% of inflows for family reasons. There were more female than male students from Asia and the Americas but more male than female students from Africa.

The relative proportions of the four categories of reasons for admission have been relatively stable since 2000. The years 1998 and 1999 were unusual because numbers of permits granted were affected by a legalization campaign enacted by the circular of 24 June 1997. The campaign mainly gave rise to new entries in 1997 and 1998 and concerned 37,426 people according to the AGDREF database (Figure 6), admitted mainly for employment reasons. This figure is smaller than the OECD's estimates (2004, 2005) of 49,500, based on medical examinations for residence-permit applicants at the French Office for Immigration and Integration (OFII). By comparison, the circular of 28 November 2012 concerned 8,211 people, admitted mainly for family reasons. In addition to these regularization campaigns, there are also a number of exceptional admissions. These decreased until 2007-2008 then increased after that date. According to the AGDREF database, a total of 15,344 people were regularized in 2013, up from 1,558 in 2008.

Figure 6. Inflows resulting from regularization



Coverage: Residence permits and long-stay visas valid for at least one year issued in year n to a foreign national for the first time.

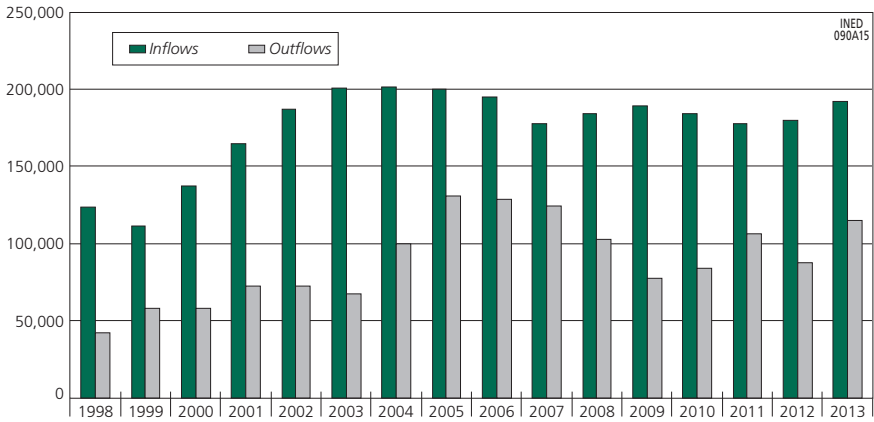
Source: Authors' calculations based on AGDREF data.

Outflows

With some precautions, the AGDREF database can be used to estimate outflows of foreigners from France. The difference between the number of residence permits and long-stay visas/residence permits valid for at least one year and current on 1 January of year $n+1$ and the number in year n is equal to the difference between the number of new permits and the outflows. Thus, “Outflows in year n ” can be estimated as the difference between the number of new permits and the total increase in currently valid permits during the year n . We counted foreign-born nationals of a country required to have a residence permit on 30 June 2013. A person may be removed from the AGDREF file because he/she has left the country, has died, has acquired French citizenship, or has remained in France without valid documents; the only criterion taken into account here is expiry of the residence permit, regardless of the reason.

Over the period 1998-2013, estimated outflows (89,232 people per year on average) were consistently lower than inflows (Figure 7, Appendix Table A.8), indicating a continuous increase in the number of third-country nationals legally resident in France. In 2013, we estimate that 114,901 people left the status of foreign national entitled to legal long-term residence in France; these exits represented 59.7% of the number of entries. Total outflows as a percentage of total inflows varied considerably over the period, from 33.7% in 2003 to 70% in 2007.

