

## Does return migration influence fertility at home?

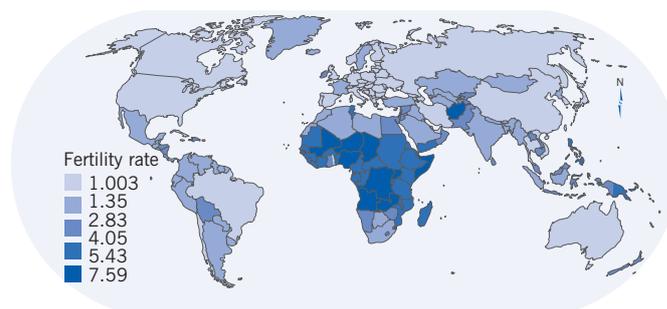
Migrants encounter different fertility norms while abroad, which they can bring back upon returning home

Keywords: temporary migration, return migration, transfer of norms, fertility

### ELEVATOR PITCH

Demographic factors in migrant-sending countries can influence international migration flows. But when migrants move across borders, they can also influence the pace of demographic transition in their countries of origin. This is because migrants, who predominantly move on a temporary basis, encounter new fertility norms in their host countries and then bring them back home. These new fertility norms can be higher or lower than those in their country of origin. So the new fertility norms that result from migration flows can either accelerate or slow down a demographic transition in migrant-sending countries.

Fertility varies dramatically between countries, 2015



Source: Author's elaboration on World Bank (2015), *World Development Indicators*.

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### KEY FINDINGS

#### Pros

- ⊕ The movement of migrants across political borders can influence fertility in the country of origin.
- ⊕ International migration can influence fertility in either direction, depending on whether it is higher or lower in the host country than in the country of origin.
- ⊕ Returning migrants can bring home the fertility norms they encountered while abroad.
- ⊕ Migrant couples often have more children than non-migrant couples, e.g. Egyptian couples with a past migration experience in other Arab countries have a higher number of children than non-migrant couples do.

#### Cons

- ⊖ It is difficult to separate the effects of the transfer of norms from the other effects of a past migration experience, such as improvements in households' economic conditions.
- ⊖ The decision to migrate (and return) might be correlated with individual fertility preferences.
- ⊖ Egypt is the only country for which evidence from household-level data on the transfer of fertility norms controls for non-random selection into migration.
- ⊖ The possible multiplier effects on non-migrants who encounter returnees have not yet been explored.

### AUTHOR'S MAIN MESSAGE

When people move across borders, cultural norms, values, and ideas are spread, and these can influence fertility choices both abroad and back home. Returning migrants play a pivotal role in the spread of fertility norms. But, the influence return migration can exert on fertility in migrant-sending countries crucially depends on where the migrants have been, such as Europe or the Persian Gulf (two regions with vastly different fertility norms). The distribution of migrants across alternative destinations responds to different factors, including the options for legal admission in various countries. This in turn is shaped by the immigration policies of the host countries. These options contribute to some of the main social and economic effects of migration on migrants' countries of origin and, ultimately, on their demographics.

## MOTIVATION

Demographic and economic imbalances across countries constitute “irresistible forces” that induce people to migrate in search of better job opportunities [1]. The relationship between demographic factors and international migration is not one-way [2]. This is because, as international migrants encounter the fertility norms that prevail in the host country, they can transfer them back to their countries of origin. The world is still characterized by major differences in the total number of children per woman, so that migrants can enter into contact with radically different fertility norms than those prevailing in their country of origin. This can be either above or below that prevailing at home. This means the indirect influence exerted by migration on population growth in migrant-sending countries can go in either direction. And given that “permanent migrations are—and possibly always have been—the exception rather than the rule” ([3], p. 491), returning migrants can represent an important channel through which fertility norms are transmitted across countries.

