CHAPTER 3

JOURNEYS AND JUNCTIONS: SPILLOVERS FROM MIGRATION AND REFUGEE POLICIES

Emerging market and developing economies have found themselves increasingly on the receiving end of migrant and refugee flows, hosting the lion's share of the latter. This chapter examines how an economy's policies to manage legal inflows of migrants and refugees can have important spillovers to other destination and transit economies, as well as the economies from which these flows originate. Tighter policies in other jurisdictions can increase inflows to a given economy by 10 percent over five years. Furthermore, output in an average economy receiving these additional inflows can increase by 0.2 percent over the same horizon. The overall effect on output can often be modest, as inflows can strain local resources and refugees tend to be less well matched with skills needs in local labor markets. However, output effects can be larger should the skills of migrants and refugees complement those of natives. The policy emphasis is on improving the integration of migrants and refugees and minimizing skills mismatches. In emerging market and developing economies, the returns from better integrating refugees can be particularly large. Furthermore, measures are needed to alleviate pressures on local services and infrastructure, by prioritizing productive public investment and promoting private sector development. International policy cooperation can help distribute the short-term costs of hosting large and unexpected inflows more evenly across economies and improve outcomes over the long term.

Introduction

The legal movement of migrants and refugees has become an increasingly familiar fixture of public debate. Flows, as a share of the global population, steadily increased from the late 1990s until the global financial crisis, broadly in line with familiar globalization trends for goods and capital (Figure 3.1).

As of 2024, the global stock of legal migrants and refugees had reached 304 million—or 3.7 percent of the global population—almost double that observed in 1995, with about one in six being refugees or asylum seekers. Furthermore, about 40 percent of migrants and 75 percent of refugees now reside in emerging market and developing economies.

These patterns are the result of "pull" and "push" factors—including geopolitical shocks and natural disasters, which have increased in frequency—and the configuration of migration and refugee policies. Policies in destination economies, in particular, are likely to have played an important role by altering frictions—and therefore the costs and benefits—associated with individual migration decisions.

Just as policies have helped shape the level and composition of observed legal flows, so too have changes in the acceptance of migrants and refugees, which has been deteriorating in several major destination economies (Figure 3.2, panel 1). Increased media coverage of migration has further driven policy discourse (Figure 3.2, panel 2). Survey responses suggest that migration-related pressures are also unlikely to abate, because the intention to migrate remains robust despite the inability of all potential migrants to reach their preferred destination (Figure 3.2, panel 3). Migrants from emerging market and developing economies often aspire to move to advanced economies—either within or outside their region—but they are more likely to end up in other nearby economies within the same income group.

This chapter examines spillovers from changes in migration and refugee policies in destination economies to other jurisdictions, unlike previous work, which focuses on the impact of flows on origin and destination economies. With globalization fatigue driving increasing barriers to the movement of both goods and people and a weak global growth outlook, it is important for policymakers to understand the impact

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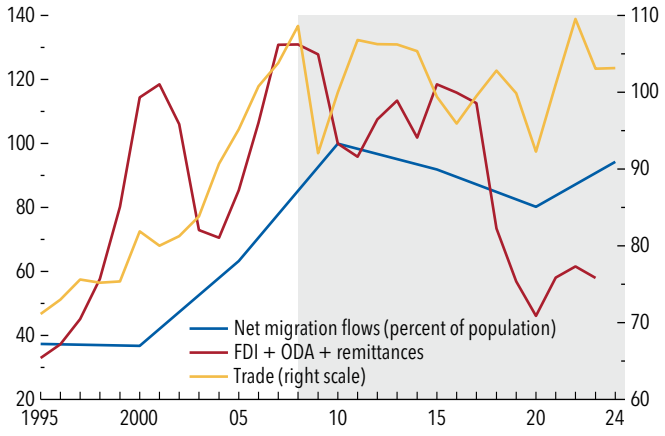
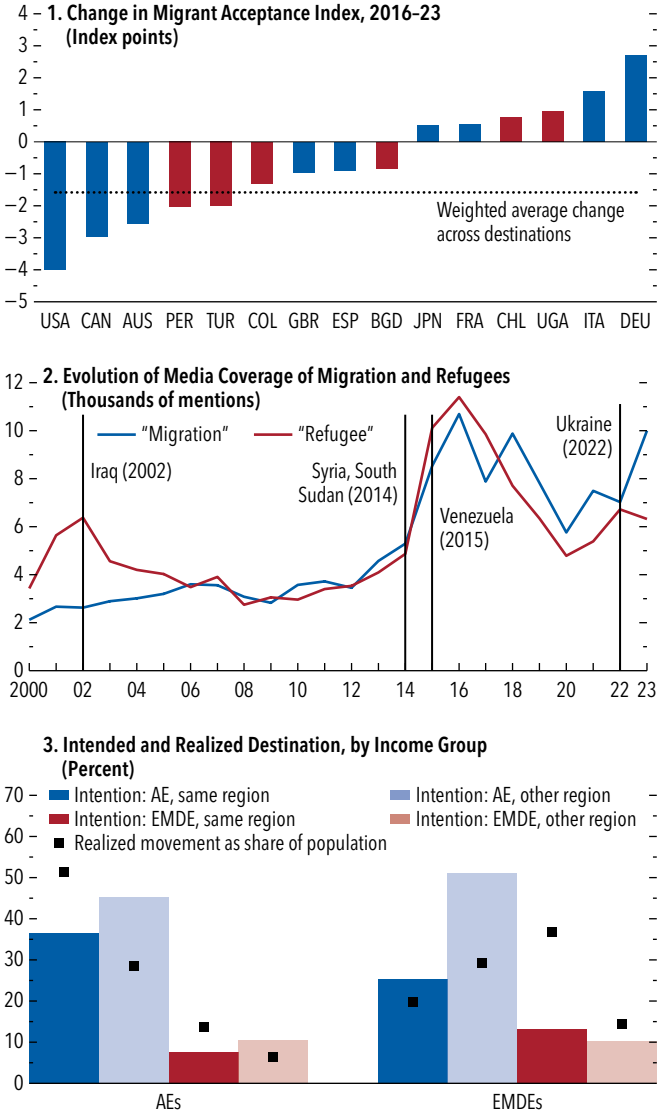
Figure 3.1. Global Trends
(Percent of GDP, 2010 = 100, unless noted otherwise)



Sources: Eurostat; Organisation for Economic Co-operation and Development; United Nations Department of Economic and Social Affairs; World Bank, *World Development Indicators*; and IMF staff calculations.

