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**Return migration**

## **MEASURING RETURN MIGRATION : SOME PRELIMINARY FINDINGS IN TIMES OF CRISIS**

**Note by OECD<sup>1</sup>**

### **1 Introduction**

Our knowledge on the size, the characteristics and the determinants of return migration is still fragmentary and simply measuring exits remains a challenge for many OECD countries. In this paper, we briefly discuss alternative methods to measure re-emigration or retention rates and present some preliminary estimates for selected European countries before and after the 2008 economic crisis.

### **2. Defining and measuring return migration<sup>2</sup>**

There are important challenges associated with both defining and measuring return migration. The challenges are even greater when comparability across countries and time is important. In practice, attempts to measure the phenomenon face two major difficulties: the definition of return migration, and data availability.

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<sup>1</sup> This paper has been drafted by Melanie Jolivet (consultant to the OECD), Theodora Xenogiani (OECD) and Jean-Christophe Dumont (OECD). The opinions expressed and the arguments advanced in this study do not necessarily reflect those of the OECD or of its member countries.

<sup>2</sup> This section is based on OECD (2008, Part III).

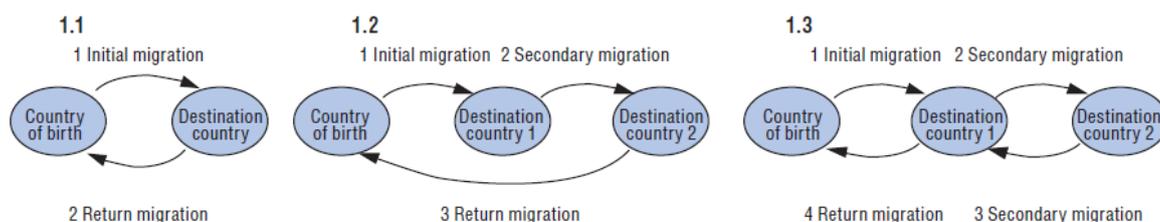
## 2.1 What is a returning migrant?

According to the definition offered by the United Nations Statistics Division for collecting data on international migration (UNSD, 1998), returning migrants are “persons returning to their country of citizenship after having been international migrants (whether short-term or long-term) in another country and who are intending to stay in their own country for at least a year.” This definition embraces four dimensions: *i*) country of origin, *ii*) place of residence abroad, *iii*) length of stay in the host country, and *iv*) length of stay in the home country after return.

According to this definition, a migrant’s home country refers to his nationality. However, for persons born abroad and naturalised and for those born as foreigners in the host country, a definition based exclusively on the country of nationality does not seem appropriate. Differences in legislation on nationality also pose problems of international comparability. Thus it would appear preferable to take the country of birth as the criterion for identifying returning migrants.

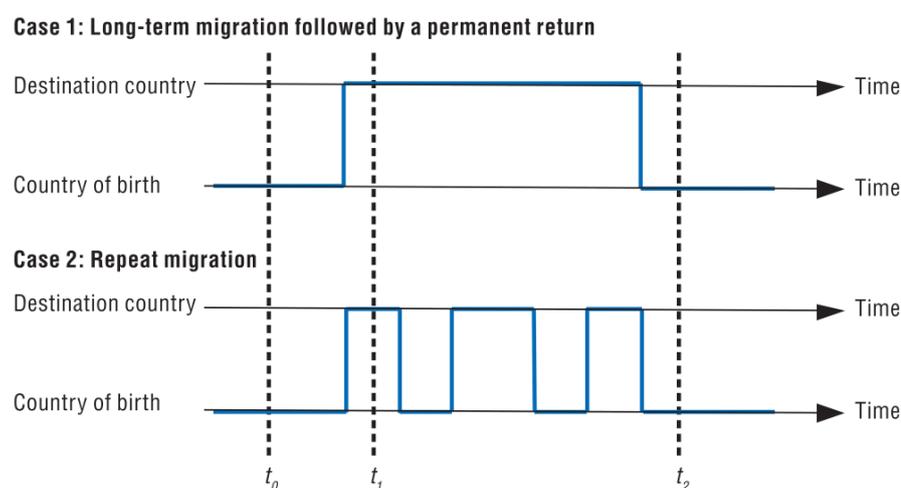
Return can sometimes be part of a more complex migration history, as Figure 1 shows. Firstly the last country of residence before return is not necessarily the country of initial destination (Figure 1, 1.2), and a departure from the country of first destination is not necessarily a return to the country of origin (Figure 1, 1.3).