Figure 7. Inflows and outflows

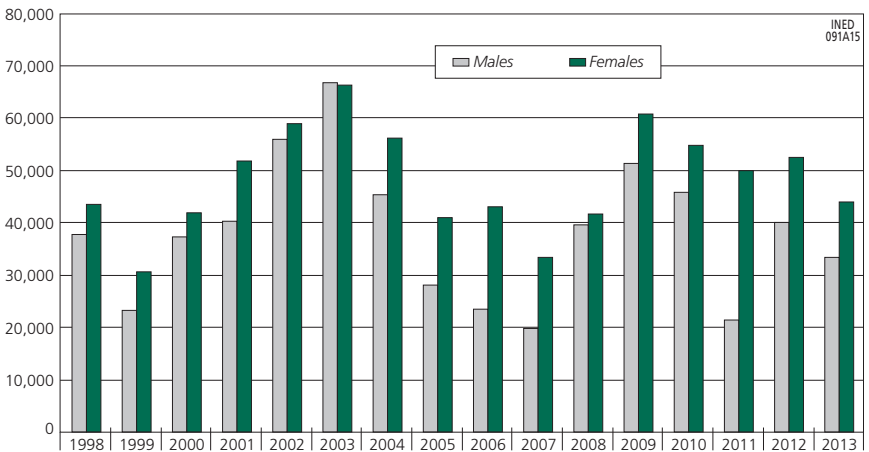


Coverage: Residence permits and long-stay visas valid for at least one year issued in year *n* to a foreign national for the first time.

Source: Authors' calculations based on AGDREF data.

The breakdown of inflows and outflows by sex highlights a growing proportion of females among the population of migrants legally resident in France. The difference between numbers of entries and exits of females is higher than that of males in almost every year of the period 1998-2013 (Figure 8). The gender gap has widened considerably in the most recent years.

Figure 8. Difference between inflows and outflows



Coverage: Residence permits and long-stay visas valid for at least one year issued in year *n* to a foreign national for the first time.

Source: Authors' calculations based on AGDREF data.

Conclusion

As in most other countries, arrivals and departures of foreign nationals are not recorded directly in France. In order to produce statistics on migration flows, other measures are needed. In this article, we used the AGDREF database managed by the French Ministry of the Interior, which collects data on residence permits, and can therefore be used to measure inflows and outflows of foreign nationals required to hold a residence permit who reside legally in France. The advantage of using AGDREF is that the data are exhaustive in their specific area of coverage and available for a relatively long period. Furthermore, thanks to the data on residence permit duration, both elements of the definition of a permanent migrant can be taken into account: length of stay and intention to settle.

Annual inflows and outflows were calculated for the period from 1998 to 2013. The absolute number of entries peaked in 2003-2005 and decreased slightly after that date. The vast majority of migrants are young adults, nationals of an African country, who came to France for family or educational reasons. The absolute number of outflows varied more than inflows but was always smaller, which indicates an increase in the population of foreign nationals legally resident in France.

Acknowledgements: The authors would like to thank Elodie Baril and Arnaud Bringé for their help in preparing the databases, the editors of the journal *Population*, and Chantal Brutel, Vianney Costemalle and Mouez Fodha, for their comments. H. d'Albis is grateful to the European Research Council for its financial support (ERC Stg Grant DU 283953).



APPENDICES

Table A.1. Inflows to France by sex

	Numbers			Breakdown (%)	
	Total	Males	Females	Males	Females
1998	123,746	60,131	63,615	48.6	51.4
1999	111,726	54,686	57,040	48.9	51.1
2000	137,027	68,528	68,499	50.0	50.0
2001	164,866	83,786	81,080	50.8	49.2
2002	187,353	94,609	92,744	50.5	49.5
2003	200,709	102,134	98,575	50.9	49.1
2004	201,531	100,158	101,373	49.7	50.3
2005	199,892	98,155	101,737	49.1	50.9
2006	195,042	94,504	100,538	48.5	51.5
2007	177,411	84,204	93,207	47.5	52.5
2008	184,329	91,687	92,642	49.7	50.3
2009	189,501	92,925	96,576	49.0	51.0
2010	184,534	89,922	94,612	48.7	51.3
2011	177,741	86,324	91,417	48.6	51.4
2012	180,077	86,112	93,965	47.8	52.2
2013	192,419	92,047	100,372	47.8	52.2

Source: Authors' calculations based on AGDREF data.

