

# 4 Migrant family building: Recent evidence and implications

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This chapter explores fertility patterns among migrant populations in OECD countries and the limits of the measures commonly used to describe them. It analyses the factors shaping fertility gaps between native- and foreign-born women, as well as those driving convergence over time. The chapter also assesses the indirect and direct contribution of migrants to the total number of births in OECD countries and their drivers – namely, the share of migrants in the total population, their age and sex composition, as well as the migration channel through which they arrive. Finally, it points to some of the implications of these trends for population dynamics and the labour market integration among migrants in OECD countries.

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# In Brief

## Key findings

- Against the backdrop of ageing populations in most OECD countries, the childbearing behaviour of migrants plays a more limited role in population dynamics than often suggested.
- In most OECD countries, migrant women exhibit somewhat higher fertility rates than their native-born peers, but their total fertility rate (TFR) is still below replacement rate (2.1 children per woman) in two-thirds of the countries.
- Fertility gaps – differences between the native- and foreign-born – are substantial and highly vary across countries. Costa Rica displays the highest differential with a TFR of 3.7 among migrant women, compared to 1.4 among their native-born peers (a gap of 2.3). The Netherlands displays the lowest gap at 0.04, with a TFR of 1.6 among both the native- and foreign-born.
- Yet, migrants’ “net contribution” to the TFR remains relatively small, ranging from +0.2 in France, Belgium and Luxembourg, to -0.3 in Australia. In almost half of the countries, the size of the foreign-born population is too small to significantly influence these rates (neutral net effect) and in few countries – Australia, Iceland and Denmark – migrant women even display relatively low fertility and decrease national rates (negative net effect).
- Fertility differences between native- and foreign-born populations reflect, to varying degrees, the importance of childbearing patterns from the origin country; the role of cultural norms and institutions to which migrants are gradually exposed at destination; the self-selection of migrants; the relation between migration and family formation, especially for women; and the effect of the migration process itself, which might temporarily alter fertility behaviour. Among the native-born with migrant parents, their fertility behaviour is shaped simultaneously by the influence of their parents’ culture and the socio-economic context at destination.
- Since female migration is often associated with family reunification, the likelihood of childbearing is frequently elevated immediately after arrival. As the TFR is typically based only on what happens at destination and at a given year, it may overestimate fertility differentials between native- and foreign-born women as the latter often go through a phase of low fertility and high fertility before and after migration, respectively. In France, an adjusted measure that accounts for the lower incidence of pre-migration births lowers the estimated TFR of migrants by 0.6.
- With the gradual adaptation of migrants to the practices of receiving societies, the fertility behaviour of migrants and that of their native-born peers tends to converge over time and across generations. Strongly declining fertility rates in origin countries over the last two decades have also contributed to closing these gaps.
- Given the fact that many female migrants arrive during their childbearing years and through family reunification channels, they may contribute substantially to the total number of births in many OECD countries despite their decreasing fertility rates.
- Even if the direct contribution of migrants to overall fertility rates is relatively small, their indirect contribution is likely higher because their employment in the care and domestic occupations allows many women, especially the most educated, to reconcile paid work and childrearing.
- Migrant women tend to have children at earlier ages, with potential negative consequences for their labour market insertion.

## Introduction

Fertility rates have declined drastically over the past decades in all OECD countries. The pace of this decline differs across countries and responds to economic and financial security, the availability of family policy supports, labour market opportunities, as well as shifting values among younger women regarding their role in society (D'Addio and Mira d'Ercole, 2005<sup>[1]</sup>; OECD, 2023<sup>[2]</sup>). Declining fertility rates coupled with increases in life expectancy contribute to ageing populations, wherein the shares of elderly among the overall population increase. Ageing populations have important implications on economic and social outcomes such as rising fiscal pressure, decreasing productivity levels, lower savings and higher government spending (Nagarajan, 2015<sup>[3]</sup>). It is not clear, however, to what extent rising fertility rates alone can avert these scenarios (OECD, 2023<sup>[2]</sup>).

Against this backdrop, the childbearing behaviour of migrants is an important component of population dynamics that must be analysed, particularly in countries with large migrant inflows. Although their contribution to the total fertility rate is minor, migrants' children (both those born at destination, as well as those that arrive with their parents) may play an important role in deterring population decline (González-Ferrer et al., 2017<sup>[4]</sup>). Yet, migration inflows would need to be unrealistically large and their fertility sustainedly high to offset ageing processes in most developed countries as the share of migrants remains modest with respect to the overall population, on the one hand, and largely depend on the composition of migrant cohorts, on the other<sup>1</sup> (Fihel, Janicka and Kloc-Nowak, 2018<sup>[5]</sup>). Further, as discussed in this chapter, migrants' fertility rate is currently below replacement level<sup>2</sup> in most OECD countries and shows high levels of convergence to the native-born population over time, which means that its long-term effect.

- First, the fertility behaviour of migrants impacts their overall socio-economic integration in the country of destination. Indeed, childbearing and labour market participation are closely interrelated (see Chapter 5): on the one hand, the economic needs of households and, consequently, their members' need to enter the labour market increase with the presence of children. On the other, childbearing might delay or reduce labour supply, as will be discussed in the next chapter. At the same time, labour market conditions can influence women's decision to start a family depending on their education and/or career aspirations. At the aggregate level, female employment (and participation) have become positively associated with fertility across the OECD since the 1990s (Adserà, 2005<sup>[6]</sup>), but this strongly depends on the vitality of the economy and supportive family policy which vary across countries. Family policy, in turn, is not always accessible to migrant women (see Chapter 5) making the relation between fertility and employment more complex. Overall, the evidence on the relationship between migrants' employment and fertility remains highly context-dependent. In some countries, migrant women with poor employment prospects and low career aspirations might opt for childbearing as an alternative to labour market participation. In others, they might postpone childbearing until employed (Alderotti et al., 2022<sup>[7]</sup>).
- Second, since norms and behaviour relating to family and childbearing are often socialised very early in life, a change in fertility preferences – and more specifically, convergence with the preferences of the native-born population – may signal profound cultural shifts among migrants resulting from the influence of the receiving society (Carlsson, 2023<sup>[8]</sup>). Not surprisingly, researchers have recognised the importance of looking at fertility behaviour as a key dimension of integration (Adserà and Ferrer, 2015<sup>[9]</sup>; Milewski and Mussino, 2019<sup>[10]</sup>).
- Third, fertility preferences and behaviour are closely linked to attitudes regarding female labour market participation and the role of women in society, more generally. Because these attitudes might differ across countries of origin and destination – and, in some cases, persist among children of migrants – fertility and labour market attachment differentials between the native- and foreign-born may lead to enduring social inequalities (Milewski and Adserà, 2022<sup>[11]</sup>).

This chapter seeks to provide facts to nuance the public debate about migrants' fertility and their consequences.

## Evidence on the fertility of migrants

### ***Migrants may display different fertility patterns than their native-born peers, but most fertility measures provide only a partial view of their reproductive lives***

Three questions have mainly guided research on the fertility patterns of migrants: how different childbearing behaviours between migrant and native-born populations are; whether these behaviours converge over time; and how the migration process affects fertility behaviour (Del Rey and Parrado, 2012<sup>[12]</sup>). To answer these questions researchers have relied on a wide array of measures, but most of them are imperfect and only provide a partial view of migrants' reproductive lives (Tønnessen and Wilson, 2020<sup>[13]</sup>).

To understand whether migrant women have more children than their native-born peers, researchers often use the total fertility rate (TFR), defined as the number of children a woman *would* have if she were to give birth according to the prevailing age-specific fertility rates. These rates are calculated by dividing the total number of births from women of a given age over the population of women belonging to the same age group. Importantly, the TFR is not the result of observing individuals longitudinally over their lifetime, but instead provides a synthetic measure based on the annual number of births from an artificial generation of women. The strengths of TFR are that it is relatively easy to calculate, gives an overall picture of the fertility trends of both native-born and migrants, provides timely information on differentials between native- and foreign-born populations and can shed light on the contributions of the latter to the national TFR (Sobotka, 2008<sup>[14]</sup>). Its limitations, however, are significant and described further below (Box 4.1).

Besides TFR, event-history analyses are used to study the timing of births for specific parities (first-born, second-born, etc). Their advantage is that they shed light on the timing of birth and distinguish between different birth events. The main disadvantage is that they do not answer questions about the number of children ever born, and, most importantly, for the case of migrant women, differences in the number of children born before and after migration (Tønnessen and Wilson, 2020<sup>[13]</sup>).

Completed fertility is another common fertility indicator that measures the number of children ever born to women of a particular cohort at the end of their reproductive lives. The advantage of this indicator is that it provides information on the *actual* number of children women have had and is not affected by time distortions. The disadvantage is that it does not distinguish between the children born before and after migration and, thus, does not allow to see how fertility varies after arrival (Tønnessen and Wilson, 2020<sup>[13]</sup>). In addition, it does not provide information about current migrant fertility trends, but of a given generation of women (who have already completed childbearing).

#### **Box 4.1. Childbearing and migration: The limits of TFR as a fertility measure**

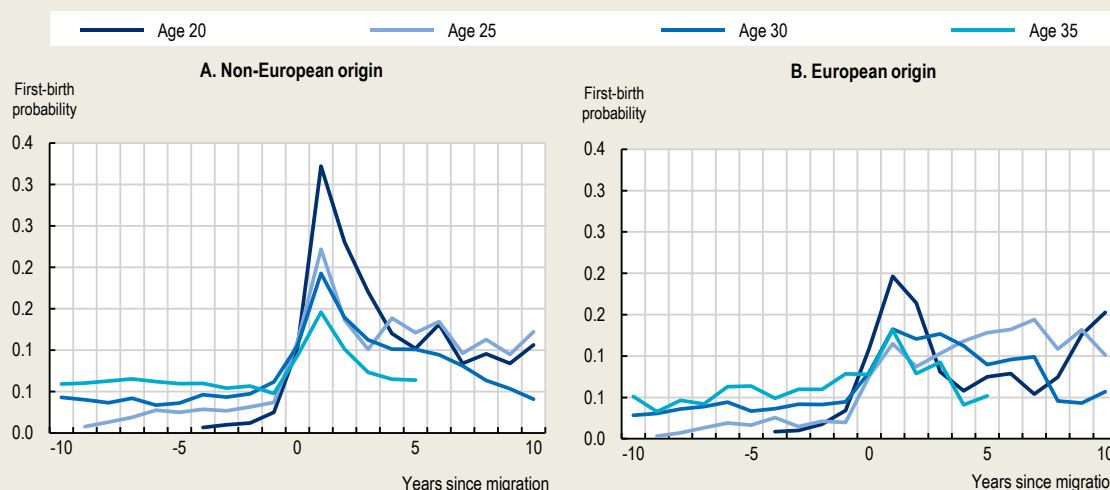
The TFR has been criticised for providing a misleading estimate of fertility differences between the native- and foreign-born. Overall, there is a consensus that TFR should be interpreted with caution and some even suggest that it should not be used at all since it does not reflect migrants' lifetime propensity to have children (Kulu et al., 2019<sup>[15]</sup>). The reason is that TFR is not an actual account of lifetime fertility, but a hypothetical measure based on information from one point in time and in the case of migrant women, from one country in time (the host country). In other words, the TFR only captures the fertility behaviour of migrants after they arrive at destination. Since female migration is often associated with family reunification, it is possible to assume that the likelihood of childbearing will be elevated after arrival, as has often been observed in country studies. Therefore, the TFR may overestimate migrants' fertility because it ignores their low fertility prior to arrival and the stabilisation after years in the country. By focusing on recent arrivals, the TFR assumes that migrant women will continue to behave like new arrivals throughout their reproductive life (Volant, Pison and Héran, 2019<sup>[16]</sup>).