## DISCUSSION OF PROS AND CONS

### **International migration can influence fertility rates in origin countries in either direction**

The evolution of democracy in a country is influenced by the international migration of its students: large numbers of students in democratic (authoritarian) countries foster (slow down) the diffusion or consolidation of democracy at home as students bring back the attitudes towards democracy they encounter in foreign countries [4]. Migration also serves to transfer new social norms across countries [5], [6], [7], most notably those related to fertility.

The number of children per woman greatly differs across countries, as shown by the illustration on p. 1. This implies that international migrants can encounter societies where different—at times radically so—fertility norms prevail. For example, a migrant moving from Niger to Europe leaves a country where, on average, women have more than 7.5 children and settles in a country where the norm is for woman to have either one or two children. Such a change can, in turn, have an impact on the migrant’s own fertility choices.

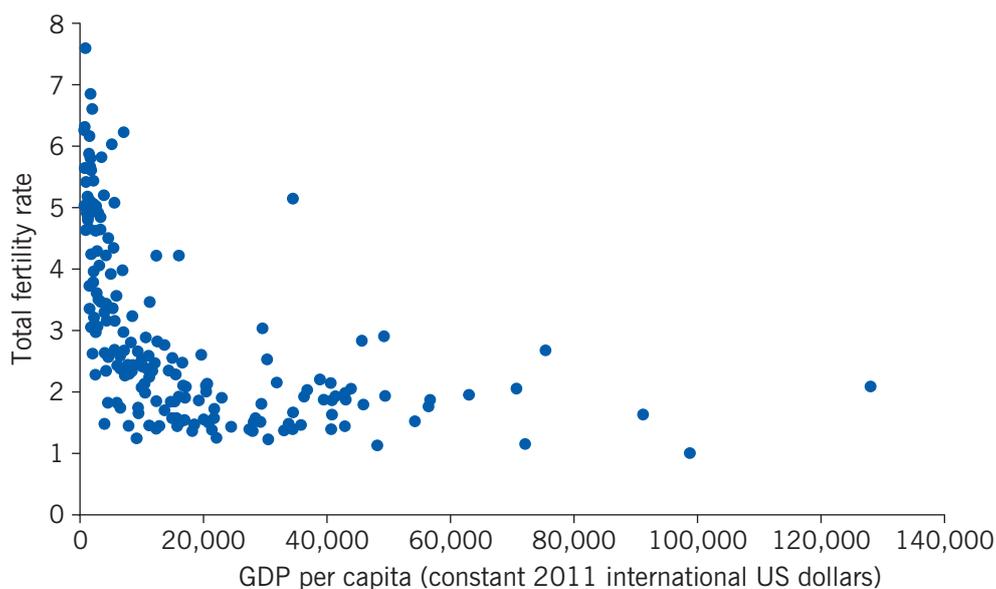
Immigrants quickly adapt to the fertility norms that prevail in the host country. Mainly this is because they face similar economic incentives as natives do (such as a higher cost of living and/or women opting for careers instead of rearing children). It is also possible that migrants contribute to the transfer of these fertility norms back to their countries of origin [2]. Such transfers can occur as international migrants nowadays stay attached to their own countries by maintaining intense communication with the relatives and friends they leave behind. The presence of a large diaspora in a host country also increases the media coverage, in the country of origin, of the migrants’ host country. This can further contribute to the conveyance of the cultural norms and values that prevail there. Furthermore, most people move abroad only on a temporary basis [3], so the return itself can represent an important channel through which to transmit the fertility norms that prevail in the host country and, thereby, influence the rate of population growth in the country of origin.

It is important to note that the above provided example on migration from Niger to a European country, which exposes migrants to significantly lower fertility norms at destination, does not represent the unique and (probably not even the typical) empirically relevant case, for two main reasons.