Note: Foreign direct investment is smoothed using a three-year moving average. The shaded area corresponds to the period after the global financial crisis, which coincides with the period in which globalization started to slow down. FDI = foreign direct investment; ODA = official development assistance.

Figure 3.2. Migration Perceptions and Preferences



Sources: Abel and Cohen 2019; Factiva; Gallup; United Nations Department of Economic and Social Affairs; and IMF staff calculations.

Note: In panel 1, the Migrant Acceptance Index ranges from 0–9 and is based on responses for unemployed and underemployed individuals for top destination countries (see Figure 3.3, panel 1). Destinations reported using International Organization for Standardization (ISO) country codes. Weighted average is based on 2024 migrant stock data. For Canada and the United States, 2017 is the base year. Emerging market and developing economies are highlighted in red, advanced economies in blue. Panel 2 shows media mentions of the terms "migration" and "refugee" across nine languages (English, Finnish, French, German, Italian, Japanese, Portuguese, Spanish, and Swedish). Vertical lines denote key episodes of migration and refugee flows. In panel 3, intended destination (bars) is based on average of survey responses between 2015 and 2019. Realized destination (black squares) is based on flows between 2015 and 2020. The sample includes 144 countries. "Same region" refers to movements within the same geographic region; "other region" refers to movements outside the same geographic region. AEs = advanced economies; EMDEs = emerging market and developing economies.

of changes in migration and refugee policies. Specifically, the chapter asks the following questions:

- Do changes in migration and refugee policies divert legal migrant and refugee flows to other economies or alter their composition?
- How large and significant have spillovers to output from migration and refugee policy changes been?
- Could international cooperation improve economic outcomes by distributing flows more evenly across economies?

The analysis in the chapter focuses exclusively on "regular"—also referred to as "legal"—cross-border movement of migrants and refugees. Severe data constraints preclude analysis in the chapter of irregular—also referred to as "illegal"—movement of people.[1] The term *migrant* is used to denote those persons who voluntarily leave their countries of origin for a variety of reasons, including to pursue better economic opportunities. In contrast, the term *refugee* refers to those persons who are forced to flee their countries of

[1]Irregular migration is not defined in international law, but it broadly covers the movement of persons that takes place outside the laws, regulations, or international agreements governing the entry into or exit from the state of origin, transit, or destination. By the very nature of these flows being outside legal pathways, severe data limitations and selection bias preclude the analysis of such flows.

origin and are unable or unwilling to return and are afforded protection under international law.

The scale of migrant and refugee flows—as well as their integration—can drive economic outcomes in destination economies in the short and long term through changes in labor supply, aggregate demand, congestion, and agglomeration (see Online Annex 3.1 for key definitions, additional details, and labor market outcomes).[2] As a result, inflows of people can have positive effects on output and labor productivity, although (concentrated) increases can drive up short-term costs by straining local infrastructure and reducing capital-to-labor ratios. Effects can also vary according to pathways—refugees tend to face higher barriers to integration and greater skills mismatches than migrants.

The chapter takes existing push and pull factors and migration barriers as given. It starts by documenting key global and regional trends regarding the direction and composition of legal migration and refugee stocks and flows and the evolution of related policies. It then provides a primer on potential spillovers induced by migration and refugee policy changes before presenting empirical evidence on spillovers from such changes, both for legal migration and refugee flows and output. Motivated by this empirical evidence, the final section uses model-based analysis to quantify the growth and long-term welfare impacts of changes in migration and refugee policies—taking into account different pathways and skills. It also provides insights on how international policy coordination can improve outcomes compared with unilateral measures in response to forced-displacement shocks.

The main conclusions of the chapter are as follows:

- Legal migration and refugee flows have been rising, with an increasing role for movement between emerging market and developing economies—particularly for refugees—and with strain being placed on economies with often limited absorptive capacity.
- Rising flows, public discourse, and tensions in key advanced economy destinations have gone hand in hand with migration and refugee policy tightening over time, potentially adding to challenges faced by emerging market and developing economy destinations.
- There is evidence at the global level that spillovers from migration and refugee policy changes work through several channels. These spillovers can be significant in terms of flows of people, but relatively modest in terms of output for the average economy.
  - Policy tightening that deters inflows by 20 percent in one set of economies can result in a significant deflection of people—increasing inflows to other economies by 10 percent cumulatively over five years. Furthermore, policy changes can alter the composition of inflows to a destination economy: For example, tighter policies that reduce migrant inflows by 20 percent over five years can be partly offset by a 30 percent increase in the typically smaller inflows of refugees over the same period.
  - Deflected flows to the final destination—equivalent to an average increase in the immigrant share of its population of about 0.2 percentage points—are associated with a 0.2 percent increase in output after five years.
  - Instead, if other countries tighten only their refugee policies, the resulting diversion of refugees does not generate meaningful output gains in the final destination. However, stronger refugee integration policies can deliver better outcomes, notably among emerging market and developing economies.
- Model-based simulations highlight how policies that deflect legal flows of migrants and refugees to other destinations or induce them to pursue alternative legal pathways can have economic implications between and within destination economies, depending on the degree of labor market integration and skills matches.
  - A reduction in legal migration inflows from policies targeting selected origin economies is partly offset by an increase in refugees from those economies—particularly low-skilled refugees. At the same time, migrants are deflected toward bordering economies.
  - The cumulative economic impact in the short to medium term is a modest lowering of GDP in destination economies, with a small boost to output elsewhere because their labor supply increases.
  - In economies that have received deflected migrants or refugees, increased competition may reduce wages for some workers—notably in the short term—while the incomes of natives engaged in activities complementary to the skills of incoming migrants and refugees increase.