In Spain, the fertility of women has proven to be low before migration and elevated shortly after arrival. The extent of disruption relates to family dynamics and spousal separation associated with the migration process (Del Rey and Parrado, 2012<sup>[12]</sup>). Similar evidence has been found in Sweden, where migrants show relatively elevated levels of births after migration due to the links between migration, marriage and family formation (Andersson, 2004<sup>[17]</sup>) (Figure 4.1). In Spain and Italy, childbearing propensities are not only higher after arrival, but they also vary by whether women migrated for employment or family-related reasons (Castro Martin and Rosero-Bixby, 2011<sup>[18]</sup>; Mussino and Strozza, 2012<sup>[19]</sup>). In Belgium, changes in migration patterns – from mainly labour migration in the 1960s and 1970s to marriage migration in the 1980s – have also influenced the timing of family formation, wherein migrant women from outside Europe, who tend to arrive in the context of family migration, experience elevated fertility during the first years after arrival (Marynissen, Neels and Wood, 2022<sup>[20]</sup>). Using a specialised survey on migrants (TeO), (Reynaud, 2023<sup>[21]</sup>) uses complete fertility histories to adjust the TFR of migrant women in France. When including the children born prior to migration, the TFR of migrant women falls significantly: in 2021, it averages 2.3 children per woman, compared to 2.9 when only the births in France are considered (e.g. -0.6).

A main implication of all these studies is that the failure to recognise the relation between migration and family formation, age at migration and duration of stay may lead to overstating the level of migrant fertility and, in consequence, their contribution to population growth.

#### Figure 4.1. In Sweden, migrant women exhibit disproportionately elevated fertility within years of arrival

Conditional first-birth probability by age at arrival and years since migration in Sweden



Note: Data cover all female immigrants to Sweden who were born outside Sweden in 1975-80, censored for death, first emigration, and all years after first birth including prior to arrival.

Source: Swedish register data (collections accessed and analysed by SUDA, Stockholm University).


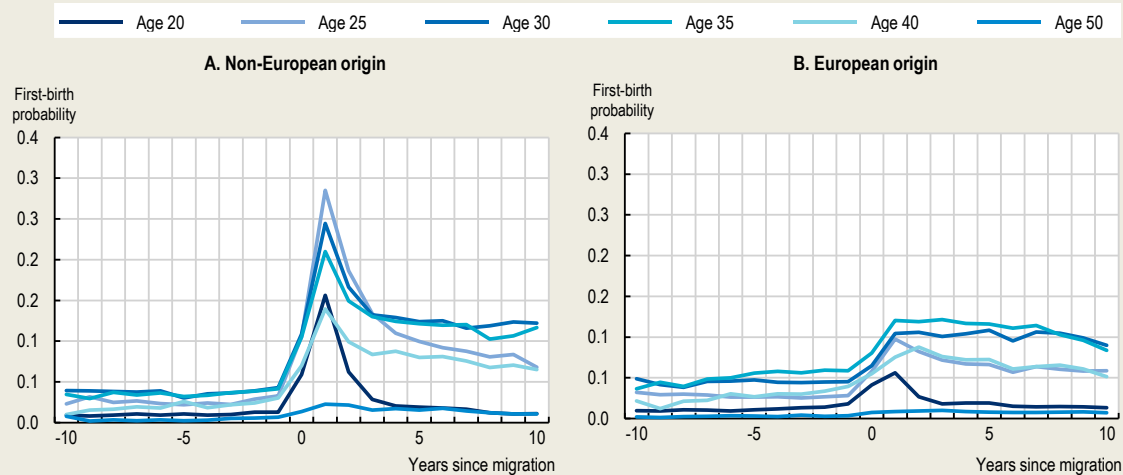
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Figure 4.2 shows the probability of having a first child among childless women of a given age and a given number of years at destination. The results for Belgium show that first birth probabilities vary by age, and even more so by duration of residence, particularly among non-European women. Clearly, when measuring fertility in migrant groups, both dimensions should be considered simultaneously to avoid bias. In periods of increasing migration, conventional fertility measures which only consider age (e.g. period TFR) will typically overestimate fertility as they erroneously sum fertility of recently immigrated women across age groups.


**Figure 4.2. Migrant women also exhibit elevated fertility in Belgium immediately after arrival**

Conditional first-birth probability by age at arrival and years since migration in Belgium



Note: First birth hazards by duration of residence and age group based on retrospective information from the 2011 Belgian census, for migrant women from non-European and European origin.

Source: Marynissen, L., K. Neels and J. Wood (2022<sup>[20]</sup>), *Fertility of Immigrants: Patterns of Family Formation around Migration of Immigrant Women in Belgium*, <https://repository.uantwerpen.be/desktop/irua>.

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***In most OECD countries, migrant women exhibit higher fertility rates than their native-born peers, but the net effect on the total fertility rate remains low...***

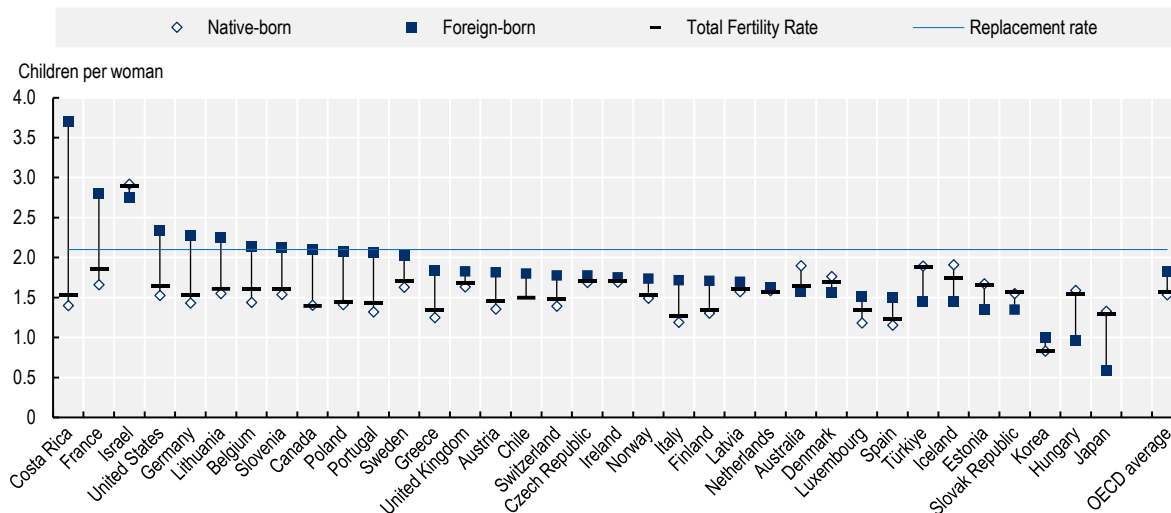
Figure 4.3 shows differences in TFR between native- and foreign-born women according to the most recent data available. Despite higher fertility levels, in two-thirds of the OECD countries, migrants' TFR is below the replacement rate (2.1 children per woman), which is the level at which a population exactly replaces itself from one generation to the next in the absence of migration.

The “net effect” of migrant women on the TFR at the country level – the difference between the observed national TFR and the TFR of the native-born – remains small, ranging from +0.2 in France, Belgium and Luxembourg, to -0.3 in Australia for an OECD average of 0.04.<sup>3</sup> In fact, in more than half of the OECD countries for which there are data, the size of the foreign-born population is too small to influence these rates by more than 0.1 (*neutral* net effect). And in a few countries, such as Australia, Denmark and Iceland, migrant women tend to lower national rates rather than increase them (*negative* net effect).

On the other hand, the fertility gaps between native- and foreign-born women are more substantial and vary considerably across countries. Costa Rica displays the highest differential: among migrants, the TFR is 3.7 children per woman, compared to 1.4 among their native-born peers (a gap of 2.3). Conversely, the Netherlands displays the lowest gap at 0.4 and in nine countries – Israel, Japan, Hungary, Iceland, Türkiye, Estonia, Australia, the Slovak Republic and Denmark – the TFR of native-born women is higher than among their foreign-born peers. It is important to note that fertility differentials across countries reflect, to a large extent, different composition of migrant populations concerning national origin, reason for migration, age and sex structure.

### Figure 4.3. In two-thirds of the OECD countries, migrants' fertility rates are below replacement rate

Total Fertility Rate (TFR) of native- and foreign-born women, 2020 or latest year available



Note: Data for all countries are from 2019, except for Australia, Canada, Costa Rica, Israel, Japan, Korea, the United States (2020), France (2021) and the United Kingdom (2018). Data for Japan refer to the nationality of the mother. Biases associated with TFR as a fertility measure, explained above, are particularly strong for France given the relative importance of family (spouse) migration.

Source: Australia: ABS (2021<sub>[22]</sub>), "Births, Country of birth of parent", <https://www.abs.gov.au/statistics/people/population/births-australia/latest-release>; Canada: Statistics Canada (2020<sub>[23]</sub>), "Live births, birth weight indicators, by characteristics of the mother and child", <https://www150.statcan.gc.ca/n1/daily-quotidien/220928/dq220928d-cansim-eng.htm>; Chile: CEPALSTAT (2019<sub>[24]</sub>), "Tasa global de fecundidad", <https://statistics.cepal.org/portal/cepalstat/dashboard.html?theme=1&lang=es>; INE (2019<sub>[25]</sub>), *Anuario de Estadísticas Vitales*, [https://www.ine.gob.cl/docs/default-source/nacimientos-matrimonios-y-defunciones/publicaciones-y-anuarios/anuarios-de-estad%C3%ADsticas-vitales/anuario-de-estad%C3%ADsticas-vitales-2019.pdf?sfvrsn=97729b7b\\_5](https://www.ine.gob.cl/docs/default-source/nacimientos-matrimonios-y-defunciones/publicaciones-y-anuarios/anuarios-de-estad%C3%ADsticas-vitales/anuario-de-estad%C3%ADsticas-vitales-2019.pdf?sfvrsn=97729b7b_5); Costa Rica: INEC (2020<sub>[26]</sub>), "Nacimientos", <https://inec.cr/acercar-inec>; Korea: Yoo, S., B. Sulki Choi and L. Jun Gyeong (2022<sub>[27]</sub>), *Developing New Fertility Indicators on Subpopulations*; Israel: Weinreb, A. (2023<sub>[28]</sub>), *Estimated migrant and non-migrant TFR in Israel using Labour Force Survey and Israel Social Survey*; Japan: Statistics of Japan (2020<sub>[29]</sub>), "Live births by nationality of father and mother", <https://www.e-stat.go.jp/en/stat-search/files?page=1&layout=datalist&toukei=00450011&tstat=000001028897&cycle=7&year=20200&month=0&tclass1=000001053058&tclass2=000001053061&tclass3=000001053064&tclass4val=0>; United States: CDC (2020<sub>[30]</sub>), "Natality, 2016-21", <https://wonder.cdc.gov/>, the United States Census Bureau (2020<sub>[31]</sub>), *American Community Survey*, <https://data.census.gov/mdat/#/>; Rest of countries: Eurostat (2020<sub>[32]</sub>), "Live births by mother's age and country of birth", [https://ec.europa.eu/eurostat/databrowser/view/DEMO\\_FACBC\\_custom\\_3116674/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/DEMO_FACBC_custom_3116674/default/table?lang=en), Eurostat (2020<sub>[33]</sub>), "Population on 1 January by age, sex and group of country of birth", [https://ec.europa.eu/eurostat/databrowser/view/MIGR\\_POP4CTB\\_custom\\_3116883/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/MIGR_POP4CTB_custom_3116883/default/table?lang=en).

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Differences in TFR between native- and foreign-born women, but also between foreign-born women and women in the origin country may reflect:

- the importance of cultural norms and fertility behaviour from the origin country, usually learnt or socialised during childhood (socialisation hypothesis). In Norway and Italy, for instance, there is evidence that migrants from certain regions tend to exhibit higher levels of third births when the first and second births are girls, which resembles cultural preferences in origin populations<sup>4</sup> (Lillehagen and Lyngstad, 2018<sub>[34]</sub>; Ambrosetti et al., 2022<sub>[35]</sub>).
- the importance of social norms and institutional contexts at destination to which migrants are gradually exposed (adaptation hypothesis). Women from Türkiye, for example, exhibit relatively higher fertility rates than their native-born peers, but they also display somewhat lower first-birth rates in countries of lower fertility – Germany and Switzerland – than in higher fertility contexts like France. These differences offer support to the adaption hypothesis (Milewski, 2011<sub>[36]</sub>).