Table A.2. Inflows: breakdown by age group in year of permit start date

	Numbers				Breakdown (%)			
	Age 0-17	Age 18-34	Age 35-64	Age 65+	Age 0-17	Age 18-34	Age 35-64	Age 65+
1998	3,898	85,815	32,014	2,019	3.2	69.3	25.9	1.6
1999	3,174	81,575	24,615	2,362	2.8	73.0	22.0	2.1
2000	16,239	92,641	25,577	2,570	11.9	67.6	18.7	1.9
2001	22,139	110,031	29,794	2,902	13.4	66.7	18.1	1.8
2002	24,169	124,123	35,985	3,076	12.9	66.3	19.2	1.6
2003	24,610	129,505	42,783	3,811	12.3	64.5	21.3	1.9
2004	29,139	124,889	42,984	4,519	14.5	62.0	21.3	2.2
2005	31,141	121,056	43,401	4,293	15.6	60.6	21.7	2.1
2006	27,227	119,841	44,328	3,646	14.0	61.4	22.7	1.9
2007	24,776	112,299	37,364	2,972	14.0	63.3	21.1	1.7
2008	20,569	118,391	42,643	2,725	11.2	64.2	23.1	1.5
2009	18,536	123,823	44,298	2,844	9.8	65.3	23.4	1.5
2010	17,988	120,201	43,766	2,579	9.7	65.1	23.7	1.4
2011	17,599	114,643	42,984	2,513	9.9	64.5	24.2	1.4
2012	17,509	115,904	44,037	2,626	9.7	64.4	24.5	1.5
2013	18,254	120,907	50,453	2,805	9.5	62.8	26.2	1.5

Source: Authors' calculations based on AGDREF data.

Table A.3. Inflows by marital status and sex

Males							
	Numbers				Breakdown (%)		
	Married	Unmarried	D, S, W	Missing	Married	Unmarried	D, S, W
1998	26,180	33,175	586	3	43.5	55.2	1.0
1999	24,465	29,585	462	18	44.8	54.1	0.8
2000	26,492	35,655	421	5,806	42.2	56.8	0.7
2001	32,140	42,569	464	8,431	42.7	56.5	0.6
2002	39,468	44,582	476	9,872	46.6	52.6	0.6
2003	46,000	45,079	701	10,120	50.0	49.0	0.8
2004	43,606	43,692	713	11,912	49.4	49.5	0.8
2005	41,368	42,409	661	13,493	48.9	50.1	0.8
2006	41,786	39,862	714	11,941	50.6	48.3	0.9
2007	33,647	38,888	648	10,870	45.9	53.0	0.9
2008	34,974	46,652	696	9,180	42.4	56.5	0.8
2009	38,397	45,457	995	7,861	45.1	53.4	1.2
2010	34,300	46,585	753	8,097	41.9	56.9	0.9
2011	32,941	44,469	771	7,971	42.0	56.8	1.0
2012	33,301	43,651	1,052	8,108	42.7	56.0	1.3
2013	34,938	47,455	1,048	8,606	41.9	56.9	1.3

Note: Individuals in a civil partnership are included among married individuals. D,S,W: divorced, separated or widowed. The percentages are calculated with respect to the total number of individuals for whom these data are available.
Source: Authors' calculations based on AGDREF data.

Table A.3 (cont'd). Inflows by marital status and sex

Females							
	Numbers				Breakdown (%)		
	Married	Unmarried	D, S, W	Missing	Married	Unmarried	D, S, W
1998	32,412	28,563	2,639	1	51.0	44.9	4.1
1999	29,360	25,357	2,302	21	51.5	44.5	4.0
2000	31,212	29,672	2,153	5,462	49.5	47.1	3.4
2001	36,602	34,009	2,557	7,912	50.0	46.5	3.5
2002	43,701	37,198	2,834	9,011	52.2	44.4	3.4
2003	47,162	38,712	3,278	9,423	52.9	43.4	3.7
2004	47,910	38,614	3,386	11,463	53.3	42.9	3.8
2005	47,836	37,982	3,161	12,758	53.8	42.7	3.6
2006	48,398	37,431	3,109	11,600	54.4	42.1	3.5
2007	43,739	36,075	2,637	10,756	53.0	43.8	3.2
2008	43,211	37,879	2,507	9,045	51.7	45.3	3.0
2009	47,074	38,753	3,157	7,592	52.9	43.6	3.5
2010	44,318	39,593	2,744	7,957	51.1	45.7	3.2
2011	43,591	37,273	2,681	7,872	52.2	44.6	3.2
2012	45,711	37,607	2,751	7,896	53.1	43.7	3.2
2013	47,208	41,853	3,143	8,168	51.2	45.4	3.4