**Figure 1. Various cases of return migration**



Secondly, in cases of “temporary” returns or short stays in the host country, return migration is especially difficult to identify and is therefore frequently underestimated. The length of stay at the time of return can be measured from the declaration given upon exit from the host country, or after return to the country of origin. In the first case, the measure is subject to some uncertainty, while in the second case it might be a truncated measure.

The possibility of measuring length of stay in the host and home countries depends on the availability of data. In the example shown in Figure 2, if place of residence is observed only at dates  $t_0$ ,  $t_1$  and  $t_2$ , then cases 1 and 2 are equivalent. Yet the reality is rather more complex. Even if “temporary” returns are particularly difficult to identify, as are short stays in the host country, it would be particularly important to be able to distinguish true returns from mere visits of migrants to their home country.

**Figure 2 Timing of migration for an individual and observational equivalence**

Source: OECD, International Migration Outlook (2008, Part III)

## 2.2. Data sources and estimation methods

The sources of data for measuring return migration can be differentiated according to two main dimensions: the place of collection (in the country of origin or the country of destination) and whether the measurement is direct or indirect. If returns are identified from host country data, the measure will be based on immigrants leaving the territory. If the data come from the home country, returns will be identified on the basis of native-born persons entering the country. These two approaches do not necessarily coincide, to the extent that not all departures measured by the host country will necessarily have the home country as destination. The second dimension distinguishes direct measurement of migratory flows and indirect measurement based on changes in migrant population stocks.

### *Direct measurement of exits or returns using longitudinal data*

A prime source of statistics on returning migrants is data from population registries, which are compiled from a permanent census of the *de jure* population. Residents are required to register upon arrival and to de-register upon departure. These records thus count entries and exits from the country, and can be used to measure the departure of migrants and the return of native-born persons who were residing abroad. The information contained in the registries varies from one country to another, but generally includes country of birth and nationality, as well as destination and planned length of stay abroad for those leaving the country.

The first limitation on the use of population registries for measuring return migration is that people register and de-register on the basis of their planned length of stay in the country (for entries) or the planned length of absence from the country (for exits). Some individuals, then, may leave the country without de-registering if they plan to return shortly. If they do not return as planned, their departure is not recorded. The same holds for people who deliberately fail to “sign out”, so as not to lose certain entitlements associated with residency in the country. Moreover, by definition, population registries do not include illegal immigrants, and there is thus no way of measuring their departure from the territory. Nor does the registry always make it possible to identify the destination of persons leaving the country: when this information is available, it expresses a person’s intent about the next country of residence, and not necessarily the real or final destination.

In some countries, inflow and outflow data are collected at borders points (ports, airports, etc.). These data are collected primarily for immigration control purposes, and information

on arrivals is generally more complete than that on departures. Moreover, these sources contain very little information on the demographic and social characteristics of migrants. Australia, New Zealand and Japan collect data of this kind. Another example of data collection at border crossings is the International Passenger Survey in the United Kingdom, the purpose of which is essentially statistical.

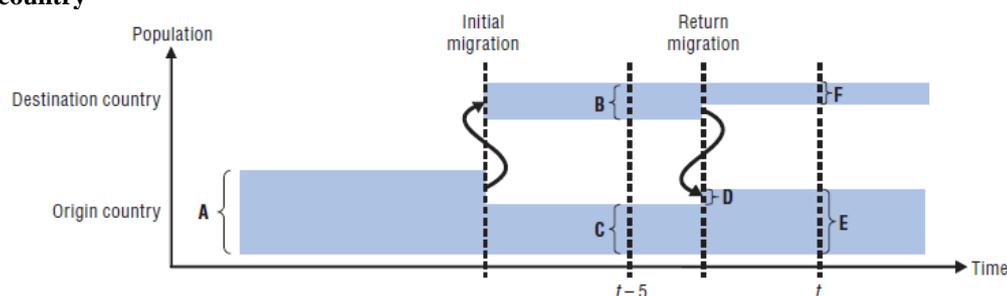
A direct measure of outflows can also be derived from longitudinal surveys. If the initial sample is representative of the foreign-born population, and if there is a way of knowing why immigrants leave the sample (*i.e.* death, departure, attrition related to data collection and survey design), then we can estimate exits from the territory, and eventual returns. Sample size and structure are the main limitations of these tools. Longitudinal surveys generally have fairly small samples, because of technical and cost considerations, which make them less representative and affects estimates of exit rates. On the other hand, sources of this kind are very useful for studying individual behaviour.