- the self-selection of migrants, whose fertility patterns might differ from the average observed in the origin country (selectivity hypothesis). Selectivity may respond to observed characteristics of migrants – education and occupation in the origin country – but unobserved ones as well – mobility aspirations or family orientation. Mexican migration to the United States, for example, is selective of individuals with relatively higher fertility than Mexican non-migrants which results in higher fertility rates among migrants than those observed in the average Mexican woman (Choi, 2014<sup>[37]</sup>). Conversely, Ghanaian migration typically consists of relatively higher educated individuals that postpone their first childbirth compared to Ghanaians in origin (Wolf and Mulder, 2018<sup>[38]</sup>).
- the disruption that migration might induce in family dynamics, particularly in the short term, such as spousal separation, with potential consequences for childbearing behaviour (disruption hypothesis). In most cases, this disruption has proven to be temporary, but migrant women who arrive in Spain before starting a family, for instance, seem to delay their first childbirth even more so than native-born women, and the majority do not compensate for this migration-related disruption at a later stage (González-Ferrer et al., 2017<sup>[4]</sup>).
- the overall interrelatedness of migration and family formation – especially for women – wherein migration coincides with other changes in family dynamics such as marriage, family reunification, and union/household formation (life-course hypothesis). Women who migrate to join their partner in the receiving country have much higher propensities to give birth after arrival compared to women who migrate for employment reasons. This phenomenon can be observed in Italy, for instance, where there is a clear association between the timing of childbearing and the share of residence permits for family reasons (Mussino and Strozza, 2012<sup>[19]</sup>).

All these processes are not mutually exclusive and directly point to migrant specificities to consider when studying fertility patterns.

#### Box 4.2. Explaining migrant-native differentials in selected countries

##### Costa Rica

More than two-thirds of the foreign-born population in Costa Rica were born in neighbouring Nicaragua. In 2020, the TFR of Nicaragua-born women averaged 3.9 children per woman, significantly raising the fertility gap compared to their native-born peers (1.4). Earlier research attributed these large differentials to a lower-educational attainment and labour force participation rate among Nicaraguan women, on the one hand, and to their higher representation in unmarried unions, on the other. The same research found no evidence of adaptation: Nicaraguan migrants who had arrived in the country within five years behaved similarly to those who had resided there for longer periods (Rosero-Bixby, Brenes Camacho and Chen Mok, 2002<sup>[39]</sup>). Nicaragua currently records high levels of cohabitation, which often result in high union instability and multiparper fertility. Further, eight in ten adult Nicaraguans in Costa Rica had not completed high school in 2019. Data from 2020 confirm that fertility levels among Nicaragua-born women in Costa Rica highly vary by partnership status and educational attainment, with a TFR of 3.8 and 2.1 among single and married women, respectively; and a TFR of 6.1 and 2.1 among lower and tertiary-educated, respectively.

##### Japan

Earlier research showed that the lower fertility rates observed among migrant women in Japan were due to the composition of migration flows (mostly from low-fertility countries, except for the Philippines), the disruption effect of international migration in the short term, a highly challenging environment for childrearing, and unstable marriages among international couples. International marriages in Japan peaked in 2006, representing slightly more than 6% of total marriages, but have declined since, due to



a tightening in spousal visas. In 2010, the TFR for Japanese women was 1.3, compared to 0.9 for Chinese women, 1.5 for Philippine women, 1.0 for Thai women, and 1.3 for Brazilian women. Only Philippine women showed a higher TFR than Japanese women, and all migrant women displayed lower fertility rates than in origin countries (Korekawa, 2017<sup>[40]</sup>)

### Israel

There are several atypical patterns in Israeli's fertility levels: not only are they higher than in all other developed countries, but pronatalist norms cut across all educational, cultural and religious backgrounds. Further, fertility has been increasing alongside a higher age at first birth and education. Migrants from former Soviet countries account for roughly half of the foreign-born population in Israel. Research has attributed their lower fertility levels to the economic uncertainty and occupational downgrading caused by migration, as well as postponement to achieve greater social mobility at destination (Weinreb and Chernichovsky, 2018<sup>[41]</sup>; Okun and Kagya, 2012<sup>[42]</sup>).

### France

Since the end of the 1990s, France has consistently displayed some of the highest fertility rates among European countries, attributed to high public spending on family benefits (at 3.5% of GDP, it is the highest across OECD countries) and a diverse and stable set of policies to support child raising (parental leave, childcare services and family allowances). While standard measures to account for the migrant fertility gap suffer from the same biases explained above, the availability of specialised and longitudinal surveys on migration has allowed to better capture the actual difference between migrants and the French-born. Using the 2011 Family and Housing Survey and an alternative measure – completed fertility – Volant, Pison and Héran (2019<sup>[16]</sup>) estimate that migrant women born between 1961 and 1965 had 2.4 children over their reproductive lifetime. Using the survey *Trajectoires et Origine*, which allows counting all children ever born and not just those born in France, Reynaud (2023<sup>[21]</sup>) calculates a slightly lower complete fertility (2.2 children) among migrant women born between 1965 and 1970. The data also confirm strong variation across origin, generation, educational attainment and age at arrival (Figure 4.9).

## **...and there is high variation by migrants' origin**

The overall differences in the TFR of migrants described above hide substantial heterogeneity across countries of birth. Fertility in sub-Saharan Africa is well above the replacement rate at an average of 4.6 births per woman in 2020, while it is closer to or at replacement level in most other regions (UNDESA, 2020<sup>[43]</sup>). Because people bring with them components of their origin culture and behaviour, migrants originating from Africa and other high-fertility regions, such as Asia, tend to display comparatively higher fertility rates than those from Europe, North and South America.

Fertility differences by origin region or country also reflect the main pathways that women use to emigrate (family, work, humanitarian reasons, etc). In Germany, women outside the EU are especially likely to migrate while married and to start a family shortly after migration. Similarly, in Italy, the highest share of family migrants come from the Indian subcontinent, Northern Africa and Senegal. In turn, family migrants marry at a younger age and display a higher completed fertility compared to independent and first migrants (those who arrived single or unpartnered) (Cristina Samper and Kreyenfeld, 2021<sup>[44]</sup>; Ortensi, 2015<sup>[45]</sup>). In Spain, migrant women from Latin America exhibit lower fertility rates than those prevailing in their countries of origin, which has been partially attributed to selective migration and to the fact that some children are left behind in their origin countries. Moroccan women, conversely, maintain a higher fertility level than the native-born, associated with distinct migration patterns as most women come to Spain as marriage migrants (González-Ferrer et al., 2017<sup>[4]</sup>).

Table 4.1 provides an example of differences in fertility rates by origin region for selected OECD countries for which there are data available: Australia, Spain and the Nordic countries of Denmark, Finland and Norway. Across all destinations, migrants from Africa have traditionally displayed the highest fertility levels, but they have also experienced a significant decline in recent years. In 2021, the TFR for migrant women from Africa was 2.2 in Norway compared to 3.0 a decade earlier. Similar trends are evident in the rest of destinations. In 2021, migrants from Asia also display relatively higher fertility rates than the native-born population but the region hides large heterogeneity with the highest rates recorded in Southern and Central Asia (Afghanistan, Pakistan, Bangladesh, in descending order) and the lowest in North-East Asia (Korea, Japan, China, in ascending order). Migrants from North and South America, finally, exhibit fertility rates that are below the replacement rate across all destinations and lower than EU migrants.


**Table 4.1. Migrants from high-fertility regions, like Africa, display the highest fertility rates across OECD destinations, but they also show declining levels across time**

Total fertility rate in selected destination countries by region of birth, 2011 and 2021

|                              | Denmark |      | Finland |      | Norway |      | Sweden |      | Australia |      | Spain |      |
|------------------------------|---------|------|---------|------|--------|------|--------|------|-----------|------|-------|------|
|                              | 2011    | 2021 | 2011    | 2021 | 2011   | 2021 | 2011   | 2021 | 2011      | 2021 | 2011  | 2021 |
| Native-born                  | 1.8     | 1.8  | 1.8     | 1.4  | -      | 1.5  | 1.9    | 1.6  | -         | 1.7  | -     | 1.2  |
| EU-27                        | 1.4     | 1.4  | 1.8     | 1.5  | 2.0    | 1.5  | 1.8    | 1.4  | -         | 1.7  | -     | 1.4  |
| North Africa and Middle East | 2.6     | 2.4  | 3.3     | 2.5  | 3.0    | 2.2  | 3.1    | 2.6  | -         | 2.2  | -     | 2.6  |
| Sub-Saharan Africa           |         |      |         |      |        |      |        |      | -         | 1.9  |       |      |
| North America                | 1.0     | 1.1  | 1.7     | 1.3  | 1.8    | 1.5  | -      | -    | -         | 1.2  | -     | 0.9  |
| South and Central America    | 1.4     | 0.9  |         |      | 2.1    | 1.3  | -      | -    |           |      |       | 1.1  |
| South-East Asia              | 1.7     | 2.1  | 1.9     | 1.6  | 2.0    | 1.7  | 2.2    | 1.9  | -         | 1.4  | -     | 1.4  |
| North-East Asia              |         |      |         |      |        |      |        |      | -         | 1.1  |       |      |
| Southern and Central Asia    |         |      |         |      |        |      |        |      | -         | 1.7  |       |      |

Note: EU27 refers to Europe for the case of Finland; in the case of Norway, Asia includes Türkiye.

Source: Denmark: Statistics Denmark (2021<sup>[46]</sup>), "Births", <https://www.statbank.dk/20017>; Norway: Statistics Norway (2021<sup>[47]</sup>), "Fertility Rates", <https://www.ssb.no/en/befolkning/fodte-og-dode/statistikk/fodte>; Sweden: Statistics Sweden (2021<sup>[48]</sup>), "Births and deaths", <https://www.scb.se/en/finding-statistics/statistics-by-subject-area/population/population-composition/population-statistics/>; Finland: StatFin (2021<sup>[49]</sup>), "Births, vital statistics and population", <https://www.stat.fi/en/statistics/synt>; Australia: ABS (2021<sup>[22]</sup>), "Births, Country of birth of parent", <https://www.abs.gov.au/statistics/people/population/births-australia/latest-release>; Spain: INE (2021<sup>[50]</sup>), "Estadística de nacimientos", [https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica\\_P&cid=1254734710984](https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica_P&cid=1254734710984).

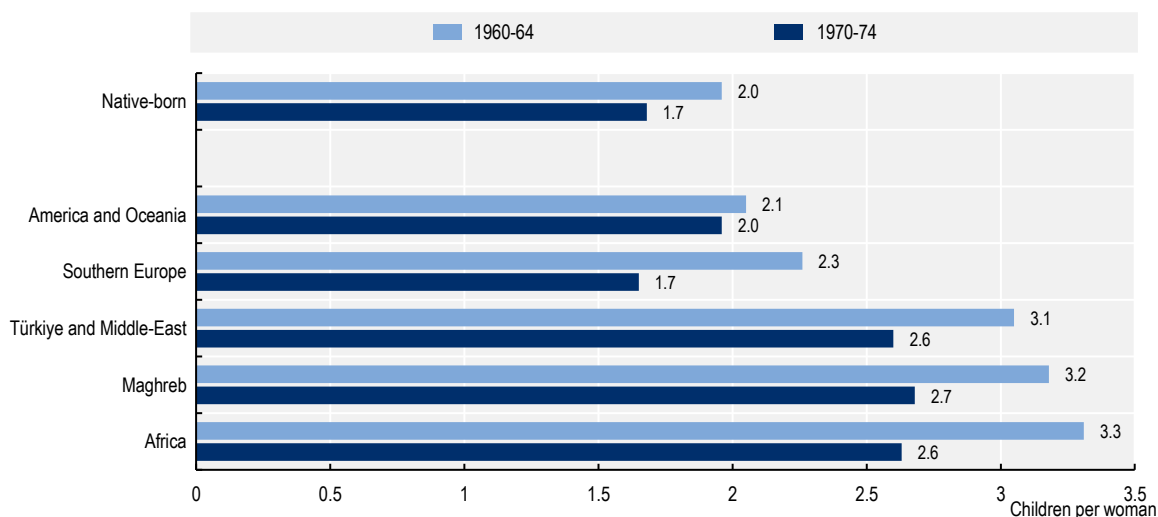
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In France, migrant women from sub-Saharan Africa, the Maghreb and Türkiye also exhibit a higher number of children at the end of their reproductive lives (completed fertility) compared to French-born women (Figure 4.4). Conversely, migrant women from Southern Europe (Italy, Spain and Portugal) show similar fertility histories. Within a period of ten years, completed fertilities are lower for all origins, but the most notable reductions are observed in migrants from Africa and Southern Europe (-0.7 and -0.6 children, respectively).