[2]All online annexes are available at www/imf.org/en/Publications/WEO.

The analysis is emphatic. Shifts in migration and refugee policies in destination economies can result in spillovers by altering flows of legal migrants and refugees in the global economy. Although these policy changes cannot substitute for actions to sustainably address underlying pull and push factors, particularly those relating to forced displacement, they can help manage flows to these economies' benefit. Improving behind-the-border migration and refugee policies on integration, together with infrastructure investment and active labor market policies, can help ease short-term congestion costs. International cooperation can also help redistribute these costs.

Migration and Refugee Patterns and Policies

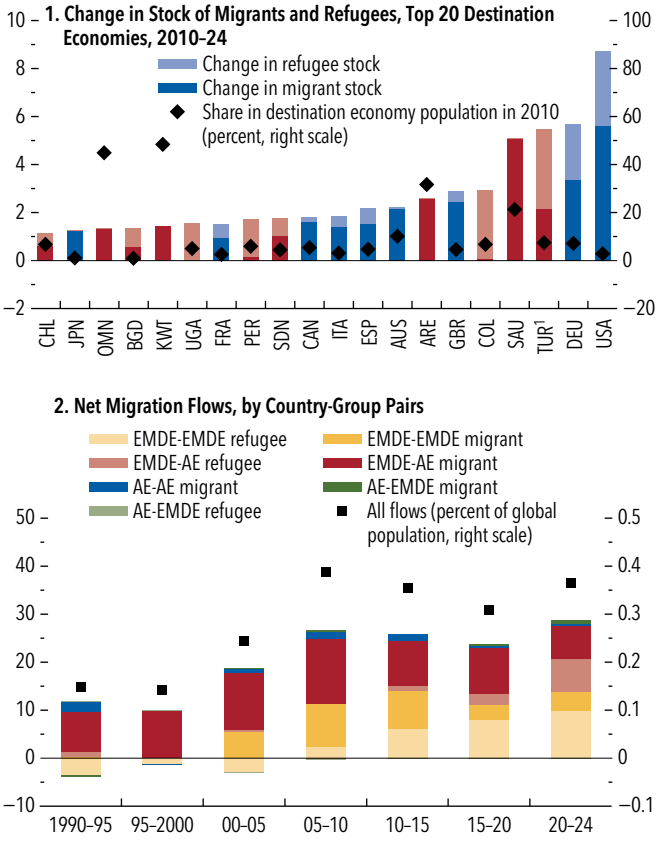
Advanced economies continue to host some of the largest groups of migrants, mostly pulled from emerging market and developing economies.[3] Flows to advanced economies accounted for the bulk of global movements in the late 1990s and early 2000s. Since then, flows of both migrants and refugees between emerging market and developing economies have increased and now account for almost half of overall net flows, with three of the five largest increases in migrant and refugee stocks during 2010–24 having taken place in large emerging market economies (Figure 3.3). During 2020–24, most gross flows were also between economies within the same region and income group, highlighting the fact that migration and refugee journeys are frequently undertaken only over short distances (Figure 3.4).

Recent developments also reflect a significant increase in flows of refugees who have been forcibly displaced or pushed from their homes by political instability, conflict, violence, persecutions, human rights violations, and natural disasters. About two-thirds of the stock of refugees are hosted in neighboring countries, with four out of the top five hosts being emerging market and developing economies (Box 3.1).[4] The global distribution of refugees can place a disproportionate burden on emerging market and developing economies, which are often not as well equipped as advanced economies to absorb the large inflows involved.

Economic implications will vary according to the characteristics of migrant and refugee inflows. In general, migration has been found to be beneficial for advanced economies.

- Migrants are generally more mobile geographically and occupationally than natives, allowing them

Figure 3.3. Changes in Stocks and Flows of Migrants and Refugees
(Millions, unless noted otherwise)



Sources: United Nations Department of Economic and Social Affairs; United Nations High Commissioner for Refugees; and IMF staff calculations.

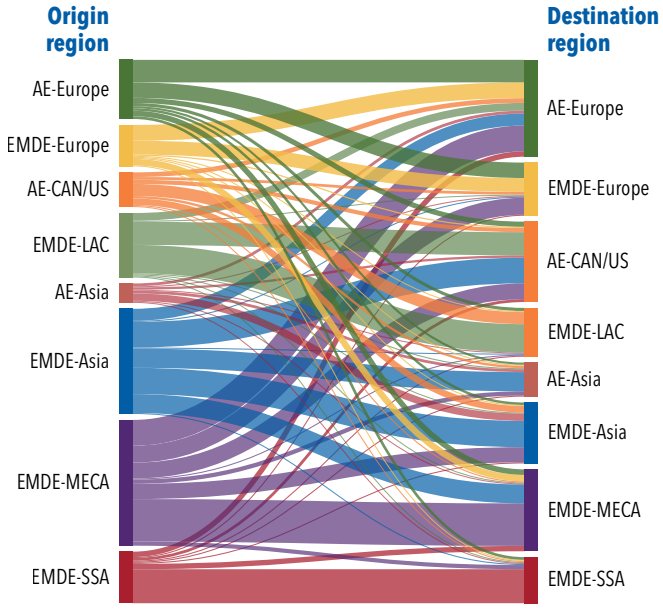
Note: Panel 1 shows the top 20 destination economies with the largest changes in migrant and refugee stocks from 2010 to 2024. Emerging market and developing economies are highlighted in red (change in migrant stock) and pink (change in refugee stock), advanced economies are highlighted in blue (light blue). Diamonds show the changes in migrant and refugee stocks between 2010 and 2024 as shares of 2010 populations. In panel 2, net flows are computed as differences in stocks. Negative values suggest return migration. Data labels in the figure use International Organization for Standardization (ISO) country codes. AE = advanced economy; EMDE = emerging market and developing economy.