#### *Indirect measurement of returns to country of origin*

Returns of migrants can be estimated from the countries of origin, if there is a representative survey available with information on individuals' previous place of residence. This is the case, for example, with the population censuses of a growing number of countries, which include a question on country of residence five years prior to census date. Here, we can not only estimate the number of return migrants for different countries of previous residence, but we can also compare the number of returning migrants with the number who never left the home country. When adequate data are available, it is also possible to match the home country census against the censuses of the principal destination countries. In this way, we can estimate return rates and we can also compare returning migrants with those who have remained in the host country. The method is illustrated in Figure 3.

One drawback of this method is that it is generally not possible to control for the date of arrival in the destination country and, consequently, for the length of residence in that country. The "return rates" estimated in this way are not comparable, then, to the return rates by cohort estimated from surveys conducted in the destination countries. In fact, this method can be used to calculate a proportion of returns among migrants present at a given date, *i.e.* a ratio between outflows and a stock; this is typically lower than a return rate for a given cohort, which relates outflows to inflows.

**Figure 3. Method for estimating returns using a census in the origin country**



*Notes:* Censuses in the origin and destination countries take place in year  $t$ . Censuses of both countries include a question on the country of residence 5 years earlier. A: initial population in the origin country; B: number of migrants arrived in the destination country before  $t-5$ ; C: number of non-migrants ( $A-B$ ); D: return migrants among migrants arrived in the destination country before  $t-5$ ; E: population in the destination country in  $t$ . D is observed at date  $t$  in the origin country through the information on the place of residence in  $t-5$ ; F is observed at date  $t$  in the host country. The proportion of returnees in  $t$  among the migrants living in the destination country in  $t-5$  is equal to  $D/B = D/(F+D)$ .

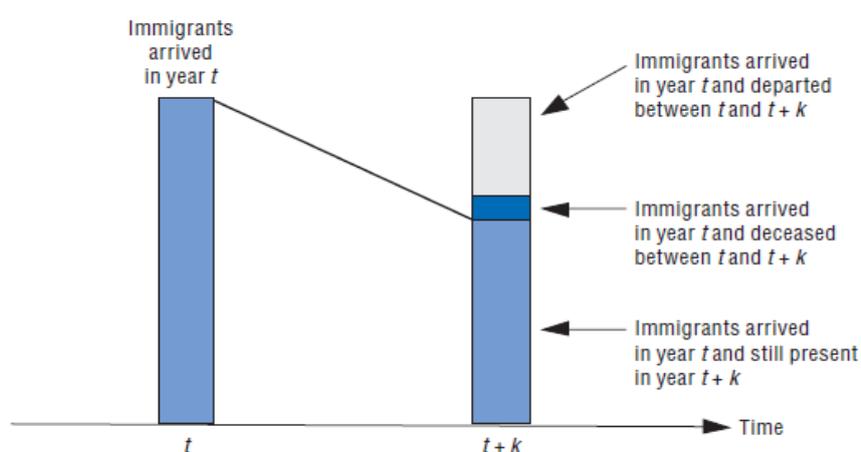
*Source:* OECD, International Migration Outlook (2008, Part III)

### *Indirect measurement of departures from the country of destination*

Indirect measures of migrant departures, based on data collected in the country of destination, involve estimating, for a cohort that arrived in year  $t$ , the difference between the initial stock of the cohort and the stock remaining at a later date  $t+k$ , accounting for deaths within the cohort during the interval (Figure 4).

The size of the immigrant cohort entering in year  $t$  can be obtained, for example, from a direct measurement of immigration flows. The size of this cohort in year  $t+k$  can then be measured from a large sample survey (labour force surveys, for example) or from a population census. Depending on the available data, it may be possible to obtain detailed results by region or country of origin, gender, education and other variables of interest.