In Sweden, completed fertility of native-born women (born between 1975 and 1980) averages 1.9 children. Except for three of the main origin countries – Thailand, Iran and Poland – foreign-born women display an overall higher number of children at the end of their reproductive lives than their native-born peers. Women from Yugoslavia, Iraq, Syria and Somalia, who are likely humanitarian migrants, display a completed fertility that is above replacement rate (Figure 4.5). It must be noted too that data refer to a generation of women who have completed their fertility lifetime. Younger cohorts are likely to have lower completed fertilities.


**Figure 4.4. The number of children born to migrant women in France varies by origin and declined over cohorts**

Completed fertilities in France by woman's region of origin for women born between 1960-64 and 1970-74



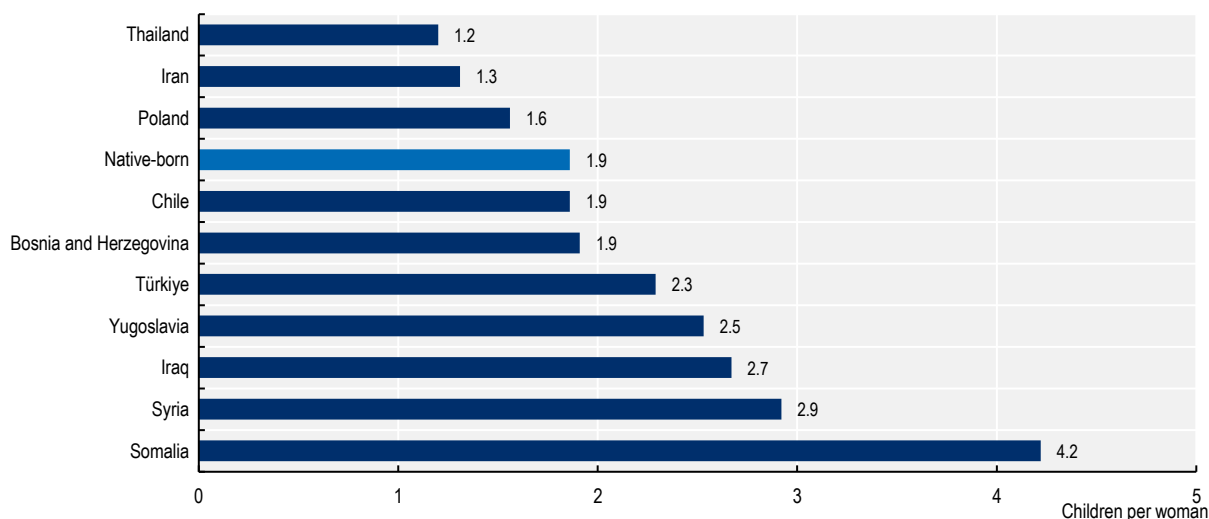
Note: Completed fertilities are the average number of children born to women from the same generation at the end of their reproductive lives. The Maghreb includes Algeria, Morocco and Tunisia only.

Source: Reynaud, D. (2023<sup>[21]</sup>), *Fecondité et migration. Comment mesurer la fécondité des immigrées?*, <https://www.insee.fr/fr/statistiques/6802839>.

StatLink  <https://stat.link/rsg6cv>

**Figure 4.5. The number of children ever born to migrant women in Sweden highly varies by origin**

Completed fertilities in Sweden by woman's country of birth for women born between 1975-80



Note: These are the ten largest origin countries based on the size of the foreign-born population in these birth cohorts (1975-80) who were resident in Sweden from ages 16-40 (based on person-years).

Source: Swedish register data (collections accessed and analysed by SUDA, Stockholm University).

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From cross-sectional data, it is not possible to understand what is driving the evolution of TFR across time and origin regions, but declining rates might be simultaneously related to three main factors, which are explained in more detail in the next section:

- **Duration of stay:** the fertility of migrant women often declines with years of residence at destination. This means that, other things equal, migrant women that have been living at these destinations for longer periods will have lower fertility than those who recently arrived. In Norway, for instance, (Tønnessen, 2019<sup>[51]</sup>) shows that in 2000 recently arrived migrants (0-2 years since migration), from Africa and Asia had a TFR above 4 children per woman, while women from the same regions who had entered the country more than ten years earlier had a TFR of around 2. Several reasons may account for the role of duration of stay such as the relatively elevated fertility immediately after arrival, the progressive adaptation to local norms or hurdles in combining work and family that slow down progression to later parities.
- **Declining fertility rates across origins:** even when coming from the same regions and countries, the fertility of recent arrivals might also differ from that of earlier cohorts. In most cases, there is a trend towards declining fertility among recent cohorts of migrants. This is linked to lower fertility in origin countries driven by factors such as family planning programmes, changes in preferences or higher education levels among women which, in turn, also affect both the shares of women who migrate and the reasons for their migration (Tønnessen, 2020<sup>[52]</sup>).
- **Selection effects:** the socio-demographic profiles of migrant women from the same country may also be changing over time. If cohorts are composed of lower-educated women and/or originating from rural areas, their fertility levels might be higher compared to cohorts composed of urban origin and highly-educated women. In the US-Mexico corridor, for example, Mexican women who emigrated after a large-scale amnesty process (IRCA in 1986) exhibited higher fertility rates than earlier cohorts, in part, because they were more likely to migrate after their fathers and husbands acquired legal status, which is more conducive of family building (Frank and Heuveline, 2005<sup>[53]</sup>).

## Adaptation and convergence of fertility behaviour

### ***Fertility patterns among migrants and the native-born often converge over time due to the composition of migrants' cohorts and the context at destination...***

The fertility levels of native- and foreign-born populations have proven to converge over time, though generally with a remaining gap and with important variations across countries (Sobotka, 2008<sup>[14]</sup>). This convergence can happen at the individual level (adaptation) or a generational level (convergence) (Wilson, 2019<sup>[54]</sup>). When fertility levels change on a short-time horizon, it might be more proper to think of it as an adaptation process that does not necessarily reflect a process of “acculturation” but rather an adaptive process to the general context wherein the political, social and labour market conditions, as well as family policies may influence childbearing behaviour. Given the importance of these factors in shaping fertility decisions for both native- and foreign-born women, one cannot expect permanently high fertility differentials among both populations. In Sweden, migrants display elevated births within the first two years of arrival, but the fertility levels of those who have been residing in the country for at least five years are already similar to the levels of the Swedish-born population (Andersson, 2004<sup>[17]</sup>)

There is evidence of adaptation among migrants from high-fertility countries lowering their fertility over time, as well as among migrants from low-fertility countries, increasing their fertility some years after migration (Adserà et al., 2012<sup>[55]</sup>; Mussino and Cantalini, 2022<sup>[56]</sup>). It must be noted, however, that many factors mediate the pace of adaptation. Some of these relate to the characteristics of migrant cohorts such as country of origin, age at arrival, language fluency, and educational attainment. For instance, the fertility behaviour of migrants who arrived in Canada before adulthood (up to age six) has proven to be either

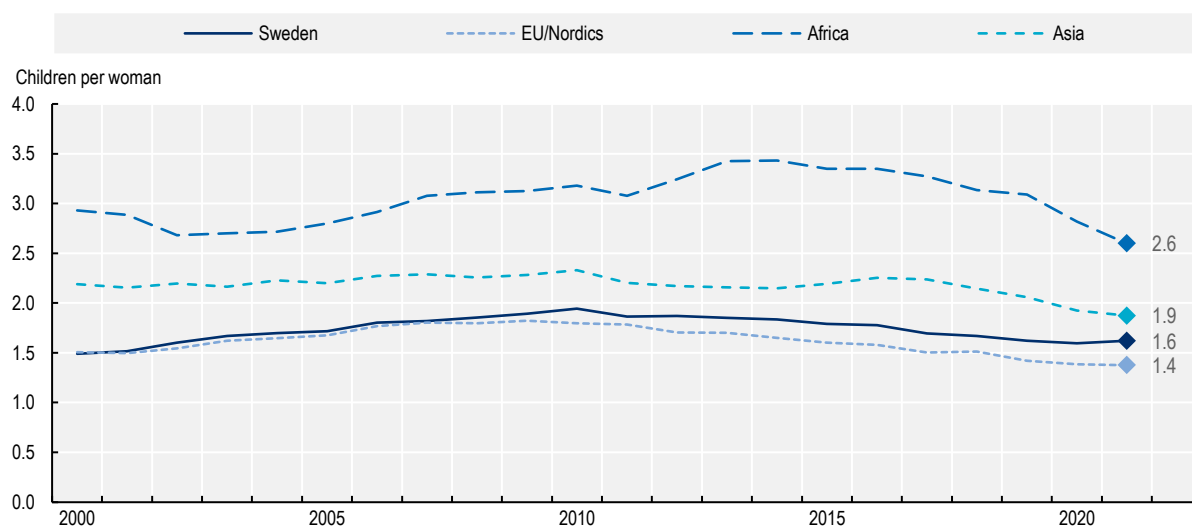
somewhat lower or indistinguishable from that of the native-born, compared to those who migrated in their late teens whose fertility behaviour differs from that observed in the host country (Adsera and Ferrer, 2013<sup>[57]</sup>). One of the mechanisms to explain these differences across cohorts is language proficiency. There is similar evidence from the United States, where migrants arriving at earlier ages – with higher English proficiency in consequence – are more likely to assimilate socially, meaning they tend to have fewer children compared to those with lower English proficiency (Bleakley and Chin, 2010<sup>[58]</sup>). Overall, when accounting for age at migration, evidence points towards adaptation of fertility behaviour: with few exceptions, women who migrated at the youngest ages have fertility rates that are most similar to native-born women (Adserà and Ferrer, 2015<sup>[9]</sup>).

Other factors mediating fertility adaptation relate to social and institutional contexts at destination country. The propensity to have children is influenced by macroeconomic conditions, labour force participation and gender norms, but also by family and migration policy. For instance, there is evidence that migrants' fertility might have fallen more pronouncedly in response to the Great Recession compared to their native-born peers indicating a stronger response of migrants' fertility intentions to economic uncertainty (Sobotka, 2017<sup>[59]</sup>; Alderotti et al., 2022<sup>[7]</sup>). In Colombia, a large-scale regularisation process of Venezuelan migrants decreased childbearing propensities among them, which can be attributed to better access to public services (including healthcare and contraception) and better employment opportunities (Amuedo-Dorantes et al., 2023<sup>[60]</sup>). Thus, convergence in fertility levels over time must be understood against the backdrop of evolving conditions in origin and destination countries, as well as differences across migrant cohorts.