Note: Individuals in a civil partnership are included among married individuals. D,S,W: divorced, separated or widowed. The percentages are calculated with respect to the total number of individuals for whom these data are available.

Source: Authors' calculations based on AGDREF data.

Table A.4. Numbers of children accompanying inflows of women: French-born and foreign-born children

	Numbers		Beakdown (%)	
	Foreign-born children	French-born children	Foreign-born children	French-born children
1998	23,606	22,125	51.62	48.38
1999	20,263	11,025	64.76	35.24
2000	21,265	10,200	67.58	32.42
2001	25,702	11,646	68.82	31.18
2002	30,375	15,928	65.60	34.40
2003	35,422	23,011	60.62	39.38
2004	35,040	22,981	60.39	39.61
2005	35,696	24,878	58.93	41.07
2006	37,359	30,059	55.41	44.59
2007	30,299	25,349	54.45	45.55
2008	29,116	25,861	52.96	47.04
2009	31,061	33,339	48.23	51.77
2010	30,957	27,751	52.73	47.27
2011	29,971	24,830	54.69	45.31
2012	31,935	25,078	56.01	43.99
2013	37,446	30,008	55.51	44.49

Source: Authors' calculations based on AGDREF data.

Table A.5. Migration flows by main groups of nationalities

	Numbers						
	Maghreb	Other Africa	Total Africa	Asia	Americas	Europe	Oceania
1998	42,464	32,932	75,396	29,725	13,518	4,318	473
1999	39,947	23,757	63,704	26,309	13,943	7,127	482
2000	52,637	28,588	81,225	32,537	16,526	6,001	552
2001	65,212	34,503	99,715	37,920	18,551	7,970	608
2002	76,775	39,880	116,655	43,000	18,669	8,318	638
2003	82,137	44,897	127,034	43,939	19,298	9,681	670
2004	79,400	45,573	124,973	43,931	20,009	11,855	647
2005	72,770	48,790	121,560	44,266	20,548	12,693	674
2006	68,849	47,063	115,912	45,794	20,808	11,588	739
2007	60,427	42,980	103,407	43,324	19,239	10,528	703
2008	62,493	45,685	108,178	44,723	19,922	10,395	826
2009	59,658	49,703	109,361	48,065	20,285	10,643	838
2010	57,735	47,948	105,683	44,404	23,314	10,194	687
2011	56,021	45,077	101,098	43,134	21,096	11,254	821
2012	57,450	45,142	102,592	44,047	20,633	11,471	805
2013	59,052	50,613	109,665	48,770	20,734	11,957	716
	Beakdown (%)						
	Maghreb	Other Africa	Total Africa	Asia	Americas	Europe	Oceania
1998	34.30	26.60	60.90	24.00	10.90	3.50	0.40
1999	35.80	21.30	57.00	23.50	12.50	6.40	0.40
2000	38.40	20.90	59.30	23.70	12.10	4.40	0.40
2001	39.60	20.90	60.50	23.00	11.30	4.80	0.40
2002	41.00	21.30	62.30	23.00	10.00	4.40	0.30
2003	40.90	22.40	63.30	21.90	9.60	4.80	0.30
2004	39.40	22.60	62.00	21.80	9.90	5.90	0.30
2005	36.40	24.40	60.80	22.10	10.30	6.30	0.30
2006	35.30	24.10	59.40	23.50	10.70	5.90	0.40
2007	34.10	24.20	58.30	24.40	10.80	5.90	0.40
2008	33.90	24.80	58.70	24.30	10.80	5.60	0.40
2009	31.50	26.20	57.70	25.40	10.70	5.60	0.40
2010	31.30	26.00	57.30	24.10	12.60	5.50	0.40
2011	31.50	25.40	56.90	24.30	11.90	6.30	0.50
2012	31.90	25.10	57.00	24.50	11.50	6.40	0.40
2013	30.70	26.30	57.00	25.30	10.80	6.20	0.40