[1]The result is based on only four reporting economies of origin in 2024: Afghanistan, the Islamic Republic of Iran, Iraq, and Syria.

[3]These pull factors involved can include higher standards of living—including higher incomes, better health outcomes, stronger educational systems and institutions, and a safer environment—as well as linguistic, or cultural proximity, or family ties.

[4]Political instability, conflict, and natural disasters can contribute to push individuals from their homes and are key factors behind the increase in migrant and refugee flows between emerging market and developing economies. Deteriorating social and economic conditions and a lack of opportunities in origin economies are other examples of push factors.

Figure 3.4. Gross Migration Flows, by Country-Group Pairs, 2020–24

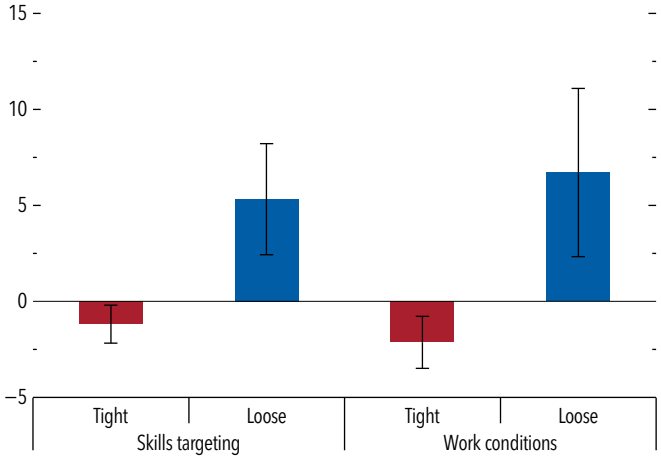


Sources: United Nations Department of Economics and Social Affairs; and IMF staff calculations.

Note: AE = advanced economy; CAN = Canada; EMDE = emerging market and developing economy; MECA = Middle East and Central Asia; LAC = Latin America and the Caribbean; SSA = Sub-Saharan Africa. Migration flows are calculated following Abel and Cohen (2019).

Figure 3.5. Change in Share of Employed Migrants and Refugees Associated with Large Increases in Job Vacancy Ratios

(Percentage points)



Sources: Eurostat; Haver Analytics; Immigration Policies in Comparison; Luxembourg Income Study Database; and IMF staff calculations.

Note: The sample covers Nomenclature statistique des activités économiques dans la Communauté européenne (NACE) Revision 2 sectors in the European Union, United Kingdom, and United States over the 2010–21 period. Sectors with high job vacancy ratios are defined as the 75th percentile across country-sectors in 2019. The markers denote 90 percent confidence intervals. Tight (loose) policies correspond to the highest (lowest) decile in the last year for which data are available. See Online Annex 3.2 for more details.

to be more responsive to changes in labor market conditions arising from both cyclical factors and structural changes—such as demographic and sectoral shifts.[5]

- Migrants and refugees—who tend to have significantly lower age profiles than the native population (April 2020 *World Economic Outlook* [WEO], Chapter 4; Box 3.2)—can generate economic gains that outweigh fiscal costs and even ease fiscal pressures if they are well integrated into the labor force (Clemens 2024; Box 3.3; see also the April 2025 WEO, Chapter 2).
- Furthermore, migrants and refugees may help contain (wage push) inflationary pressures by increasing the labor supply, as observed across multiple sectors in advanced economies since the pandemic (Cheremukhin and others 2024). These effects can be more pronounced where native workers have skill levels similar to those of migrants and refugees. However, migrants can also contribute to inflationary pressures by raising demand (Manacorda, Manning, and Wadsworth 2012; April 2020 WEO, Chapter 4; Box 3.4).
- Overall, migration policy frameworks will determine how job vacancies are filled between natives and migrants—the latter tend to mobilize in sectors in which labor demand is high, jobs are hard to fill, and barriers to entry are lower (Figure 3.5; Online Annex 3.2).

Meanwhile, refugees frequently struggle to join the labor force or find employment opportunities that fully utilize their skills. The benefits from their contributions are larger, notably in the long term, if they are well integrated into the labor market. Evidence indicates that the complementarity of migrants and refugee skills with those of natives and the strength of integration policies matter also for emerging market and developing economies (Viseth 2021). However, even in situations in which refugees have a common language and culture, legal and structural barriers mean that they tend to work in the informal sector (Alvarez and others 2022). These findings also suggest that there

[5]There is evidence that immigrants are more responsive to labor shortages than natives, which reflects, in part, the fact that they have already incurred labor mobility costs. See Online Annex 3.2 for more details.

is no significant displacement of natives by refugees, but instead there are potential productivity losses from skills mismatches and labor misallocation.