Most research on adaptation focuses on cross-sectional data where it is not possible to distinguish between the effect of duration at destination and cohort effects. Figure 4.6 shows fertility behaviour in Sweden over the past 20 years. While the TFR of Swedish-born, and migrants from Asia and EU/Nordic countries, on the one hand, has remained relatively stable, the TFR of migrants from Africa displays higher variation, partly reflecting shifts in origin countries, but also economic downturns and labour market changes at destination (including the 2008 financial crisis).

### Figure 4.6. Fertility levels in Sweden vary by origin of migrants and across time

Total Fertility Rate (TFR) by woman's region of birth in Sweden, 2000-21



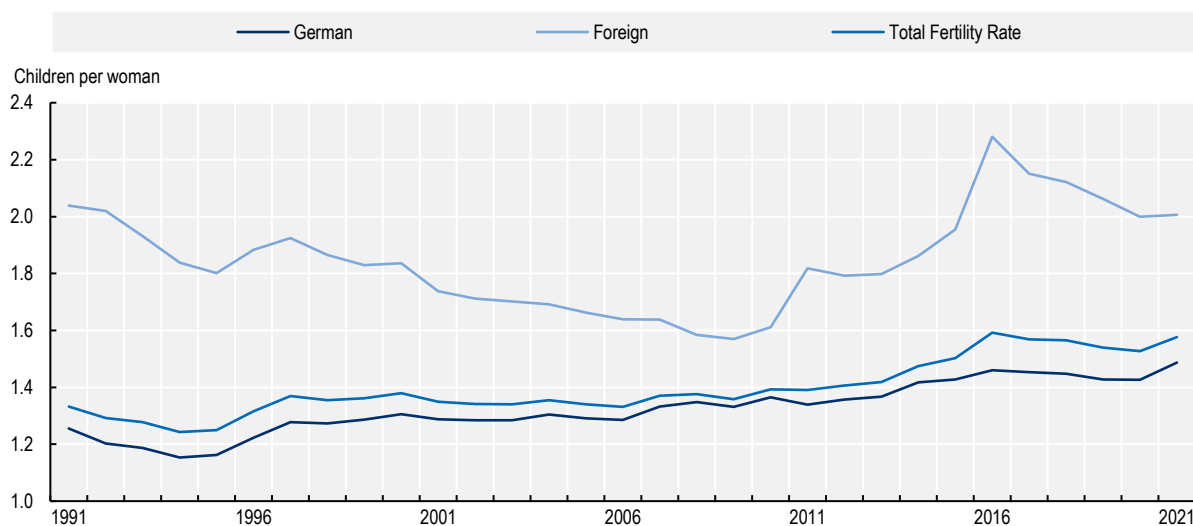
Source: Statistics Sweden (2022<sup>[61]</sup>), *The future population of Sweden 2022-70*, <https://www.scb.se/en/finding-statistics/statistics-by-subject-area/population/population-projections/population-projections/pong/publications/the%1efuture%1epopulation-of-sweden%1e2022%1e70/>.

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Germany is an interesting case as different migrant cohorts and their relative weight in total population influence the fertility gaps between the native and the foreign-born, on the one hand, and the country's overall TFR, on the other (Figure 4.7).<sup>5</sup> The TFR, however, may be subject to interpretation issues as there is a strong link between migrants' fertility levels and duration of stay or age at arrival, which is not shown here (Sobotka, 2008<sub>[14]</sub>). Nevertheless, some trends are noteworthy: the TFR of foreign women dropped below replacement level as early as the mid-1990s. Decreasing fertility rates since then led to a narrowing gap with German women, reaching a minimum level in 2008/09, when it averaged 0.2, possibly reflecting an overall economic downturn affecting fertility intentions. Since 2010, the TFR of foreign women increased gradually reaching a peak in 2016 when it averaged 2.3 children per woman and widening the gap with nationals to its maximum (0.8), possibly reflecting large inflows of humanitarian migrants. The TFR of German women has varied less significantly but the overall trend since the mid-1990s has been upwards. Finally, the net contribution of migrants to the country's TFR has varied considerably across years and is close today to what it was in the mid-1990s (0.10 versus 0.09, respectively).

**Figure 4.7. The fertility gap between German and foreign women has varied considerably across years**

Total Fertility Rate (TFR) of German and foreign women in Germany, 1991-2021



Note: Data refer to mother's nationality, not country of birth.

Source: Destatis (2023<sub>[62]</sub>), "Total fertility rate (per woman): Germany", <https://www.destatis.de/EN/Themes/Society-Environment/Population/node.html>.

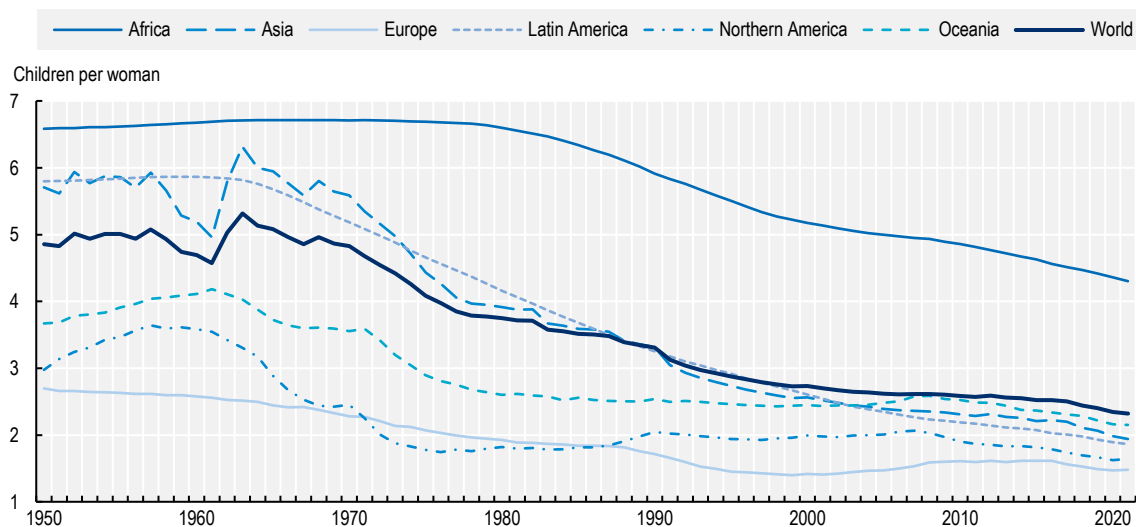
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### ***...but also, due to lowering fertility rates in most origin countries***


Most of the research on migrants' fertility has focused on understanding the processes that influence fertility behaviour, but there has been less emphasis on changes across migrant cohorts, which can evidence changes in fertility behaviour at origin. In the past decades, fertility has dramatically declined globally and at a faster pace in many important origin countries (Figure 4.8). Fertility rates in Türkiye and Mexico, for instance, have steadily declined from around five and seven children per woman in the early 1970s, respectively, to 1.9 by 2020.

## Figure 4.8. Lowering fertility rates in the past five decades are closing the gaps between regions

Total Fertility Rate (TFR) by women's region of origin, 1950-2021



Source: United Nations (2023<sup>[63]</sup>), *World Population Prospects: The 2022 Revision*, <https://population.un.org/wpp/>.

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This means that although newly arrived migrants grew up in the same country as those who emigrated earlier, they grew up with different fertility norms, patterns and expectations (Tønnessen, 2019<sup>[51]</sup>). As previous high-fertility countries experience births decline, the expected trend would be towards diminishing fertility rates among recent migrants compared to earlier cohorts over time. Table 4.2 shows the TFR in the top origin countries of migrants to the OECD (based on stocks). In most of them, TFR has fallen below replacement, with a few notable exceptions such as Pakistan (3.4), Algeria (2.9), Morocco (2.4) and Suriname (2.4).

**Table 4.2. Fertility rates in the main origin countries of migrants to the OECD have fallen significantly in the past two decades**

Total Fertility Rate in top destination countries and in main origin countries, 1980 and 2020

| Main destination countries | Year | Main origin countries |          |             |
|----------------------------|------|-----------------------|----------|-------------|
| United States              |      | Mexico                | India    | China       |
|                            | 1980 | 4.8                   | 4.8      | 2.7         |
|                            | 2020 | 1.9                   | 2.2      | 1.7         |
| Germany                    |      | Poland                | Türkiye  | Russia      |
|                            | 1980 | 2.3                   | 4.4      | 1.9         |
|                            | 2020 | 1.4                   | 1.9      | 1.5         |
| United Kingdom             |      | India                 | Poland   | Pakistan    |
|                            | 1980 | 4.8                   | 2.3      | 6.7         |
|                            | 2020 | 2.2                   | 1.4      | 3.4         |
| France                     |      | Algeria               | Morocco  | Portugal    |
|                            | 1980 | 7.0                   | 5.7      | 2.3         |
|                            | 2020 | 2.9                   | 2.4      | 1.4         |
| Canada                     |      | India                 | China    | Philippines |
|                            | 1980 | 4.8                   | 2.7      | 5.1         |
|                            | 2020 | 2.2                   | 1.7      | 2.5         |
| Australia                  |      | United Kingdom        | India    | China       |
|                            | 1980 | 1.9                   | 4.8      | 2.7         |
|                            | 2020 | 1.7                   | 2.2      | 1.7         |
| Spain                      |      | Morocco               | Romania  | Colombia    |
|                            | 1980 | 5.7                   | 2.4      | 3.9         |
|                            | 2020 | 2.4                   | 1.6      | 1.7         |
| Italy                      |      | Romania               | Albania  | Morocco     |
|                            | 1980 | 2.4                   | 3.6      | 5.7         |
|                            | 2020 | 1.6                   | 1.3      | 2.4         |
| Switzerland                |      | Germany               | Italy    | Portugal    |
|                            | 1980 | 1.4                   | 1.6      | 2.3         |
|                            | 2020 | 1.5                   | 1.2      | 1.4         |
| Türkiye                    |      | Bulgaria              | Iraq     | Germany     |
|                            | 1980 | 2.0                   | 6.6      | 1.4         |
|                            | 2020 | 1.6                   | 3.5      | 1.5         |
| Netherlands                |      | Türkiye               | Suriname | Morocco     |
|                            | 1980 | 4.4                   | 3.9      | 5.7         |
|                            | 2020 | 1.9                   | 2.4      | 2.4         |

Note: Main destination countries by average stock between 2015 and 2021.

Source: OECD (2023<sup>[64]</sup>), *OECD International Migration Statistics* (database), <https://doi.org/10.1787/data-00342-en>; Colombia, Chile and Mexico: CEPALSTAT (2019<sup>[24]</sup>), "Tasa global de fecundidad", <https://statistics.cepal.org/portal/cepalstat/dashboard.html?theme=1&lang=es>; EU countries and the United Kingdom: Eurostat (2023<sup>[65]</sup>), "Total fertility rate", [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics); Australia: ABS (2021<sup>[22]</sup>), "Births, Country of birth of parent", <https://www.abs.gov.au/statistics/people/population/births-australia/latest-release>; United States: United States Census Bureau (2020<sup>[31]</sup>), *American Community Survey*, <https://data.census.gov/mdat/#/>; CDC (2020<sup>[30]</sup>), "Nativity, 2016-21", <https://wonder.cdc.gov/>; Japan: Statistics of Japan (2020<sup>[29]</sup>), "Live births by nationality of father and mother", <https://www.e-stat.go.jp/en/stat-search/files?page=1&layout=datalist&toukei=00450011&tstat=000001028897&cycle=7&year=20200&month=0&tclass1=000001053058&tclass2=000001053061&tclass3=000001053064&tclass4val=0>; Rest of countries: United Nations (2023<sup>[63]</sup>), *World Population Prospects: The 2022 Revision*, <https://population.un.org/wpp/>.

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### ***Fertility between the native- and foreign-born tends to converge across generations***

While the fertility of migrants has received considerable attention, the fertility patterns of their children are less understood. These tend to be influenced by the social norms of their host country but may also be affected by the behaviour of their parents to the extent that it differs durably from the social norms of the host country. The “subculture hypothesis” assumes that the latter effect dominates the former. There is indeed evidence that ideas about the appropriate timing and sequencing of family formation among migrants’ children differ from those prevailing among the native-born population. Alternatively, the “adaptation hypothesis” assumes that the effect of the host society dominates: children of migrants are influenced by the prevailing conditions and norms in destination to which they are gradually exposed, through schooling, the media and social contacts outside the family (Pailhé, 2017<sup>[66]</sup>).