Source: Authors' calculations based on AGDREF data.

Table A.5b. Percentage of females in inflows by main continents of origin

	Africa	Americas	Asia
1998	48	59	55
1999	47	58	55
2000	46	59	53
2001	45	58	53
2002	46	59	52
2003	46	58	52
2004	47	58	53
2005	48	58	52
2006	49	58	53
2007	50	58	54
2008	47	57	54
2009	47	59	54
2010	48	59	54
2011	47	59	55
2012	49	58	55
2013	49	58	54

Source: Authors' calculations based on AGDREF data.

Table A.6. Inflows by the ten main nationalities

	All 10 nationalities	Morocco	Algeria	Tunisia	Turkey	China	Russia	Senegal	Côte d'Ivoire	DRC Former Zaire	Comoros
1998	123,746	21,306	15,179	5,979	7,938	4,322	1,141	3,538	2,439	1,748	1,492
1999	111,726	21,387	13,258	5,302	7,115	2,194	1,552	3,012	2,074	1,345	992
2000	137,027	29,181	15,554	7,902	8,726	3,599	1,901	3,857	2,659	1,739	1,231
2001	164,866	33,300	22,450	9,462	9,340	5,303	2,344	4,270	3,310	2,229	1,285
2002	187,353	34,431	31,810	10,534	10,391	7,000	2,691	4,776	3,762	3,181	2,393
2003	200,709	32,271	38,174	11,692	9,882	7,650	3,513	4,498	4,324	3,548	4,252
2004	201,531	31,079	37,275	11,046	10,190	8,726	4,503	4,543	4,871	4,000	2,253
2005	199,892	28,230	34,207	10,333	10,731	9,109	4,735	4,295	4,588	4,560	3,253
2006	195,042	25,441	33,172	10,236	10,918	11,116	4,376	4,038	4,594	4,431	2,847
2007	177,411	23,177	27,767	9,483	9,329	10,990	4,176	4,031	3,969	3,946	2,862
2008	184,329	26,590	26,433	9,470	8,784	12,644	4,239	4,049	3,948	4,258	3,258
2009	189,501	23,387	24,807	11,464	8,038	13,756	4,636	5,143	4,247	4,129	3,563
2010	184,534	22,157	23,803	11,775	6,412	13,226	4,784	5,038	4,152	3,947	2,890
2011	177,741	21,628	23,237	11,156	5,776	12,452	5,130	4,630	3,941	4,019	2,618
2012	180,077	21,616	24,460	11,374	5,626	12,678	4,992	4,700	3,898	4,212	3,151
2013	192,419	22,737	24,014	12,301	5,738	14,063	5,263	5,358	4,358	4,474	5,159

Source: Authors' calculations based on AGDREF data.

Table A.7a. Inflows: breakdown by reasons for admission

	Numbers						
	Employment (incl. seasonal work)	Seasonal work	Family (including minors)	Education	Humanitarian	Other	Missing
1998	38,887	0	33,159	20,034	4,092	16,632	10,942
1999	9,941	1	50,915	25,861	6,284	18,719	6
2000	8,658	1	71,264	34,636	6,913	15,552	4
2001	12,075	1	85,756	43,536	10,133	13,363	3
2002	15,159	0	98,978	48,691	13,118	11,403	4
2003	7,510	0	117,804	47,156	16,735	11,500	4
2004	6,304	0	119,080	44,130	20,409	11,605	3
2005	6,440	0	119,814	41,430	21,596	10,610	2
2006	6,892	0	121,100	40,428	16,159	10,459	4
2007	6,754	5	105,723	40,741	14,794	9,396	3
2008	17,163	4,464	97,839	44,939	16,512	7,863	13
2009	16,738	2,490	99,479	47,473	17,593	8,213	5
2010	13,895	1,093	97,941	47,690	17,222	7,780	6
2011	13,570	1,080	95,086	44,763	16,793	7,519	10
2012	11,870	969	99,911	42,719	17,382	8,186	9
2013	12,970	919	107,894	46,055	17,063	8,429	8