**Figure 4. Indirect estimation method of immigrants' exits from the destination country**

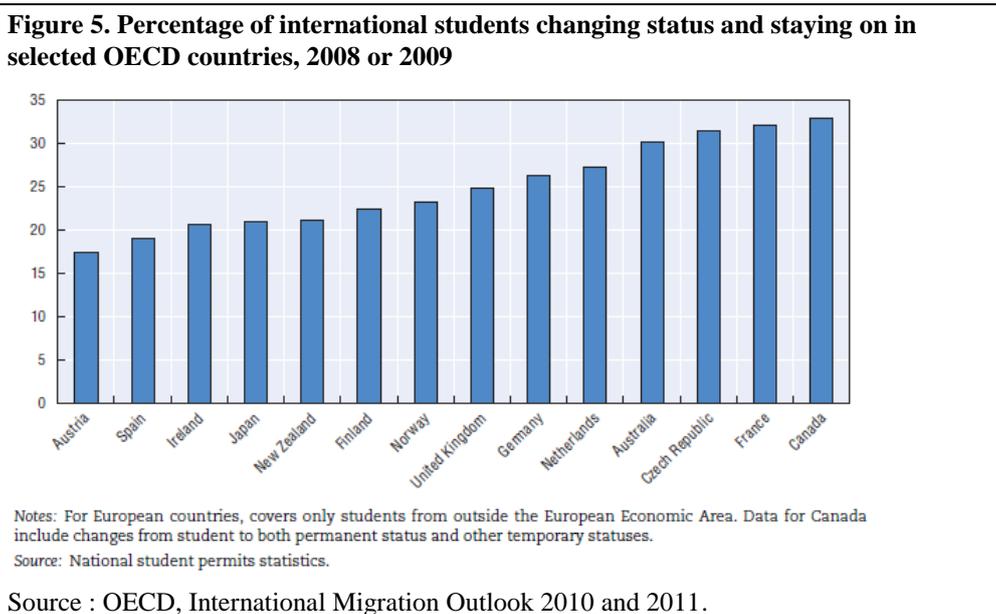


Source: OECD, International Migration Outlook (2008, Part III)

#### **Box 1 : Indirect measurement of stay rates for international students**

Most OECD countries now allow international students the opportunity to search for work for a specified period following the completion of study. The success of policies to retain international students as highly skilled migrants in the domestic labour market can be assessed by means of *stay rates*, which measure the share of international students who stay in the host country for work or other reasons. In practice, this can be tabulated as the percentage of students who change status, from student visa to other residence permit types, in particular work permit status.

The estimates of stay rates need to be treated with some caution because of data limitations but also because they do not necessarily concern students who have finished their studies. Students may change status prior to graduation, for example, if they marry a national of the host country. Others may be allowed to stay for humanitarian or other reasons without graduating. In principle, one would like to know the number of graduates who stay one, but the data on students who change status do not identify whether or not the students concerned have completed their education. However, because work permit requirements for international students generally require a tertiary qualification as well as a job which corresponds to their field of study, it may well be the case that most international students who change permit status and become workers are international graduates. For reasons of consistency and international comparability, however, the stay rates in figure 5 have been calculated using as the denominator the total number of students who have not renewed their student permits. Note that these rates exclude students in free-movement regimes who do not require a student visa or a work permit to remain in the country of study.



### 3. The magnitude of return migration

This section presents indirect measurements of departures for selected European destination countries based on the European Labour Force Survey.

Using LFS in this context poses a number of challenges which relate notably to the improvement of the coverage of the survey overtime, to variations in non-responses rates regarding place of birth or duration of stay and to the concentration of responses about length of stay at certain values (five years in particular). As a result of these shortcomings the stocks of these cohorts are volatile and must be smoothed out in order to estimate retention rates. The smoothing method selected involves constructing an envelope around the original cohort, and the final stock for a given length of stay will be the average between the maximum and minimum of the envelope.