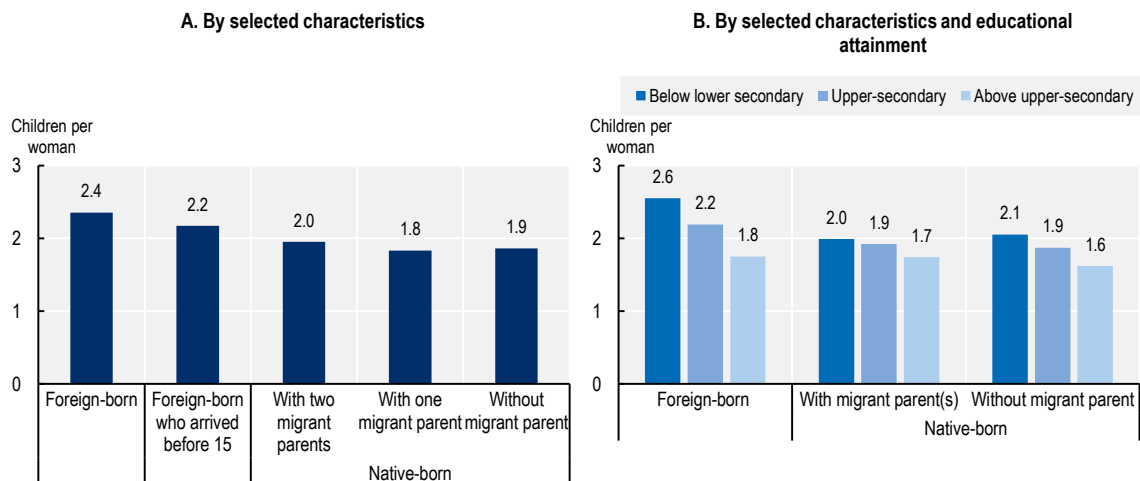
Studying migrants’ fertility in eight European countries – United Kingdom, France, Germany, Belgium, Switzerland, Spain and Estonia – Kulu et al. (2015<sup>[67]</sup>) find that the childbearing behaviour of the descendants of migrants falls in between the fertility pathways experienced by their parents’ generation and the native-born populations.

In France, the fertility behaviour of most children of migrants is converging towards that of native-born: the completed fertility of native-born women with migrant parents (1.9) is significantly lower than that of migrant women (2.3) and similar to that of French-born women with native-born parents (1.9). Further, there is not only high variation across origin groups, but the various patterns of adaptation are highly dependent on access to a higher level of education. Among native-born women with parents from Southeast Asia, sub-Saharan Africa, the Maghreb and Türkiye the propensity of a first birth is higher among the low-educated. For tertiary-educated women with parents from Maghrebi and Southeast Asian countries, conversely, the propensity of a first birth is even lower compared to French-born women (Pailhé, 2017<sup>[66]</sup>). More recent data confirm that higher educational levels mediate fertility differences among children of migrants in France: among those with an educational degree above the *baccalaurat* (upper secondary), the gaps in completed fertilities between those with and without migrant parentage are lowest (Figure 4.9) (Reynaud, 2023<sup>[21]</sup>).

In the United States, the fertility of Mexican migrants and their children points to convergence across generations. Research by Choi (2014<sup>[37]</sup>) suggests that Mexican migrants have higher fertility than native-born women and that their fertility levels resemble those of rural Mexican women, which is unsurprising since Mexican migrants tend to come from rural communities where women generally have more children. Choi also finds evidence of accelerated fertility among Mexican women after migration that partially compensates for lower fertility prior to migration, and a general tendency for Mexican-American fertility to decrease across generations, offering support for the convergence hypothesis. Using data from the Centre for Disease and Control Prevention (CDC) and the American Community Survey, Figure 4.10 offers support to this hypothesis, showing that the TFR of women of Mexican origin born in the United States closely resembles that of native-born women.

### Figure 4.9. Age at arrival and educational attainment mediate fertility levels among children of migrants in France

Completed fertility in France of native- and foreign-born women born between 1960-74 by selected characteristics (Panel A) and by selected characteristics and educational attainment (Panel B)



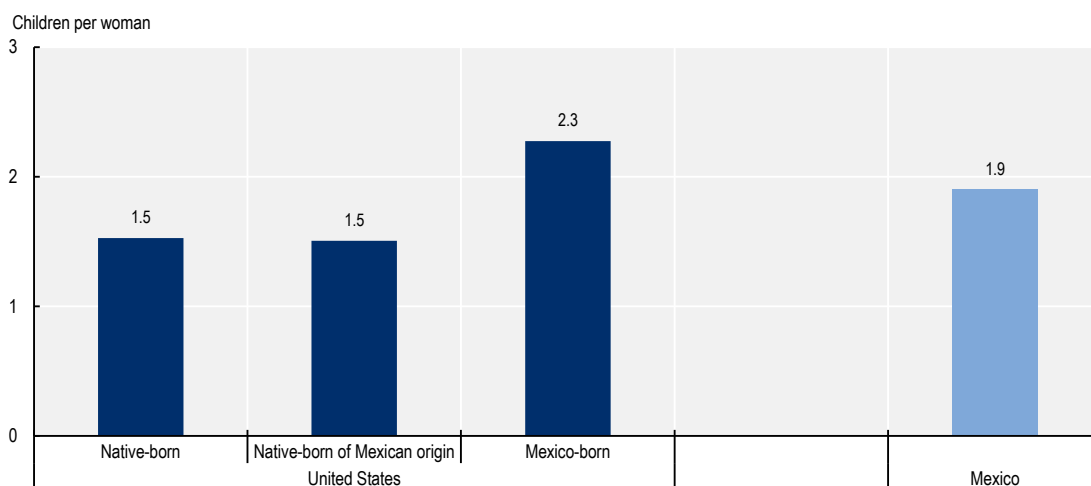
Note: Completed fertilities are the average number of children born to women from the same generation at the end of their reproductive lives. Data cover women born between 1960 and 1974.

Source: Reynaud, D. (2023<sup>[21]</sup>), *Fecondité et migration. Comment mesurer la fécondité des immigrées?*, <https://www.insee.fr/fr/statistiques/6802839>.

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### Figure 4.10. In the United States, the fertility of migrants' children is already similar to that of the native-born population without immigrant parentage

Total Fertility Rate (TFR) in the United States of native-born, native-born of Mexican origin, and Mexico-born women, 2020



Source: United States Census Bureau (2020<sup>[31]</sup>), *American Community Survey*, <https://data.census.gov/mdat/#/>; CDC (2020<sup>[30]</sup>), "Natalidad, 2016-21", <https://wonder.cdc.gov/>; INEGI (2020<sup>[68]</sup>), "Natalidad y fecundidad", [https://www.inegi.org.mx/temas/natalidad/?fbclid=IwAR10OHRUvb0P\\_GtodJFUO8D6\\_0s2q1hOEiShQKLwwntKoOYaNfSvL0s2b4#informacion\\_general](https://www.inegi.org.mx/temas/natalidad/?fbclid=IwAR10OHRUvb0P_GtodJFUO8D6_0s2q1hOEiShQKLwwntKoOYaNfSvL0s2b4#informacion_general).

StatLink  <https://stat.link/cmsy0v>

### Box 4.3. The role of migrants in shaping fertility trends in origin countries

Both financial remittances sent by migrants as well as ideas and behavioural patterns brought back into the country of origin by returnees may speed up fertility changes in countries of origin. On the one hand, financial remittances are instrumental to smoothing consumption and increasing savings. In that regard they reduce uncertainty, improve living conditions and encourage educational investments that usually come hand in hand with later and lower fertility. On the other hand, social remittances in the form of transfers of information, skills, and social capital from receiving communities are another important enabler of improved socio-economic conditions and associated fertility changes (Levitt, 1998<sup>[69]</sup>). Both returnees and transnational migrants play an important role in the transmission of new values to their communities of origin. The use of social media, the internet and continuous contact with migrants' relatives likely accelerates the transmission of fertility patterns in destination to the origin countries and, with it, the convergence of social norms and the promotion of gender roles that are more supportive of women's empowerment in the form of higher female labour market participation and educational levels. (Beine, Docquier and Schiff, 2013<sup>[70]</sup>) show some degree of convergence in fertility levels between many sending countries across the world and major destinations of their migrants. Work by Bertoli and Marchetta (2015<sup>[71]</sup>) is also consistent with those findings. Interestingly, Fargues (2006<sup>[72]</sup>) and Fargues (2011<sup>[73]</sup>) show how, depending on the fertility levels at destination countries, migrants from similar origins in northern Africa bring back very different fertility norms to their countries of origin.

Source: Adserà, A. (2020<sup>[74]</sup>), "International political economy and future fertility trends", <https://doi.org/10.1553/populationyearbook2020.deb01>; Beine, M., F. Docquier and M. Schiff (2013<sup>[70]</sup>), "International migration, transfer of norms and home country fertility", <https://doi.org/10.1111/caje.12062>; Levitt, P.; (1998<sup>[69]</sup>), "Social Remittances: Migration Driven Local-Level Forms of Cultural Diffusion", <https://doi.org/10.1177/019791839803200404>; Fargues, P. (2006<sup>[72]</sup>), *The Demographic Benefit of International Migration: Hypothesis and Application to Middle Eastern and North African Contexts*, <http://documents.worldbank.org/curated/en/508301468280735279/The-demographic-benefit-of-international-migration-hypothesis-and-application-to-the-Middle-Eastern-and-North-African-contexts>; Fargues, P. (2011<sup>[73]</sup>), "International Migration and the Demographic Transition: A Two-Way Interaction", <https://doi.org/10.1111/j.1747-7379.2011.00859.x>; Bertoli, S. and F. Marchetta (2015<sup>[71]</sup>), "Bringing It All Back Home – Return Migration and Fertility Choices", <https://doi.org/10.1016/j.worlddev.2013.08.006>.

## Migrants' contribution to births in OECD countries

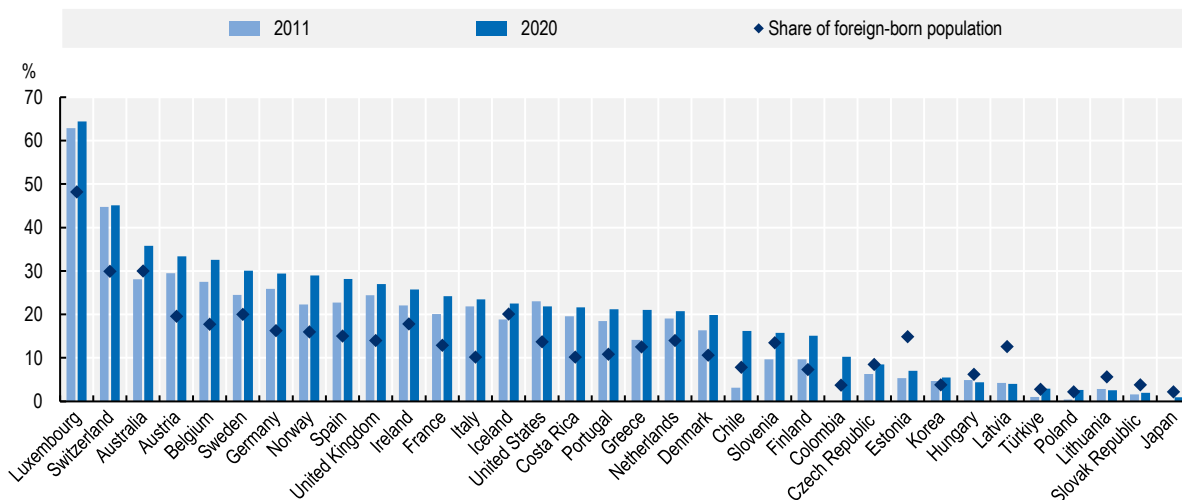
### ***Migrant women directly contribute to the share of births in OECD countries due to their age composition and migration channel....***

The proportion of births to migrants provides a basic indication of their importance for population dynamics. This measure is a function of past migration levels, the age composition of migrants, and their fertility rates (Sobotka, 2008<sup>[14]</sup>). Births to the foreign-born population generally refer to foreign-born mothers giving birth, which means that if, for instance, a native-born man has a child with a foreign-born woman in the country of the man, this counts as a foreign-born offspring. In general, the number of births to the foreign-born population does not significantly differ when foreign-born mothers or fathers are considered<sup>6</sup> (Bagavos, 2022<sup>[75]</sup>).