	Breakdown (%)					
	Employment (incl. seasonal work)	Seasonal work as % of employment	Family (including minors)	Education	Humanitarian	Other
1998	31.40	0.00	26.80	16.20	3.30	13.40
1999	8.90	0.00	45.60	23.10	5.60	16.80
2000	6.30	0.00	52.00	25.30	5.00	11.30
2001	7.30	0.00	52.00	26.40	6.10	8.10
2002	8.10	0.00	52.80	26.00	7.00	6.10
2003	3.70	0.00	58.70	23.50	8.30	5.70
2004	3.10	0.00	59.10	21.90	10.10	5.80
2005	3.20	0.00	59.90	20.70	10.80	5.30
2006	3.50	0.00	62.10	20.70	8.30	5.40
2007	3.80	0.10	59.60	23.00	8.30	5.30
2008	9.30	26.00	53.10	24.40	9.00	4.30
2009	8.80	14.90	52.50	25.10	9.30	4.30
2010	7.50	7.90	53.10	25.80	9.30	4.20
2011	7.60	8.00	53.50	25.20	9.40	4.20
2012	6.60	8.20	55.50	23.70	9.70	4.50
2013	6.70	7.10	56.10	23.90	8.90	4.40

Source: Authors' calculations based on AGDREF data.

Table A.7b. Percentage of females by reasons for admission and by main continents of origin

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Africa																
Family	54	52	51	51	51	50	51	53	53	54	55	55	54	54	54	55
Employment	42	31	33	34	38	27	23	22	24	21	7	10	13	14	16	19
Education	39	37	34	32	34	35	36	38	39	39	38	39	39	40	41	40
Other	55	49	50	52	50	41	35	34	34	40	41	45	50	50	50	52
Humanitarian	48	49	51	50	47	45	45	44	46	47	47	46	45	43	44	47
Americas																
Family	67	66	64	63	63	63	63	63	63	64	66	66	65	64	65	64
Employment	44	33	34	31	33	29	30	29	33	32	31	39	38	36	35	37
Education	62	61	61	61	61	59	59	60	59	58	58	58	56	57	56	57
Other	62	57	58	60	61	61	59	60	58	60	57	58	59	60	58	56
Humanitarian	56	55	58	48	45	45	51	50	49	52	52	55	54	50	53	49
Asia																
Family	61	60	57	57	56	55	56	56	57	58	60	62	63	62	62	60
Employment	48	26	25	25	21	22	23	21	18	23	22	26	25	25	25	25
Education	56	56	54	55	54	54	54	54	54	56	57	57	57	58	59	59
Other	59	57	60	62	65	58	60	65	65	66	65	69	65	62	61	61
Humanitarian	49	48	46	45	44	43	45	43	41	44	41	39	36	40	38	37

Source: Authors' calculations based on AGDREF data.

Table A.8. Inflows and outflows

	Inflows	Outflows		
		Total	Males	Females
1998	123,746	42,235	22,243	19,992
1999	111,726	57,988	31,490	26,498
2000	137,027	57,949	31,317	26,632
2001	164,866	72,797	43,446	29,350
2002	187,353	72,505	38,745	33,760
2003	200,709	67,656	35,454	32,202
2004	201,531	99,846	54,675	45,171
2005	199,892	130,941	70,159	60,782
2006	195,042	128,412	71,046	57,366
2007	177,411	124,280	64,433	59,847
2008	184,329	102,862	52,019	50,842
2009	189,501	77,412	41,531	35,881
2010	184,534	83,906	44,031	39,875
2011	177,741	106,485	64,997	41,488
2012	180,077	87,538	46,079	41,459
2013	192,419	114,901	58,550	56,351

Source: Authors' calculations based on AGDREF data.