First, as Figure 1 shows, in countries where per capita incomes are high, fertility rates are low; and where per capita incomes are low, fertility rates are high. But the figure also shows that, even at high income levels, the number of children per woman substantially varies across countries. Thus, in a number of high- or medium-income countries that are the main recipients of migrants, such as Kuwait, the number of children per woman is high. This implies that the migrants who move there can be exposed to a higher (rather than lower) fertility norm than the one that prevails in their country of origin. And because migrants usually return home, this also implies that they take with them the new (and sometimes higher) fertility norms they encounter. There is a connection between changes in fertility and the amount of money migrants send back home [2]. Due to limited data, the latter is used as a proxy for the scale of emigration from countries, such as those from the Maghreb (the region of North Africa to the west of Egypt) and the Mashreq (the region from the western border of Egypt to the eastern border of Iraq). This flow of money shows that migrants from the former set of countries go predominantly to European destinations (in particular, to France), while migrants from the latter set of countries move predominantly to the Gulf. For the Maghreb countries, whose migrants are exposed to Europe's lower fertility norm, as the amount of money these migrants send home increases, their fertility decreases; but it is the reverse for those from the Mashreq countries because these migrants typically go to the Gulf where they encounter its higher fertility norm.

Second, a large share of migrants tends to move within regions. For instance, the typical destination for a migrant coming from a sub-Saharan African country, such as Burkina Faso, is another sub-Saharan African country, such as the Ivory Coast, both of which have high levels of fertility. Similarly, the main destination for 47% of migrants from developing countries is a non-OECD country, and in 81% of these cases the main destination is even a contiguous country [8]. These migrants encounter the fertility norms that prevail in their host countries. The “fertility norm” that migrants from a given origin are exposed to is defined as a weighted average of the total fertility rate of all the other countries of the world and

Figure 1. Average fertility rate and GDP per capita (2010)



Note: Each dot corresponds to a country.

Source: Author's elaboration on World Bank (2015), *World Development Indicators*.

the weights of each country of origin, which are represented by the share of migrants that move to each host country [8]. In one study, for 83 of the 208 countries observed, the fertility norm that migrants encounter is higher than the total fertility rate in the country of origin [8]. This, in turn, strengthens the argument that international migration can influence fertility in the country of origin in either direction, depending on the distribution of migrants across alternative destinations.

There is evidence that when migrants are exposed to a fertility norm that is 10% higher than the fertility norm of their country of origin, this can increase the latter by 3–4% [8]. But it is difficult to identify a causal relationship between fertility in the host country and fertility in the country of origin due to the existence of unobserved factors that may influence both fertility norms. One of these factors is the extreme poverty that limits migrants' destination choices to countries close by. For example, income per capita in Burkina Faso is low, and this can explain why women have, on average, 5.87 children, and why around 95% of its migrants move to the neighboring Ivory Coast, where the total fertility rate stands at an almost equally high 4.91 children. The lower per capita income in Burkina Faso limits its migrants' abilities to venture very far and, consequently, also limits them to encountering a fertility norm that is similar to that at home. This is why it is important to rely not only on the observed distribution of migrants across destinations to determine the origin-specific fertility norm, but also migration to and from proximal countries. Such studies would estimate bilateral migration stocks by using only bilateral geographical variables (such as the distance between two countries). The main results of these types of studies are robust to addressing the concerns over factors directly related to the fertility norm. And because fertility norms vary across host countries, these factors can also explain why international migration can either slow down or speed up the pace of demographic transition in the country of origin.

### **Returnees can bring back home the fertility norms they encounter while abroad**

There is clear evidence of the connection between migration and fertility levels [2], [8], but what remains to be identified are the various channels through which migration could be influencing changes in fertility levels in migrants' countries of origin. As discussed above, return migration certainly represents one of these possible channels, given that the majority of international migrants tends to move abroad only on a temporary basis. But there are insufficient data on the scale of return migration, so this cannot be measured on an aggregate or macro level.