As shown in Figure 4.11 migrants contribute substantially to the total number of births in many OECD countries. This is not surprising, as foreign-born women tend to be younger than native-born women, are likely to arrive at childbearing ages, display higher fertility and come in the context of family reunification (Figure 4.12). In 2020, six in ten babies in Luxembourg, for example, were born to foreign-born women. There is, however, substantial variation in the area: at the lower extreme, one in a hundred births in Japan were from migrant women.


### Figure 4.11. Despite their small contribution to the total fertility rate, migrants contribute significantly to total number of births in OECD countries

Share of live births from foreign-born mothers among total number of births (2011 and 2020) and share of foreign-born population among total population (2020)



Note: Data for the United Kingdom and Chile are from 2018 and 2019 (not 2020), respectively; data for Switzerland are from 2015 (not 2011); data for Australia and the United States are from 2010 (not 2011). Data for Japan refer to nationality, not the mother's country of birth.

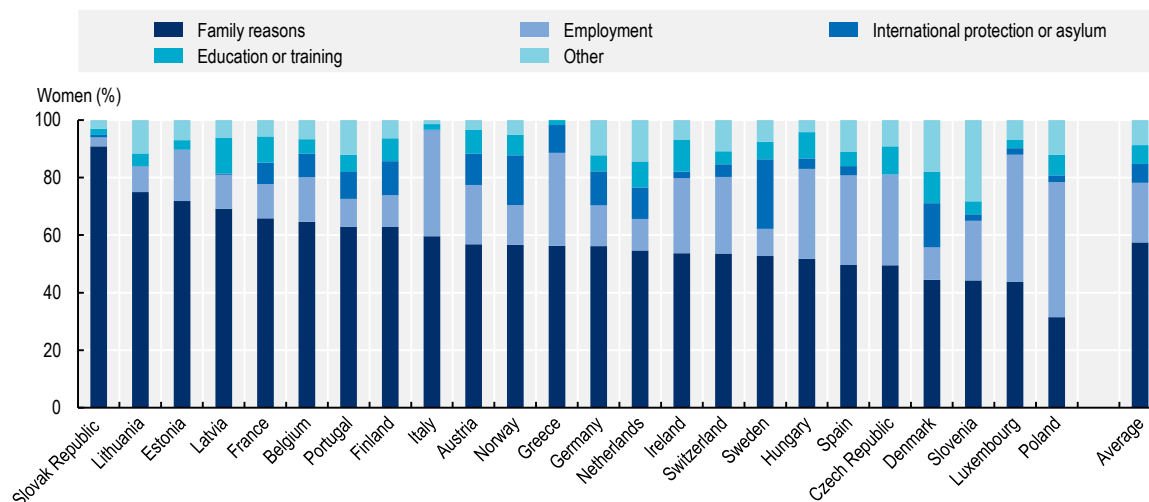
Source: Eurostat (2020<sup>[32]</sup>), "Live births by mother's age and country of birth", [https://ec.europa.eu/eurostat/databrowser/view/DEMO\\_FACBC\\_custom\\_3116674/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/DEMO_FACBC_custom_3116674/default/table?lang=en); INEC (2020<sup>[26]</sup>), "Nacimientos", <https://inec.cr/acerca-inec>; United States Census Bureau (2020<sup>[31]</sup>), American Community Survey, <https://data.census.gov/mdat/#/>; CDC (2020<sup>[30]</sup>), "Natality, 2016-21", <https://wonder.cdc.gov/>; Statistics Canada (2020<sup>[23]</sup>), "Live births, birth weight indicators, by characteristics of the mother and child", <https://www150.statcan.gc.ca/n1/daily-quotidien/220928/dq220928d-cansim-eng.htm>; ABS (2021<sup>[22]</sup>), "Births, Country of birth of parent", <https://www.abs.gov.au/statistics/people/population/births-australia/latest-release>; INE (2019<sup>[25]</sup>), *Anuario de Estadísticas Vitales*, [https://www.ine.gob.cl/docs/default-source/nacimientos-matrimonios-y-defunciones/publicaciones-y-anuarios/anuarios-de-estad%C3%ADsticas-vitales/anuario-de-estad%C3%ADsticas-vitales-2019.pdf?sfvrsn=97729b7b\\_5](https://www.ine.gob.cl/docs/default-source/nacimientos-matrimonios-y-defunciones/publicaciones-y-anuarios/anuarios-de-estad%C3%ADsticas-vitales/anuario-de-estad%C3%ADsticas-vitales-2019.pdf?sfvrsn=97729b7b_5); DANE (2021<sup>[76]</sup>), "Nacimientos", [https://www.dane.gov.co/files/investigaciones/poblacion/pre\\_estadisticasvitales\\_IIItrim\\_2022pr.pdf](https://www.dane.gov.co/files/investigaciones/poblacion/pre_estadisticasvitales_IIItrim_2022pr.pdf); Statistics of Japan (2020<sup>[29]</sup>), "Live births by nationality of father and mother", <https://www.e-stat.go.jp/en/stat-search/files?page=1&layout=datalist&toukei=00450011&tstat=000001028897&cycle=7&year=20200&month=0&tclass1=000001053058&tclass2=000001053061&tclass3=000001053064&tclass4val=0>; KOSTAT (2021<sup>[77]</sup>), *Vital Statistics of Immigrants in 2021*, [https://kostat.go.kr/board.es?mid=a20108030000&bid=11743&act=view&list\\_no=421965&tag=&nPage=1&ref\\_bid=](https://kostat.go.kr/board.es?mid=a20108030000&bid=11743&act=view&list_no=421965&tag=&nPage=1&ref_bid=)

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To better understand the dynamics of family formation and the proportion of births to migrant women, it is useful to look at the female migrant population by age composition and their migration channel (the self-declared reason for migration from the 2021 EULFS is used as a proxy here). Across the European OECD countries, every four out of ten native-born women are in their fertile years (15 to 49 years old), compared to six in ten of their foreign-born peers. In addition, in 2021, six out of ten women (15 years and older) migrating to the European OECD countries declared to so for family reasons (Figure 4.12). It is possible to assume that for female family migrants, the migration event and family formation are interrelated events.

**Figure 4.12. Six in ten women migrated to the European OECD countries for family reasons**

Women's self-declared reasons for migration, 2021



Note: Data cover women who are 15 years and older.

Source: Eurostat (2021<sup>[78]</sup>), *EU Labour Force Survey*, <https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>.StatLink  <https://stat.link/a6zhip>**...but their indirect contribution to births is also significant**

Even if the direct contribution of migrants to overall fertility is relatively modest, their indirect contribution is probably significant. The employment of migrant women in household and care services has proven to increase the availability of these services and allow (highly educated) mothers to return to work after childbirth (see next chapter). This is especially true in contexts of high-income inequality or where social and family policies are less developed. In Spain and Italy, given the shortage of childcare services, women's labour force participation and childrearing are usually reconciled via the unpaid care of grandparents and the care work of migrants (Farré, González and Ortega, 2011<sup>[79]</sup>; Tobío, 2001<sup>[80]</sup>).

Similarly, college-educated women in the United States are increasingly having children, as migrant inflows are associated with reductions in the cost of childcare and other household services. The impacts are strongest among women whose fertility decisions are the most likely to be affected by changes in childcare markets: married women and women with a graduate degree. This makes sense in that highly educated women are more likely to use market-provided childcare. Previous research had already shown that a reduction in the cost of household services – led by low-educated migrants – allowed tertiary-educated native-born women to reconcile childbearing and paid work; e.g. to increase their labour force participation. In tandem, both findings suggest that while the predominant impact of low-skilled migration is to increase the labour supply of high-skilled native-born women, some women respond by having an additional child (Furtado and Hock, 2010<sup>[81]</sup>; Furtado, 2015<sup>[82]</sup>).

## Age at childbirth

### ***Migrant women tend to have children at an earlier age, with potential consequences for their labour market insertion***

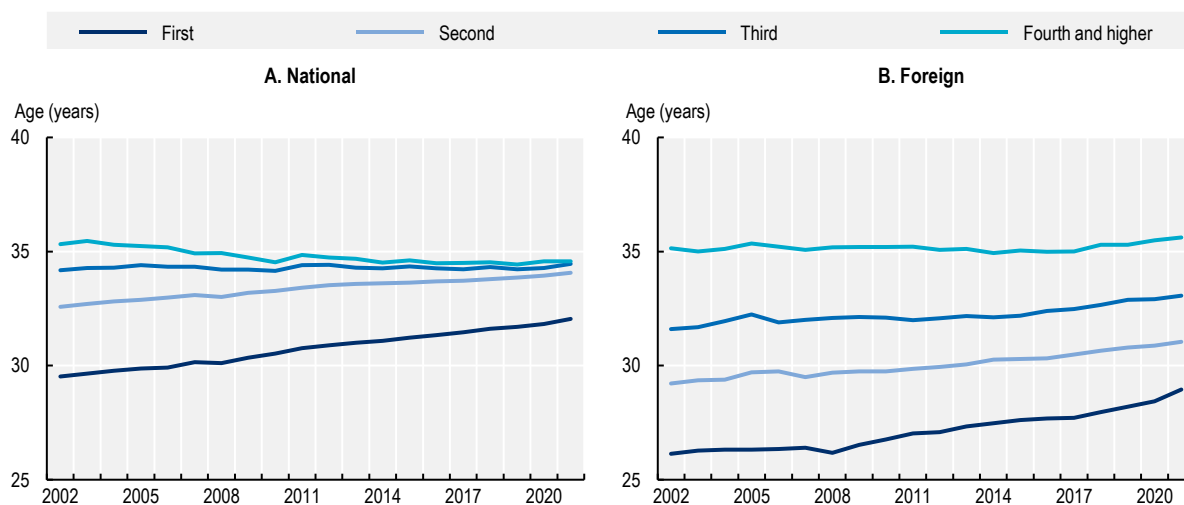
Migrant women tend to have children at an earlier age than their native-born counterparts. While most research has emphasised the importance of culture in early onset of fertility, there is evidence that institutional factors as well as education and employment-related factors critically influence childbearing behaviour. Andersson and Scott (2007<sup>[83]</sup>) for example, find that most groups of migrants in Sweden (from ten different origin countries) give birth earlier than native-born women and much of the differences are driven by time since migration and labour market attachment. Women (both migrants and non-migrants) who are not established in the labour market have a reduced propensity to become a mother, which the authors attribute to Sweden's parental leave system in which financial benefits are based on previous earnings. The similarity in patterns across widely different national groups supports the notion that various institutional factors affecting all subgroups are crucial in influencing childbearing behaviour.

Kulu et al. (2015<sup>[67]</sup>) found that poor employment prospects among migrant populations may promote early onset and high completed fertility. Migrant women with poor employment prospects may decide on the “motherhood track”, particularly if family policies encourage women to stay at home with children. In contrast, low educational segregation between population subgroups and family policies that encourage women's employment and support the compatibility of employment and parenthood, in turn, may explain a lack of high fertility among ethnic groups in a country (Kulu et al., 2017<sup>[84]</sup>).