REFERENCES

- ARBEL J., COSTEMALLE V., 2015, “Réconciliation des recensements et des titres de séjour sur l’estimation des flux d’immigration”, *Économie et statistiques*, forthcoming.
- BRUTEL C., 2014, “Estimer les flux d’entrées sur le territoire à partir des enquêtes annuelles de recensement”, INSEE, Document de travail F1403, 24 p.
- D’ALBIS H., BOUBTANE E., COULIBALY D., 2016, “Immigration policy and macroeconomic performance in France”, *Annals of Economics and Statistics*, 121-122, forthcoming.
- DSED, 2015, “La délivrance des premiers titres de séjour en 2013. Révision successive des données”, Ministère de l’Intérieur.
- GROSS D., 2002, “Three million foreigners, three million unemployed? Immigration flows and the labour market in France”, *Applied Economics*, 34(16), pp. 1969-1983.
- GROSS D., SCHMITT N., 2012, “Low- and high-skill migration flows: Free mobility versus other determinants”, *Applied Economics*, 44(1), pp. 1-20.
- HÉRAN F., 2007, *Le temps des immigrés. Essai sur le destin de la population française*, Seuil, La République des idées, 109 p.
- HÉRAN F., TOULEMON L., 2005, “What happens when the census population figure does not match the estimates?”, *Population and Societies*, 411, 4 p.
- LÉGER J.-F., 2004, “Les entrées d’étrangers sur le marché du travail français (1990 à 2001)”, *Revue européenne des migrations internationales*, 20(1), pp. 7-31.
- LÉGER J.-F., 2008, “Les entrées annuelles des ressortissants des pays tiers sur le marché de l’emploi de 2004 à 2006”, *Info migration*, 1.
- LÉGER J.-F., BREEM Y., 2013, “Une mesure du nombre annuel de nouveaux actifs étrangers en France”, *Espace populations sociétés*, 3, pp.39-56.
- MARTÍ M., RÓDENAS C., 2012, “Measuring international migration through sample surveys: Some lessons from the Spanish case”, *Population, English Edition*, 67(3), pp. 435-464.
- MAZUY M., BARBIERI M., D’ALBIS H., 2013, “Recent demographic trends in France: Fertility remains stable”, *Population, English Edition*, 68(3), pp. 329-374.
- MAZUY M., BARBIERI M., D’ALBIS H., 2014, “Recent demographic trends in France: The number of marriages continues to decrease”, *Population, English Edition* 69(3), pp. 273-322.
- MAZUY M., BARBIERI M., BRETON D., D’ALBIS H., 2015, “The demographic situation in France: Recent developments and trends over the last 70 years”, *Population, English Edition* 70(3), pp. 393-460.
- OECD, 2004, *Trends in International Migration 2003*, OECD Publishing, Paris. DOI:http://dx.doi.org/10.1787/migr_outlook-2003-en
- OECD, 2005, *Trends in International Migration 2004*, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/migr_outlook-2004-en
- PAPON S., 2012, “La mesure des entrées sur le territoire français”, *Infos migrations*, 44, 4 p.

- PREUSS-LAUSSINOTTE S., 2000, "Les fichiers et les étrangers au cœur des nouvelles politiques de sécurité", Bibliothèque de droit public. L.G.D.J., vol. 209.
- THIERRY X., 2001, "Les entrées d'étrangers en France de 1994 à 1999", *Population*, 56(3), pp. 423-450.
- THIERRY X., 2004, "Recent immigration trends in France and elements for a comparison with the United Kingdom", *Population, English Edition*, 59(5), pp. 635-672.
- THIERRY X., 2010, "Les origines nationales des immigrés arrivés récemment en France", *Regards croisés sur l'économie*, 8(2), pp. 41-48.