Certain migration and refugee policies have become increasingly restrictive for the median economy in recent decades, whether in response to the stock of existing migrants and refugees, or to recent inflows, or to a failure to integrate.[6] For instance, some countries have tightened external regulations (Figure 3.6, panel 1: see Online Annex 3.1 for key definitions). These are targeted primarily toward migrants, and include skills targeting and minimum ages. Meanwhile, the previous easing trend for internal regulations—including integration measures—has stalled with greater variation across countries (Figure 3.6, panel 2). Furthermore, the stringency of regulation enforcement (controls) has increased, although it has tapered off over time (Figure 3.6, panel 3).

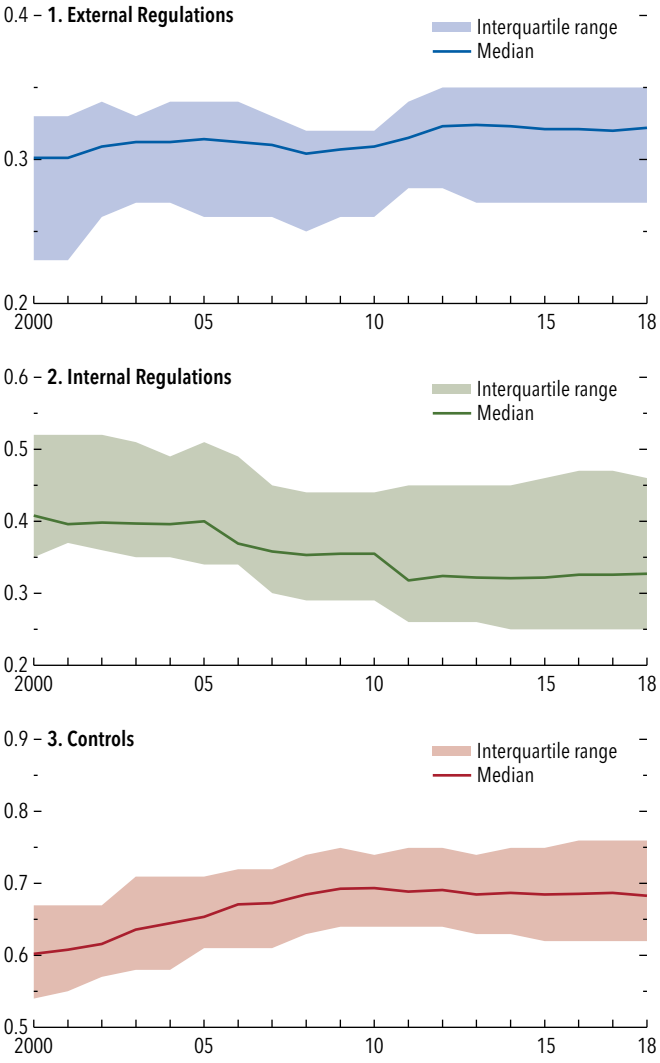
A Primer on Spillovers from Migration and Refugee Policy Changes

Changes in migration and refugee policies can alter the flow of migrants and refugees within and between economies through four main channels (see Figure 3.7).

- Stricter policies in destination economies may not reduce the overall magnitude of flows from origin economies but may alter their composition, as targeted restrictions can lead to shifts between the flows of migrants and refugees. This is referred to as *categorical substitution*.
- Restrictions in one or more destination economies may divert migrants and refugees to other destinations or leave them stranded in transit economies. This channel is labeled *destination substitution* or *deflection*.
- Migrants and refugees from other origin economies may be encouraged or more likely to fill the gap caused by the restrictions placed on flows from targeted origin economies. This is *origin substitution*.
- In some cases, stricter policies may dissuade migrants from traveling altogether: *origin suppression* or *deterrence*.

[6]Migration and refugee policies are collectively the set of laws, regulations, and programs that governments use to facilitate, regulate, and optimize migration outcomes. Although refugees are afforded protection under international law, their integration into an economy is governed by domestic regulations and controls.

Figure 3.6. Migration and Refugee Policy Trends
(Index, 0 = open, 1 = closed)



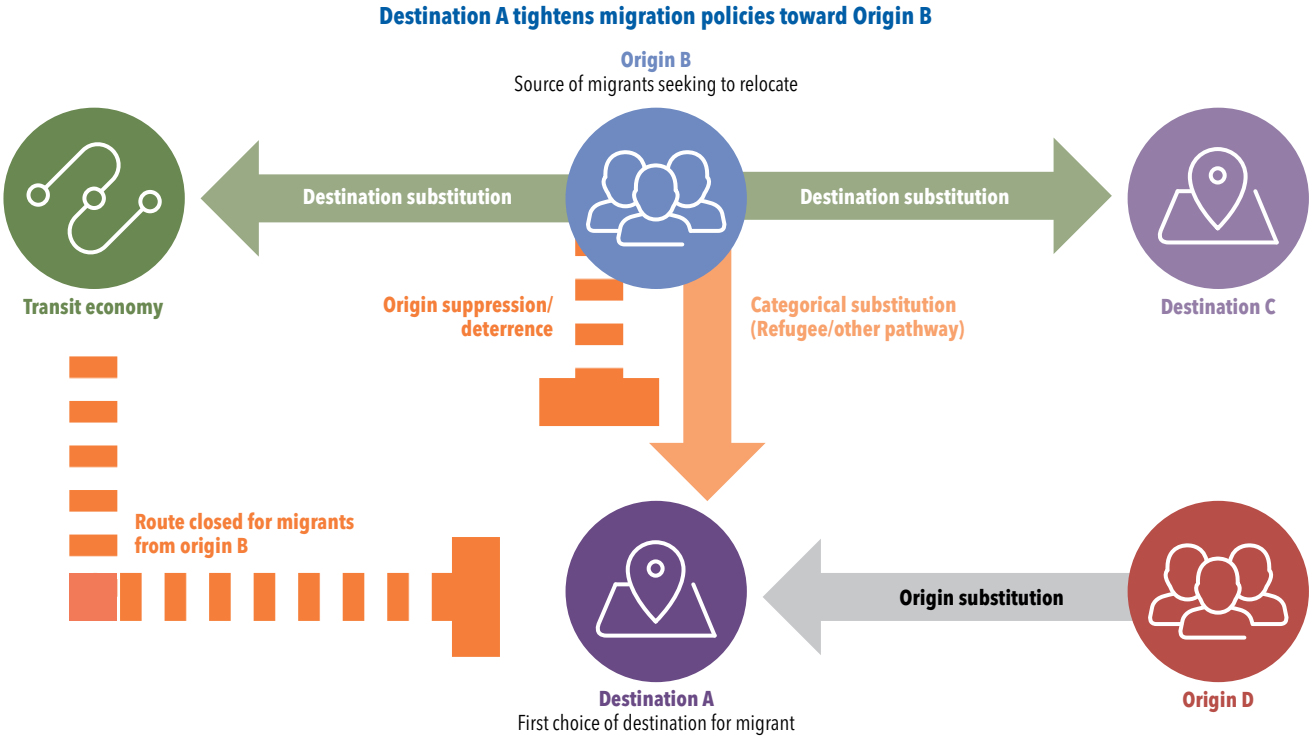
Sources: Immigration Policies in Comparison; and IMF staff calculations.