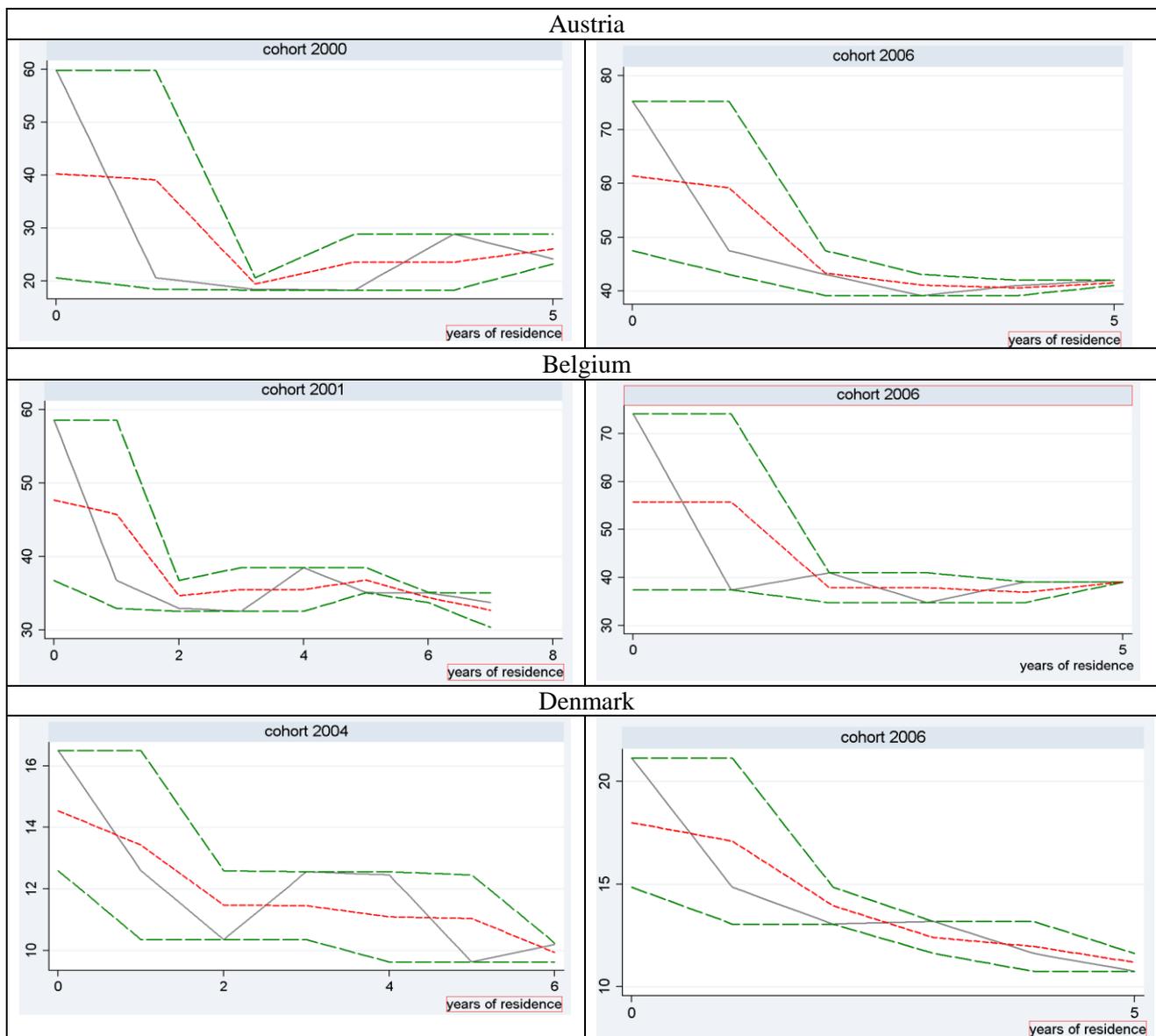
The result presented in Figure 6 show a rapid drop in the size of the cohort in the first two years after migration, which suggest that a large share of registered movements are actually short term. The slope is indeed steeper in countries where immigration data are based on population register with short duration requirements or on surveys.

Secondly, it appears that a large share of re-emigration occurs in the first five years, as the curve is quite flat afterwards. Other evidence have shown that the probability of leaving the country declines in the first 15 years of residence, and then grows, reflecting the lifecycle of the migrants, and in particular a significant propensity to return home upon retirement (Jensen and Petersen 2007; Klinthäll 2006; De Coulon and Wolff 2006).

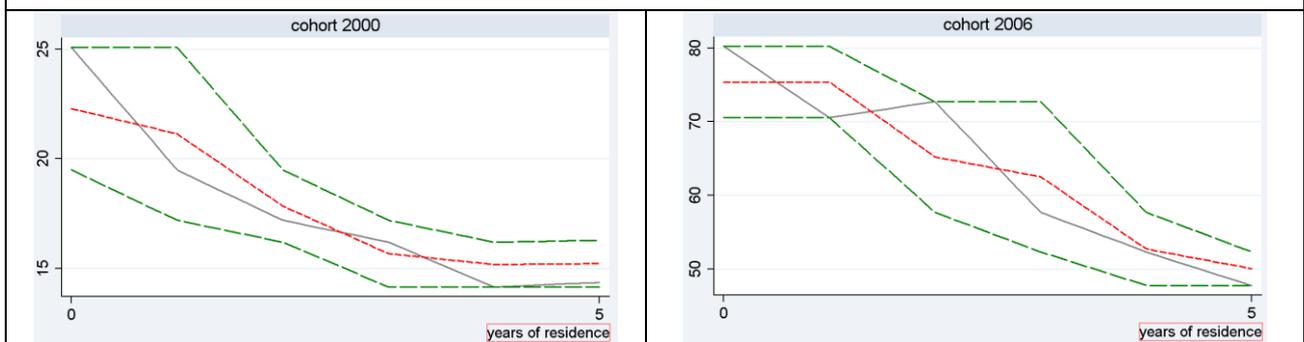
Finally, re-emigration patterns seem to vary more between countries than between cohorts, reflecting most probably difference in the structure of migration by category, age, gender and country of origin. All these parameters are actually found to have a significant impact on the relative importance and dynamics of returns (see OECD 2008, part III).