*If* international migration does lead to a transfer of fertility norms across countries, then we should expect that migrants who make their fertility decisions after returning to their country of origin should have a number of children that is close to that which prevails in their host country. For example, Algerians returning from Germany should be expected to have one or two children, which accords with the fertility norm in their former host country. Data obtained from household surveys have been used to investigate the impact on fertility of migration episodes from Latin American countries to the US [9], [10]. Specifically, the case of rural Guatemala, an area characterized by very high fertility, shows that couples with a past migration experience, either in urban areas in their own country or in the US, tend to have fewer children than do non-migrants [9]. Such a reduction in fertility appears to be related to an increased use of contraceptive techniques, which allows couples to bring the actual number of children closer to the (lower) desired objective. For Mexican migrants, a temporary migration experience, of either spouse, to the US, can influence marital fertility in Mexico, depending on whether the returnee is the wife or the husband [10]. When the woman migrates, total

marital fertility experiences a significant but modest decline, with this result strongly driven by a greater reliance on contraceptives, while in the case of a male migrant, the total number of children even increases. The Mexican men encountered the lower fertility norms of the US, but it is possible that they “rejected them in favor of traditional, patriarchal family relations that emphasize the husband’s and father’s authority in the home” ([10], p. 1364).

Egypt represents a particularly interesting case study, as it is a Mashreq country whose migrants predominantly move to other Arab countries, mostly in the Gulf, with high (and higher than in Egypt) levels of fertility [11]. Countries in the Muslim world are characterized by notable differences in religious attitudes towards fertility and the adoption of birth control techniques. In the 1930s, religious authorities in Egypt had already declared that the adoption of birth control techniques was not at odds with Islam, while a much more conservative attitude still prevails in other Muslim countries. Furthermore, although Egyptian migration is predominantly male, the husband’s earnings play a role in the number of children born to a couple. So it is interesting to see whether the husband’s exposure to different fertility norms has an impact on the couple’s fertility choices. Most male Egyptian migrants move abroad before getting married (and hence before making decisions about fertility), so that the norms they encounter in the host country could potentially exert a strong influence on their fertility choices once they are back home and form their own families.

Married couples wherein the husbands are returning migrants from another Arab country have significantly larger numbers of children than couples wherein the husbands are non-migrants [11]. This finding is consistent with return migration representing a relevant channel through which (higher, in the case of Egypt) fertility norms are transmitted to the migrants’ country of origin.

### **Transfer of fertility norms and the income effect**

Returning migrants bring back home the fertility norms they encounter in their host country [11]. Still, it is fair to say that returnees not only bring back home new ideas and perspectives on fertility, they “bring it all back home” [11]. Specifically, a temporary migration experience produces a variety of effects on migrants and their households. Notably, these include a lasting improvement in the economic conditions that often motivated their migration in the first place as returnees can bring back the savings they accumulated while abroad; also, after they return home they might earn higher wages in the local labor market, due to the new skills they acquired while abroad. So, why can this produce a confounding influence on the fertility choices taken by a couple? The answer might be found in the fundamental economic concept of supply and demand. If children are normal goods, that is, goods for which demand increases with income, then the household’s improved economic condition that resulted from the past migration experience might be reflected in an increase in the number of children [11], even in the absence of any transfer of fertility norms. Nevertheless, a number of arguments suggest that the income effect produced by migration does not entirely explain the association between a past migration experience and fertility. For example, married Egyptian couples with better socio-economic statuses tend to have fewer children. Also, a larger share of the wives of returning migrants (as opposed to those of non-migrants) is economically active, often in micro enterprises run by their husbands. This, in turn, implies that the resources brought back home by the returning migrants open up employment opportunities for their wives, which then results in a trade-off between the wives spending their time raising children or earning extra income for the household. In this context, having children is seen as the more costly choice. In the case of migration to areas of higher fertility, such a side effect of the husband’s

migration experience should weaken, rather than reinforce, the effect on fertility produced by a transfer of fertility norms.