Note: The sample covers 33 member countries of the Organisation for Economic Co-operation and Development.

Estimating Spillovers from Migration and Refugee Policy Changes

This section uses a structural gravity model and local projections to assess the historical impact of migration and refugee policy shifts on flows and associated economic outcomes. The gravity framework allows for a globally consistent evaluation of changes in migrant and refugee flows following a change in policies, taking the relative economic size, geography, and bilateral linkages between destination and origin

Figure 3.7. Categorizing Changes in Migration Flows between Origin and Destination Economies Following a Policy Tightening



Source: IMF staff.

Note: The figure shows four channels of flows between destination and origin economies following a migration policy tightening in Destination A toward Origin B, all else equal. Migrants from Origin B may be deterred from moving to Destination A (origin suppression/deterrence), may move to Destination A through an alternative pathway (categorical substitution), or may choose to move to an alternative destination or remain in a transit economy (destination substitution). Migrants from other origin economies may also move to Destination A (origin substitution).

economies as given (Online Annex 3.3).[7] Subsequently, output effects for final destination economies in response to policy-induced immigration shocks derived from the gravity model are estimated using local projections (Jordà 2005).

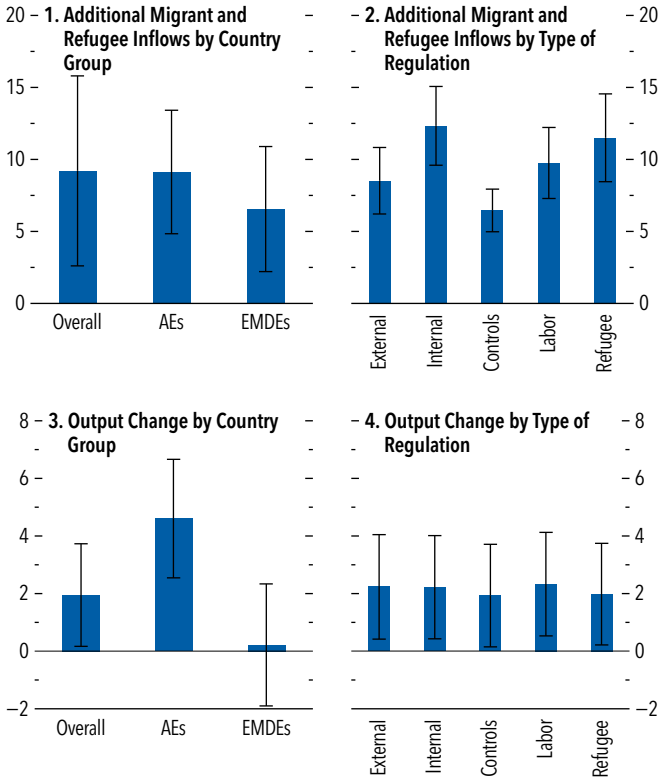
The gravity framework assumes that flows between two economies are directly proportional to their size and inversely proportional to their distance from one another; they are also subject to the relative barriers each country faces with respect to trading partners ("multilateral resistance"). The framework controls for trade linkages, multilateral resistance, and past migration flows but also includes a measure of the exposure of an economy's migration and refugee flows to the policies of other destination economies using a "shift-share" instrument.[8] The coefficient on this instrument provides an estimate of the additional migrant and refugee inflows when alternative destination economies tighten migration and refugee policies (effects of *destination substitution*). The gravity model is further extended to estimate the sensitivity of flows of each category—migrant and refugee—to policy changes in destination economies that specifically target either category (*categorical substitution*; Ottaviano, Peri, and Wright 2013).

Using data for 194 economies from 1995 to 2020, the gravity model provides clear evidence of *destination substitution*: Tighter policies that deter 20

[7]The analysis builds on Anderson (2011); Bertoli, Fernández-Huertas Moraga, and Ortega (2013); Ortega and Peri (2013); Beverelli and Orefice (2019); and Guichard and Machado (2024), which estimate gravity models adapted for migration.

[8]This shift-share measure is constructed as a weighted average of migration policies across alternative destination economies (Online Annex 3.3).

Figure 3.8. Destination Substitution in Response to Stricter Migration and Refugee Policies in Other Destinations
(Cumulative percent change after five years)



Sources: Abel and Cohen 2019; Centre d'Études Prospectives et d'Informations Internationales; Immigration Policies in Comparison; and IMF staff calculations.