**Figure 6. Evolution of the number of immigrants by length of stay for selected European destination countries and entry cohorts, thousands**

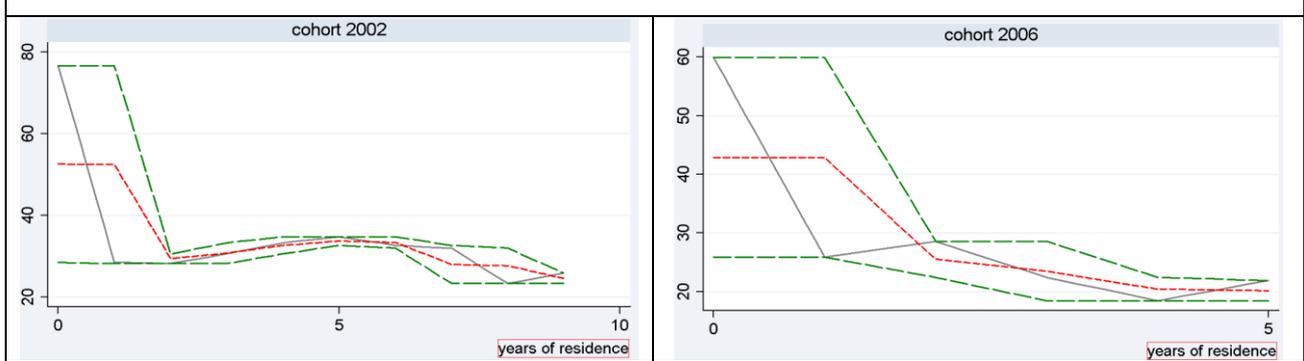
----- : Envelope      — : Row data      — : Estimated data