Another argument is that the savings migrants accumulate while abroad reduce the demand for children induced by so-called old-age concerns, that is, these savings alleviate parents' desire to have children who will then take care of them in their old age. Thus, the (likely) positive income effect produced by migration does not necessarily induce married Egyptian couples to have a higher number of children.

### **The decision to migrate (and return) and individual fertility preferences**

Returning migrants might differ from non-migrants with respect to some characteristics, such as individual preferences towards fertility. This type of characteristic is qualitative and, therefore, not so easy to measure. This points to the possibility of other qualitative characteristics that can have an impact on fertility but are also difficult to analyze. For example, “women of rural origin who migrate to urban areas, and especially to international destinations, are likely to possess attributes like a higher tolerance for risk and a greater openness to innovation that are also associated with early adoption of modern contraception” ([9], p. 286). Similarly, one could be concerned that Egyptian returnees differ from non-migrants in ways that are not easily discerned but that nevertheless directly influence the fertility choices that are recorded in the data: specifically, one could reasonably conjecture that returnees might have (even before migrating) cultural or religious values that resonate well with the ones they encounter in the host country. To put it differently, the estimated effect of migration on fertility might be confounded by the fact that Egyptians who decided to migrate and return would have had a higher number of children even if they had *not* migrated. This is because individual (and unobservable in the data) characteristics drive both the decision to migrate and choices regarding marital fertility.

This analytical challenge is even more pressing when only some of the migrants eventually return [9], [10]. This means that migrants might differ from non-migrants in their preference towards fertility, which is unobservable in the data, and also that the fertility norms of returning migrants might differ from those who permanently settle in the host country. For instance, the positive effect on total marital fertility among Mexican couples where the husbands have a past migration experience might simply reflect the fact that the male Mexican migrants who return home are those who reject the lower fertility norms they encounter in the US.

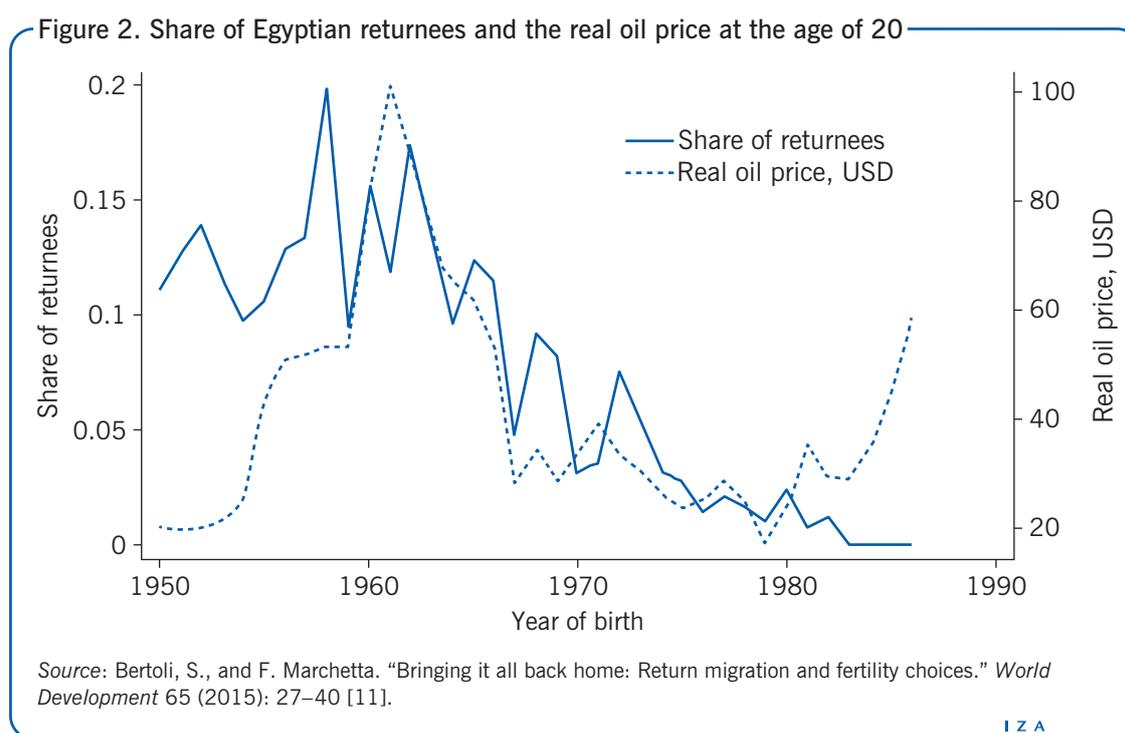
In contrast, Egyptian migration to other Arab countries is almost exclusively temporary in nature, so that the double selection problem that arises in different geographical contexts does not apply here. Furthermore, it is found that migration across different age groups of the male Egyptian population closely follows the ups and downs in the international real price of oil that prevails around the time at which they are entering the labor market, as depicted in Figure 2. Egyptians facing higher oil prices at the age of 20 are more likely to migrate towards other Arab countries, coming back home after a few years, as a high (low) oil price is associated with a strong (weak) demand for migrant labor in a number of Arab oil-producing countries, as shown also by [12] and [13].