In Spain, the TFR has remained relatively stable since 2011, at 1.3. The long-term decline in fertility has been associated with a progressive postponement of childbearing as both men and women increasingly wait to be established in the labour market before childbearing, but rather than foregone motherhood what explains the country's fertility levels is the low rates of progression to second births (González-Ferrer et al., 2017<sup>[4]</sup>). Although the net contribution of migrants to overall fertility was modest in 2020 (+0.07), Figure 4.13 shows that migrant women tend to have children at earlier ages. In 2021, the first child was born at 32.1 years among native-born women versus 29 among the foreign-born (a 3.1-year difference). The age gaps only begin to decrease by the third order and reverse at fourth orders and higher, with migrant women registering an average age of 35.6 compared to 34.6 among the native-born. This is consistent with findings from Kraus and Castro-Martín (2017<sup>[85]</sup>) which show, on the one hand, a decline in the fertility levels of Latin American migrants (the largest origin), especially after the 2008 crisis, leading to a convergence in fertility levels with the native-born population. On the other, the fact that such convergence has not been observed with regard to the fertility calendar, with Latin American women entering motherhood, on average, three years earlier than their native-born peers.

### Figure 4.13. Foreign women in Spain tend to have their first child at earlier ages compared to national women

Age at childbirth by birth order and woman's nationality in Spain, 2002-21



Note: Data refer to mother's citizenship, not country of birth.

Source: INE (2021<sup>[86]</sup>), "Edad media a la maternidad por orden del nacimiento según nacionalidad de la madre", <https://www.ine.es/dynt3/inebase/es/index.htm?padre=2043&capel=2044>.

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In Sweden, migrant women from a selected cohort (born between 1975 and 1980) exhibit earlier family formation compared to the native-born. Age at first birth for migrant women ranges from 23.6 among women from Somalia to 28.6 among women coming from Iran (compared to 28.9 among Swedish-born women) (Table 4.3).

### Table 4.3. On average, native-born women in Sweden tend to have their first child approximately three years later than foreign-born women

Average age at first birth by woman's country of birth, women born between 1975 and 1980, Sweden

| Country of birth       | Age at first birth |
|------------------------|--------------------|
| Somalia                | 23.6               |
| Yugoslavia             | 24.0               |
| Syria                  | 25.1               |
| Türkiye                | 25.3               |
| Iraq                   | 25.5               |
| Chile                  | 25.6               |
| Bosnia and Herzegovina | 26.0               |
| Thailand               | 26.4               |
| Poland                 | 26.7               |
| Iran                   | 28.6               |
| Native-born            | 28.9               |

Note: These are the ten largest origin countries based on the size of the foreign-born population in these birth cohorts (1975-80) who were resident in Sweden from ages 16-40 (based on person-years).

Source: Swedish register data (collections accessed and analysed by SUDA, Stockholm University).

Early family formation can translate into lower capacity among women to pursue training or employment due to family responsibilities (see Chapter 5). In other cases, conversely, children of migrants may postpone family formation to a greater extent than the native-born due to high educational and employment aspirations (Pailhé, 2017<sup>[66]</sup>).

## Desired fertility

Fertility behaviour may be the result of individual preferences but may also reflect the socio-economic context in which fertility decisions are made. Fertility differences between migrants and the native-born, therefore, may expose social inequalities and not necessarily differences in norms or preferences (Milewski and Mussino, 2019<sup>[10]</sup>). Indicators on fertility intentions and migrants' ideal family size can shed light on fertility norms limiting the interference of economic conditions and the disruptions related to the migratory process (Mussino and Ortensi, 2019<sup>[87]</sup>). In this sense, they are likely closer to personal norms than actual fertility behaviour (Carlsson, 2019<sup>[88]</sup>).

Research shows that as with actual fertility, fertility ideals are mediated by several factors including age at migration as well as educational attainment, residential segregation, among other factors. Those emigrating as children or adolescents tend to display fertility ideals farther from their country of origin compared to those who emigrate at later ages (Alderotti et al., 2022<sup>[7]</sup>).

Carlsson (2019<sup>[88]</sup>), for example, finds that in Sweden there is adaptation at the ideational (or preference) level of fertility across generations. However, the pace and extent of convergence vary by gender – with clearer patterns among women – and origin – with a clear convergence pattern among migrants from Eastern Europe and no clear pattern among migrants from the Middle East and North Africa. The fact that the process of convergence is observed both in actual fertility as well as fertility intentions suggests that the fertility adaption of migrants not only responds to the influence of the institutional and socio-economic context, but to the influence of norms.

In the Netherlands, de Valk (2013<sup>[89]</sup>), studying families from different origins, finds that there are differences regarding the preferred timing for family formation and the ideal family size, but there is also evidence of socialisation as children prefer smaller families and later childbearing compared to their parents and these intergenerational differences are not greater among immigrant families. In Spain, the desired number of children does not differ between adolescents of Latin American origin who migrated as children and Spanish-born adolescents, but the former would like to start their family earlier. Yet, compared to their parents, age at family formation is considerably lower, showcasing that adaptation and socialisation processes are both at work for migrants who arrived young. Social integration into the host society – measured by the number of native-born best friends – reduces the gap in expected age at first birth, while age at migration exerts no significant influence (Kraus and Castro-Martín, 2017<sup>[85]</sup>).

Table 4.4 shows ideal fertility and ideal and actual age of family formation among migrants and native-born individuals in Spain. In line with the findings of Kraus and Castro-Martín (2017<sup>[85]</sup>), migrants prefer to start their family earlier than the native-born, and the difference is particularly high among migrants from Africa and Eastern Europe. Regarding family size preferences, there are no large differences between migrants and the native-born, except for migrants from high-fertility regions such as Africa. This similarity in family preferences cannot be attributed to an adaptation process to social norms, as the preferred number of children among younger cohorts in certain origin regions already hovers around two. Finally, there is a significant variation in fertility ideals depending on the age at arrival, with migrants who arrived at earlier ages showing greater convergence to the fertility preferences of the native-born population.

Because many factors contribute to materialising fertility expectations, the actual age at first birth does not always correspond to the ideal age. Among Spanish-born and migrants from Western Europe, there is only a slight average gap, perhaps reflecting a more accurate perception of the economic situation and



aspirations in other (competing) life domains such as education or the labour market. In the case of migrants from Eastern Europe and Latin America, the onset of family formation is, on average, earlier than desired (Bueno, Lozano and Adsera, forthcoming<sup>[90]</sup>).


**Table 4.4. There are differences in ideal fertility and timing among migrants and the native-born in Spain, but these tend to be lower among migrants who arrived before adolescence**

Ideal family size and age at family formation among migrants and native-born women in Spain, 2018

|                         | Mean ideal number of children | Mean ideal age at first birth | Actual age at first birth |
|-------------------------|-------------------------------|-------------------------------|---------------------------|
| Spain                   | <b>1.9</b>                    | <b>28.2</b>                   | <b>28.7</b>               |
| Western Europe          | <b>2.0</b>                    | <b>28.0</b>                   | <b>28.2</b>               |
| Arrived before 13       | 1.8                           | 28.1                          | 28.3                      |
| Arrived at 13 and older | 2.2                           | 27.8                          | 28.0                      |
| Eastern Europe          | <b>2.0</b>                    | <b>26.1</b>                   | <b>24.2</b>               |
| Arrived before 13       | 1.9                           | 27.0                          | 22.0                      |
| Arrived at 13 and older | 2.0                           | 26.0                          | 24.2                      |
| Africa                  | <b>2.8</b>                    | <b>24.6</b>                   | <b>25.1</b>               |
| Arrived before 13       | 2.3                           | 25.5                          | 25.8                      |
| Arrived at 13 and older | 2.9                           | 24.5                          | 25.1                      |
| Latin America           | <b>2.1</b>                    | <b>27.2</b>                   | <b>24.5</b>               |
| Arrived before 13       | 2.1                           | 27.3                          | 23.8                      |
| Arrived at 13 and older | 2.2                           | 27.2                          | 24.6                      |

Note: Total sample includes 14 369 women aged 18-55, of which 12% are migrants. Among the sample, 8 154 are mothers, of which 13% are migrant mothers.

Source: INE (2018<sup>[91]</sup>), "Encuesta de fecundidad 2018", [https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736177006&menu=ultiDatos&idp=1254735573002](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177006&menu=ultiDatos&idp=1254735573002).

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## Conclusion

The fertility of migrants is an increasingly important element in the population dynamics of receiving countries. However, most fertility measures tend to provide only a partial view of their childbearing patterns and are prone to overestimating differences between migrant and native-born women. This happens for a couple of reasons. First, fertility tends to be relatively high immediately after migration as in many cases is related to family reunification or marriage. Second, the fertility of migrants preparing to move to another country tends to be relatively lower than otherwise. As a result, measures only looking at the behaviour of migrants in their destination fail to account for the relatively low fertility in origin just before migration. This chapter provides a detailed explanation of these facts. In addition, the chapter refers to recent studies (France, in particular) in which researchers calculate how different the TFR of migrants is when it is possible to have complete information on the childbearing behaviour of migrants both in origin and destination. Overall, fertility patterns among migrants and the native-born tend to converge over time and across generations. The substantial decrease in fertility across most origin countries is an important reason for the convergence.

While the net contribution of migrants to overall fertility levels is relatively small, their immediate contributions in terms of shares among births are substantial. This is in part explained by the fact that many migrants arrive in OECD countries precisely during their childbearing years. More importantly, the fertility behaviour of migrants – both in terms of fertility levels as well as age at family formation – has important implications for their integration process as it impacts their labour market attachment and outcomes, as

will be seen in the companion chapter. Early childbearing and, particularly, childbearing that happens immediately after arrival when women lack pre-birth labour market experience in destination hinders their continuous attachment after childbirth. As the next chapter discusses, policy makers should consider those patterns of childbearing in designing policies that enable women to enter or re-enter the labour market.

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## Notes

<sup>1</sup> Fertility, mortality and international migration directly determine changes in a population's age structure. The effect of fertility is clear and immediate in changing the size of the youngest group, but the effects of mortality and migration are far more complex. First, death, immigration and emigration can occur at any age (as opposed to births). Second, while emigration and deaths are comparable in terms of population reduction, the parallel between migration and birth as a way of increasing population is not as straightforward as the composition of migrants is heterogeneous (Fihel, Janicka and Kloc-Nowak, 2018<sup>[5]</sup>).

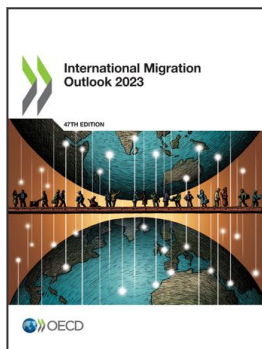
<sup>2</sup> Replacement level is the level of fertility at which a population exactly replaces itself from one generation to the next. In developed countries, replacement level fertility can be taken as requiring, under the current mortality conditions and barring out- and in-migration, an average of 2.1 children per woman.

<sup>3</sup> Earlier research provides similar results. In 2014, the net effect of migrants to the overall TFR of 18 EU countries was 0.05, ranging from a high 0.17 in France to 0.04 in Norway (Sobotka, 2017<sup>[59]</sup>).

<sup>4</sup> Many studies in different settings have suggested that migrants from countries with skewed sex ratios at birth tend to adjust the sex of their offspring to ensure the birth of at least one male child. Using 2001 and 2006 Canadian census, Adsera and Ferrer (2020<sup>[92]</sup>) find that South Asian women have an abnormally high share of boys after a first-born girl, resembling cultural preferences and patterns of their origin countries.

<sup>5</sup> It must be noted, however, that Germany only publishes fertility data by citizenship (nationality) and, thus, the statistics presented here should be seen as an approximate measure of migrant's fertility rates.

<sup>6</sup> According to calculations by Bagavos (2022<sup>[75]</sup>), the share of births to foreign-born fathers to the total number of births in France and in the United Kingdom would have been higher by less than 1 percentage point as compared to the corresponding share to foreign-born mothers.



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