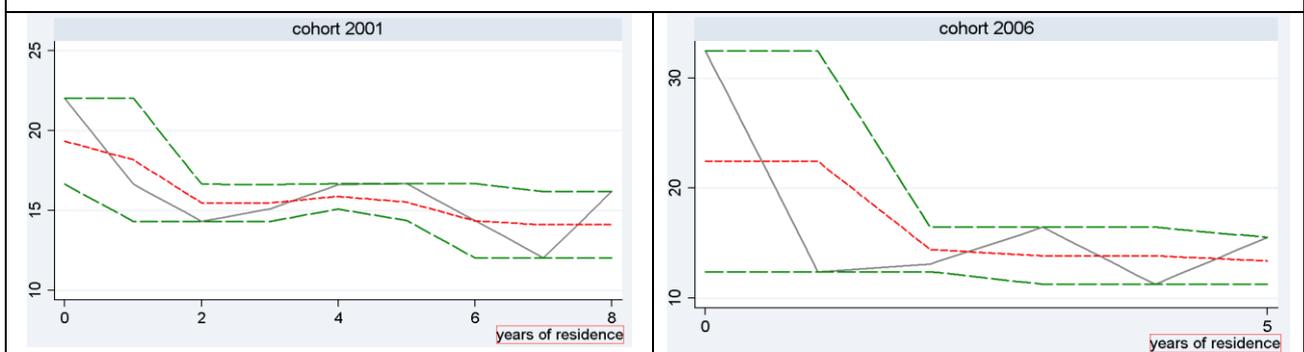
Ireland

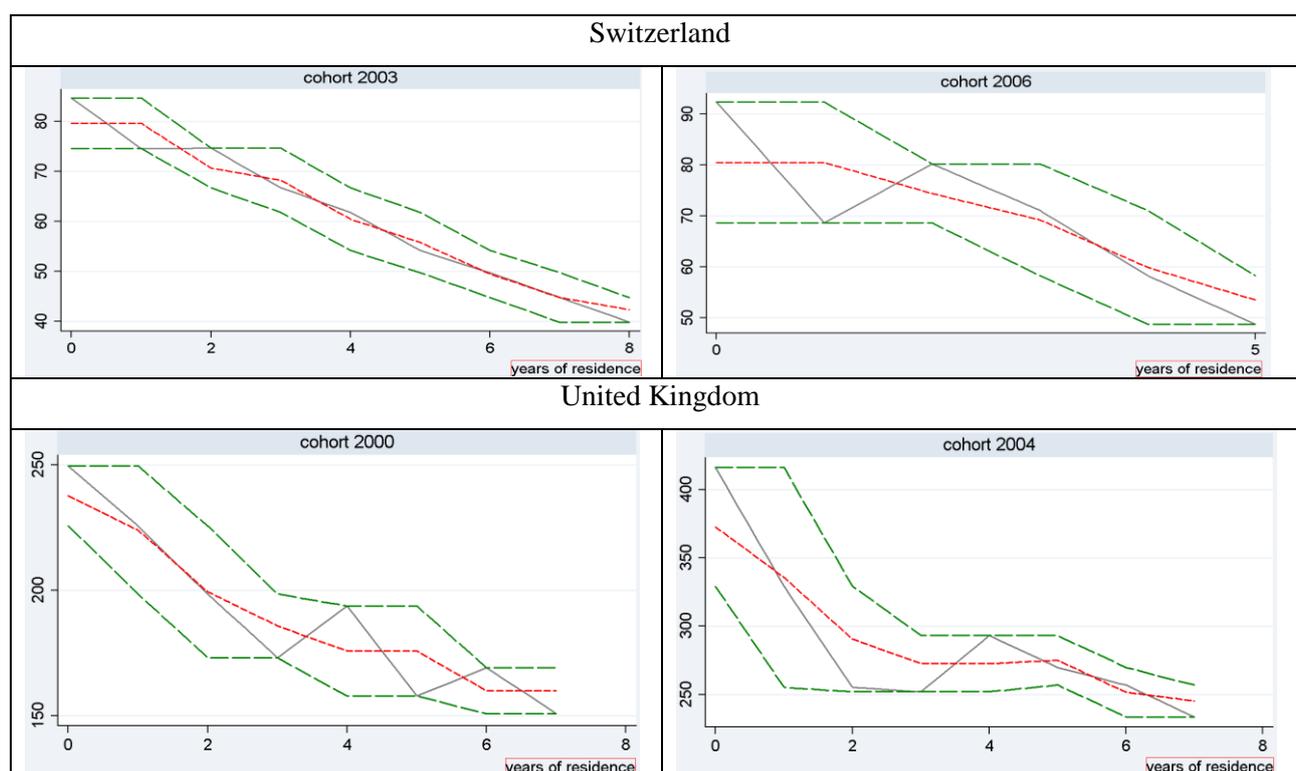


Netherlands



Norway





Source: OECD Secretariat calculations

#### 4. Return migration in times of crisis

Various explanations of return migration have been offered in the academic literature (for a review, see OECD, 2008 Part III). These can be summarised in four main groups: i) failure to integrate into the host country and changes in the economic situation of the home country, ii) individuals' preferences for their home country; iii) the achievement of a savings objective, or iv) greater employment opportunities for individuals in their home country, thanks to experience and capital gained abroad. All these explanation are closely linked to prevailing economic and labour market conditions in the destination country and back home. The impact of economic crisis is however theoretically uncertain as it depends on the relative size of the shock in origin and destination countries as well as on the effect of the crisis on the possibility to remain as well as on the likelihood to be (re)admitted in the future.

##### *Return migration during past economic crises*

Evidence on the impact of major past economic crises on migrant flows are scarce and tend to show mixed results. In the case of Germany, during the oil crisis of the 1970s, Dobson *et al* (2009) note that most of migrants are reluctant to leave even when economic conditions worsen. They estimate that only ten to 15 percent of guest workers went back to their home country. Similar evidence are found for Turkish workers in Germany and Algerian workers in France (Sward, 2009 and Dustmann, 1996).

On the contrary, in the 1930s the economic crisis increased emigration from the United States. The overall rate of net migration of aliens to the United States dropped sharply in 1931 and became negative for the years 1932-1935. Mexico experienced significant return migration flows from the United States. Meanwhile, emigration was also much more

prevalent among US citizens themselves. In 1932 and 1933, for instance, there were almost as many native-born US citizens who departed permanently as immigrant aliens who arrived in the country (OECD, 2009).

During the 1997-99 Asian financial crisis, no repercussions on labour migration outflows have been noted in the region, despite the efforts of governments to alleviate tensions on the labour market by promoting return migration (Hugo 2002). This may be explained by the fact that the Asian crisis was followed by a relatively quick resumption of economic growth (Martin 2009).

More generally, the impact of changes in economic conditions on migration outflows may be difficult to identify because of concomitant changes in migration policies to foster returns or limit entries (Bonjour, 2005; Beets and Willekens, 2009).