Further, research shows that Egyptian married couples where the husband is a returning migrant have a higher number of children than do the married couples where the husband is a non-migrant [11]. One can also assume that when the real price of oil declines, returning migrants might have different fertility preferences than non-migrants.

### Evidence from household-level data does not extend beyond Egypt and does not cover non-migrants and their descendants

Evidence on the relationship between return migration and fertility and the potential differences in unobserved factors in relation to returning migrants, non-migrants, and fertility, does *not* currently extend beyond Egypt. Beyond being an interesting case study per se (as concerns about the excessive population growth in Egypt date back to the time of the British colonial administration), Egyptian migration presents some features that are analytically convenient, as we have already discussed above. Specifically, the data show that migration from Egypt to Gulf countries is (almost) exclusively temporary in nature. The main predictor of Egyptian migration is the fluctuations in the international real oil price (depicted in Figure 2). This suffices to predict a migratory return from the frequency of oil price fluctuations because we know most Egyptian migrants will stay in another Arab country for four to five years. The data availability and single influencing factor are also why a large part of the literature on the various impacts from return migration (and not just on its influence on fertility) focuses on Egypt.

We know that Guatemalan returnees are more likely to use contraceptives than are non-migrants [9], Mexican female returnees have slightly lower levels of fertility [10], and returning Egyptian migrants have more children than non-migrants [11]. But these are estimated effects and need not represent a return migrant's full impact on fertility in the country of origin. Specifically, returning migrants come in contact with non-migrants. In this way, they might contribute to the spread of the fertility norms they encounter in the host country. This impact could also spill over to a second generation. In other words, through peer effects, returning migrants could (indirectly) affect non-migrants' fertility choices. "[M]edia attention is also likely to focus on the situation of return migrants, including their modes of behavior and the extent to which they differ from those of non-migrants. There is significant evidence that transmission of norms through media and in particular through television tends to affect people's behavior in terms of fertility and marital choices" [10]. However, it is not easy to separate these effects from other diffuse effects induced by migration, for example, through



direct communication with migrants abroad, through media coverage of the different host countries migrants go to, or from other (potentially unobserved) factors that drive both the local incidence of migration and the fertility behavior of non-migrants.

## LIMITATIONS AND GAPS

The literature on the relationship between return migration and fertility in the country of origin is limited in terms of the data available for use in this type of research and also the countries covered. Household-level data on unobservable factors that influence migration are only available for Egypt. For research on migration and fertility to move beyond this one case, the data must improve across countries. As migration occurs around the world and as it significantly influences trends in fertility and population growth, there is a pressing need for more good, relevant information on the migration experience at the household and country level. Data on the scale of return migration would also give us a better indication of the impact of this phenomenon on the demographics of migrants' countries of origin. Researchers presently rely on data on the frequency and amount of money migrants send home to estimate their ties to their home countries and their probability of returning. This is not a direct, accurate measure of return migration.