Note: The figure uses data for 194 economies over 1995 to 2020. The whiskers show 90 percent confidence intervals. AEs = advanced economies; EMDEs = emerging market and developing economies.

percent of migrant and refugee inflows in one set of destination economies lead to an increase of almost 10 percent in others over five years, all else equal (Figure 3.8, panel 1).[9] These effects are slightly more pronounced for advanced economies than emerging market and developing economies. They are also largest when internal regulations are tightened—making the integration of migrants into destination economies more challenging—and relatively modest when the enforcement of controls is stricter (Figure 3.8, panel 2). Furthermore, a 2 percentage point rise in the share of deflected migrant and refugee inflows in the destination economy's population is associated with an increase in output in that economy of about 2 percent over a five-year period (Figure 3.8, panel 3).[10] As such, for the average destination economy—where inflows are close to 2 percent of the population—a 10 percent increase in inflows equates to an increase in output of about 0.2 percent. The output effects hold regardless of which type of regulation tightens, in line with previous findings (Figure 3.8, panel 4; April 2020 WEO, Chapter 4).[11] Additional analysis using a richer dataset on refugee policies, with greater coverage of emerging market and developing economies, shows a similar impact on migration and refugee inflows as a result of tighter refugee policies elsewhere (Online Annex 3.3).

The short to medium-term-output responses to policy-induced migration shocks vary by destination economy group and migrant category. Additional flows are associated with output increases in advanced economies, whereas the output impact in emerging market and developing economies is muted when integration is not accounted for.[12] This partly reflects not only advanced destination economies' relatively stronger capacity to absorb different categories of arrivals into their labor force, but also their relatively smaller inflows of refugees.[13]

Tightening of migration policies leads to categorical substitution toward refugees (Figure 3.9, panel 1). A tightening designed to reduce average annual migration flows by about 4 percent into a destination economy over one year can be partly offset with an increase of more than 25 percent in the typically smaller refugee inflows to that economy. These additional refugee inflows lead to modest output effects in the short term. The modest effects capture the fact that migrants—who could otherwise have been quickly and efficiently matched to labor market needs, thus boosting output—instead use an alternative pathway

[9]The tightening is equivalent to a one-standard-deviation increase in the overall policy measure derived from the Immigration Policies in Comparison (IMPIC) database (Helbling and others 2017).

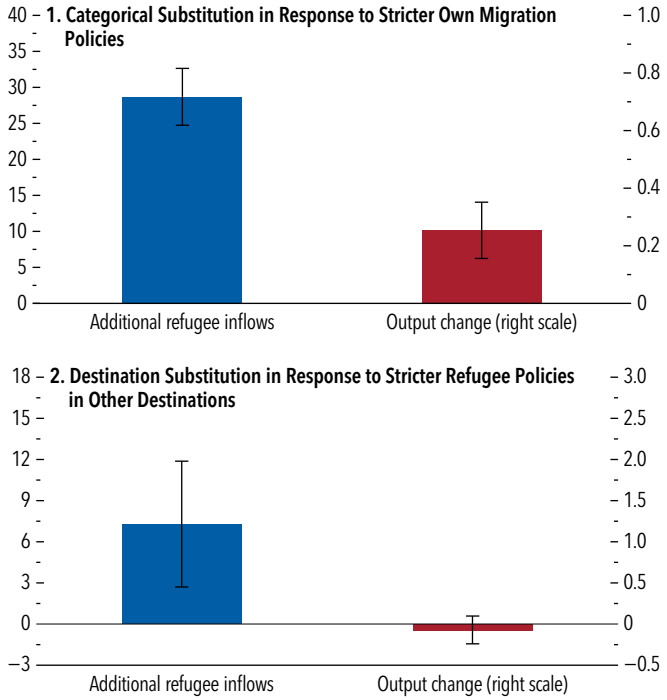
[10]A 2 percentage point rise in the share of deflected migrant and refugee inflows in the destination economy's population is also associated with a decline in output per worker of just under 0.2 percent over a five-year period, although the latter is not precisely estimated.

[11]Chapter 4 of the April 2020 *World Economic Outlook* (WEO) finds that a 1 percent increase in migration inflow-to-employment ratios can increase output in advanced economy destinations by up to 1 percent after five years, with the increase driven by a mix of higher productivity and employment growth.

[12]In line with aggregate results, impacts on GDP per worker within advanced economies and emerging market and developing economies are found to be small and negative, but imprecisely estimated.

[13]Consistent with this observation, Chapter 4 of the April 2020 WEO finds no positive macroeconomic effects from increased refugee inflows in emerging market and developing economies.

Figure 3.9. Refugee Inflows in Response to Stricter Policies
(Percent change)



Sources: Centre d'Études Prospectives et d'Informations Internationales; Immigration Policies in Comparison; United Nations High Commissioner for Refugees; and IMF staff calculations.

Note: The figure uses data for 194 economies over 1995 to 2020. The whiskers show 90 percent confidence intervals.

with greater integration challenges. Furthermore, estimates suggest that a tightening of refugee policies by a set of destinations—designed to reduce refugee inflows into those economies by 60 percent over one year—is associated with an increase in refugee inflows into other economies of close to 8 percent within one year (Figure 3.9, panel 2). Deflected refugee inflows resulting from stricter refugee policies elsewhere—capturing destination substitution effects—do not generate meaningful output gains on average, given absorption challenges. However, estimates using indicators with a better coverage of integration policies—such as naturalization and greater ease of movement within a country—indicate that output effects are much larger for emerging market and developing destination economies where integration policies are stronger (Online Annex 3.3).