Hippolyte d'ALBIS, Ekrame BOUBTANE • CHARACTERISTICS OF MIGRATION FLOWS TO FRANCE BASED ON RESIDENCE PERMIT DATA (1998-2013)

In this article, administrative data on residence permits are analysed to calculate flows of legal permanent migration to France from third countries. The authors describe and discuss the AGDREF database, a national database of foreign nationals residing in France, as well as the methodological assumptions underpinning their calculations. Annual migration inflows and outflows are calculated for the period 1998-2013 on the basis of information on residence permits with a validity of at least one year extracted annually from the AGDREF database. The study breaks down the inflows by migrants' age, gender and nationality, and by residence permit duration and reason for admission. Inflows peaked in 2003-2005 and have fallen slightly since. A total of 192,419 legal migrants entered France in 2013. The majority of legal permanent immigrants are young adults from African countries who come to France for family reasons or to pursue their education. Over the period 1998-2013, estimated outflows were consistently smaller than inflows.

Hippolyte d'ALBIS, Ekrame BOUBTANE • CARACTÉRISATION DES FLUX MIGRATOIRES EN FRANCE À PARTIR DES STATISTIQUES DE DÉLIVRANCE DE TITRES DE SÉJOUR (1998-2013)

Cet article analyse les données administratives relatives aux titres de séjour qui sont utilisées pour calculer les flux de migration permanente et légale en France d'étrangers en provenance de pays tiers. Il présente et discute la base nationale AGDREF (Application de gestion des dossiers de ressortissants étrangers en France) et l'ensemble des hypothèses méthodologiques retenues pour la construction de ces flux. Les flux d'entrées et de sorties annuels sont établis pour la période 1998-2013 à partir des informations sur la détention de titres de séjour dont la durée de validité est d'un an et plus extraites annuellement de la base AGDREF. L'étude est décomposée en fonction des flux d'entrées par âge, sexe et nationalité des personnes migrantes, ainsi que par durée de validité et motif de délivrance du titre de séjour. Les flux d'entrées ont atteint leur niveau le plus élevé dans les années 2003-2005 et sont en légère diminution depuis. En 2013, le flux d'entrées s'est établi à 192 419 personnes. Les personnes immigrées sont majoritairement de jeunes adultes, ressortissants d'un pays d'Afrique et venant en France pour motif familial ou pour études. Au cours de la période 1998-2013, les sorties estimées sont toujours inférieures aux entrées.

Hippolyte d'ALBIS, Ekrame BOUBTANE • CARACTERIZACIÓN DE LOS FLUJOS MIGRATORIOS EN FRANCIA A PARTIR DE LAS ESTADÍSTICAS DE PERMISOS DE RESIDENCIA (1998-2013)

Este artículo analiza los datos administrativos relativos a los permisos de residencia, que se utilizan para calcular los flujos de migración permanente y legal en Francia de extranjeros provenientes de terceros países. Presentamos la base nacional AGDREF (Aplicación de gestión de los registros de extranjeros en Francia) así como una discusión de las hipótesis metodológicas utilizadas para la construcción de dichos flujos. Los flujos anuales de entradas y de salidas son establecidos para el periodo 1998-2013 a partir de las informaciones sobre los permisos de residencia de una duración igual o superior a un año, extraídas anualmente de AGDREF. Los flujos de entrada son presentados en función de la edad, el sexo y la nacionalidad de los inmigrantes, así como de la duración de validez y del motivo de emisión del permiso de residencia. Los flujos de entrada han alcanzado su valor máximo en los años 2003-2005 y disminuyen lentamente desde entonces. En 2013, el flujo de entradas fue de 192 419 personas. En su mayoría, los inmigrantes son jóvenes adultos, ciudadanos de un país africano que llegan a Francia por motivos familiares o por estudios. Durante el periodo 1998-2013, el número estimado de salidas ha sido siempre inferior al de las entradas.

Keywords: Immigration, inflows, outflows, France, residence permits.

Translated by Madeleine Grieve.