In some cases, economic downturns and recessions may represent a turning point in the composition of migrants. The economic crises which followed the two oil shocks of the 1970s in most OECD countries are good examples of the various channels through which migration flows can be affected by a recession. Several European countries set up voluntary return policies to encourage unemployed immigrants to leave. The by-in for these programmes remained relatively low and instead of returning home, many migrants, who had initially come to destination countries alone to work temporarily, brought their spouses and children. As a result, lower return migration rates have been observed in the early 1980s (see for example OECD 2009, Part I and Castle 2009)

#### *The impact of the recent economic downturn*

The 2008 economic crisis is peculiar in many respects because of the severity of the shock, its quick diffusion and the fact that it hit hard specific sectors, both high and low skilled, where immigrants are concentrated, such as finance or construction. Furthermore, most affected countries (Ireland, Spain, Portugal, Greece, the United Kingdom and to a lesser extent the United States) had experienced large inflow of foreign workers, including from new EU member States, in the early 2000s. All these would support the possibility of high returns, however, not all countries were affected in the same way, and variations across countries and across migrant groups (migrant women were generally significantly less affected than their male counterparts) are likely to be more important in the present context than they have been in some of the previous crises mentioned above.

Overall, the propensity to return during the current crisis depends on individual and economic characteristics of migrants. Bolivians in Spain at the two extremes of the “level of success” distribution (described as job stability and the ability to save) were less likely to return home when the crisis started in 2008 (Bastia, 2011). Those in stable labour market situation were able to overcome the crisis and hence decided to stay whereas those in difficult cases were ashamed to admit their failure and decided to stay in Spain despite worsening working conditions and lower salaries.

Recent work by Rendall et al. (2011) provides evidence for the case of migration between the United States and Mexico, declines in annual return-migration flows of up to a third between 2007 and 2009 notably among the predominantly labour-migrant groups of male migrants and all 18- to 40-year-old migrants with less than a college education because of the worsening of the economic conditions in the home country.

Other evidence suggests that outflows were different for EU-12 and non-EU migrants in Europe. For the first group, outflows were high and highly responsive to labour market fluctuations (EHRC and MPI, 2009) in comparison with those of the second group. For instance, in Ireland, the outflows of non-EU migrants only grew by 16.7 per cent in 2008, while outflows of EU-12 migrants increased by 57 per cent in the same period.

Table 1 presents preliminary estimates of re-emigration rates after 5 years for selected European countries for cohorts entering between 2000 and 2003 or between 2004 and 2005. Initial flows are estimated with data from the OECD International Migration Database

adjusted to population 15+. Migrant stocks after 4 to 6 years of residence in the destination country are calculated with LFS data.

The average figures for cohorts entering between 2000 and 2005 (Table 1 column 1), show return migration rates between 20 and 58 percent, which are in line, although slightly lower, with the results presented in OECD (2008, part III) for the period between 1993 and 1999. Differences in registration criteria, in LFS sample designs and in measurements of inflows across countries do not allow perfect comparability, and the results presented in Table 1 should therefore be analyzed with extra caution.

Table 1. **Re-emigration rates after 5 years of residence in selected European countries (cohorts entering between 2000 and 2005)**

Country	2000-2005	2000-2003	2004-2005
Austria	52%	55%	50%
Belgium	44%	43%	46%
Switzerland	46%	46%	45%
Denmark	28%	27%	29%
Ireland	27%	19%	35%
Netherlands	50%	49%	50%
Norway	48%	48%	48%
Sweden	20%	20%	20%
United Kingdom	21%	18%	24%
Germany			59%

Source: OECD estimates, LFS 2000-2011, SOPEMI data 2000-2010

Table 1 could also be used to give a first snapshot on how the recent crisis in Europe affected return migration or re-emigration rates. Migrants entering Europe between 2000 and 2003 (Table 1, column 2) were reaching the fifth year of residence just before the onset of the crisis. In contrast, those entering between 2004 and 2005 (Table 1, column 3) were completing their fifth year during the economic crisis. A comparison of the re-emigration rates between these two groups gives some indication of the potential impact of the crisis on re-emigration rates.

Overall we observe little changes in re-emigration rates before and after the crisis. Ireland is however a notable exception with a considerable increase from 19 percent to 35 percent. A substantial increase is also seen in the United Kingdom (from 18 to 24 percent). Part of this result may be explained by the fact that both countries have been impacted by the crisis earlier than the others but it should also be related to the high share of free mobility migrants. Re-emigration rates have also increased, although to a lesser extent in Belgium but have decreased in Austria where the share of labour migration in permanent migration is low and the impact of the crisis was much more moderate.

## Conclusion

The methodology proposed in this paper is not without limitations and results should be considered with some caution but it enables to get an updated appraisal of re-emigration and first evidence of the impact of the 2008 economic crisis. To get the full picture these preliminary results need to be expanded to other non-European OECD countries and to be broken down by migrant groups, including skill level and region of origin (notably the distinction between EU and non-EU).

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