Furthermore, it would be interesting to analyze other contexts, such as Filipino migration, that are characterized by (i) the predominantly temporary nature of migration episodes, (ii) a large share of female migrants, and (iii) a much greater diversity of fertility norms across destinations. Such a generalization would provide valuable insights with respect to the role of return migration in promoting a transfer of fertility norms. It would probably also offer a better scope for dealing with some of the remaining concerns about identifying the factors that influence fertility. Specifically, if one could compare returning migrants from a certain host country with returning migrants from other host countries. This would tell us more about the social norms of specific countries and their influence on the norms in migrants' countries of origin and, more specifically, on fertility and population growth. This would alleviate concerns about the differences between migrants and non-migrants that occur along unobserved dimensions, such as factors that influence the fertility decisions of returning migrants and whether this influences the non-migrants they come in contact with. The lack of household-level evidence on the indirect influence of returnees on non-migrants represents a gap that should be filled. Researchers should also be able to more fully discern the fertility effect due to the transfer of fertility norms from the income effect on fertility produced by a past migration experience. Of particular interest is where the sample of destination countries includes countries with similar incomes per capita but different fertility levels.

Other pertinent information would include the number of people who migrate only temporarily and why; why females migrate, for how long, whether they are married or unmarried; how they weigh job opportunities against the cost of child rearing; what proportion of these female migrants return home and to which specific country of origin; and the overall impact of female migration on fertility. But the scale of return migration is the main missing gap in the migration data. This information would shed considerable light on the impact of returning migrants on the demographic trends of individual host countries.

## SUMMARY AND POLICY ADVICE

International migration can exert an influence on the evolution of fertility in the country of origin. People move across borders for a number of reasons, mainly for better job opportunities

elsewhere. This movement of people puts them in contact with different fertility norms, and (more general) with different societies and the different roles of men and women therein. This latter factor represents the main proximate determinant of fertility. That is, the different norms migrants encounter can influence their own fertility decisions and also the decisions of the non-migrants they encounter upon returning home.

Most migration is temporary in nature, and return migration can thus represent a relevant channel through which different fertility norms can get transferred across borders. The usual scenario is one wherein migrants move from a relatively low-income country with a high fertility norm to a relatively high-income country where women tend to have fewer children. When there, migrants improve their own economic condition by gaining more skills and/or making more money. They also have fewer children than they would have, had they not migrated. Nevertheless, there is evidence to the contrary. Individual household-level data from Egypt (the country with the most data on this subject) show that a temporary migration experience in another Arab country (characterized by a higher fertility level) influences the fertility choices made by married Egyptian couples [11], suggesting that return migration can produce feedback effects on the country of origin that slow down the speed of demographic transition.

The lack of good, relevant data on migration means that the best research on the topic of migration and fertility is limited to Egypt. Also, data on the extent of return migration are limited to the amount of money migrants send home and how often they do this. Data on the actual numbers of return migrants, on their countries of origin, and their host countries, are lacking. Given the extent of global migration and its significant impact on fertility, particularly in migrants' countries of origin, policymakers should actively support the collection of relevant, detailed data at the individual household and country level.

In all, the effect of migration on home countries crucially depends on migrants' distribution across destinations. This, in turn, depends on the migration policies of these destinations. As immigration policies in some Gulf countries are less restrictive than are those in some EU countries, it only makes sense that migration flows tend more toward the former. Return migrants bring back home different ideas about fertility, which can in turn be of real concern for a country's demographics. Discussions on national, regional, and global demographics should take into consideration immigration policies and the extent to which they influence where migrants go.

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### Competing interests

The IZA World of Labor project is committed to the *IZA Guiding Principles of Research Integrity*. The author declares to have observed these principles.

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### Further reading

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