Beyond aggregate output effects, shifts in migration flows can have broad-ranging macroeconomic impacts on destination economies. For instance, empirical studies find positive impacts of immigration on productivity—often attributed to complementarities between native and immigrant workers (Peri 2011; Ortega and Peri 2014; Alesina, Harnoss, and Rapoport 2015; Jaumotte, Koloskova, and Saxena 2016). Such complementarities are also cited by the literature for limited evidence that migration affects the wages or employment of native workers (Kerr and Kerr 2011; Peri 2014). High-skilled immigration, in particular, is associated with better economic outcomes, including higher wages for natives and enhanced firm performance.

The results from the gravity model suggest that there are spillovers from changes in migration and refugee policies. However, care is required to interpret them: Migration and refugee flows may influence policies rather than the other way around, and measurement error may exist, resulting from, among other factors, lack of comprehensive data on bilateral migration policies.[14] Nonetheless, questions remain regarding the macroeconomic implications of policy spillovers for the global economy and their welfare impacts given the existence of multiple spillover channels, alternative legal pathways for immigration, and various integration frictions.

Modeling Spillovers from Migration and Refugee Policy Changes

In this section, a spatial dynamic general equilibrium model of trade and migration is used to conduct two exercises that evaluate (1) the distributional implications of targeted migration and refugee policy tightening and the associated costs and benefits to different economies over varying time horizons; and (2) whether international coordination can generate better outcomes than unilateral policy changes, by trading off potential short-term costs of immigration for long-term benefits (Caliendo and others 2021, 2023).[15] In addition to modeling changes in the overall flow of migrants and refugees between economies—allowing for both deflection and deterrence—the model's framework distinguishes between the different legal pathways

[14]Relatedly, a gravity framework based on an aggregate assessment of an economy's migration policies may underestimate the magnitude of spillovers, given that adjustments to migration policies often target flows from specific countries of origin or correlate with policy changes in other destination economies.

[15]In the first exercise, the targeted migration policies apply to both new and incumbent migrants, that is, they alter both barriers to enter and those to remain. Both exercises use a historical episode as a baseline.

available for migrants and refugees and varying degrees of labor market integration in destination economies, both of which are necessary to capture the effects of categorical substitution (Online Annex 3.5).

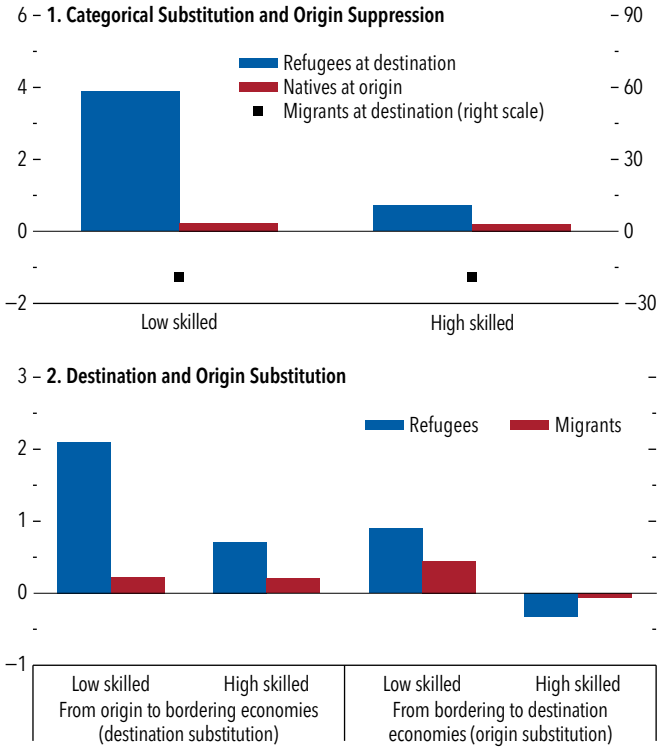
Several important features drive the modeling results. Individuals choose whether and where to migrate and which pathway to use, given policy and nonpolicy migration costs, as well as the real wages they can earn in different destinations, which reflect factors such as the complementarity of their skills with those of residents. The economic impact of policy-induced changes in flows depends largely on two opposing forces: (1) *agglomeration*, wherein a net inflow of migrants can lead to higher total factor productivity from, for example, knowledge spillovers and increased entrepreneurship; and (2) *congestion*, which stems from increasing strain on local services, businesses' equipment and properties, and publicly provided infrastructure, such that an increase in population lowers capital per worker in the short to medium term (Saiz 2007; Melo, Graham, and Noland 2009; Kline and Moretti 2013; Colas and Sachs 2024). Over the long term, economies that successfully build capital can reap the benefits of net migration flows, increasing potential output per capita.

Distributional Implications of Targeted Migration Policies

In the first exercise, tighter policies in a destination economy that target migrants from certain origin economies are assumed to reduce the stock of migrants from these economies by 20 percent over the short to medium term relative to the baseline.[16] As a result, 0.25 percent more of the native population remains in the origin economies (*origin suppression*). At the same time, flows—of both low- and high-skilled refugees—through the refugee pathway increase (*categorical substitution*). Relative to the baseline, low-skilled refugee flows increase by 4 percent, and high-skilled refugee flows increase by 0.5 percent (Figure 3.10, panel 1).

[16]These flows tend to be small as a share of the overall population in the destination economy. In this exercise, migrants account for 0.3 percent of the population from the origin countries and roughly half of that amount when measured in percent of the population in the destination economy. The 20 percent reduction in economic migration is broadly comparable to the predicted outflows following a one-standard-deviation increase in labor migration indices from the Immigration Policies in Comparison (IMPIC) database—which capture migration tightening of policies targeted at migrants.

Figure 3.10. Spillovers in Response to Stricter Migration Policy, by Skill Level
(Percent of baseline)

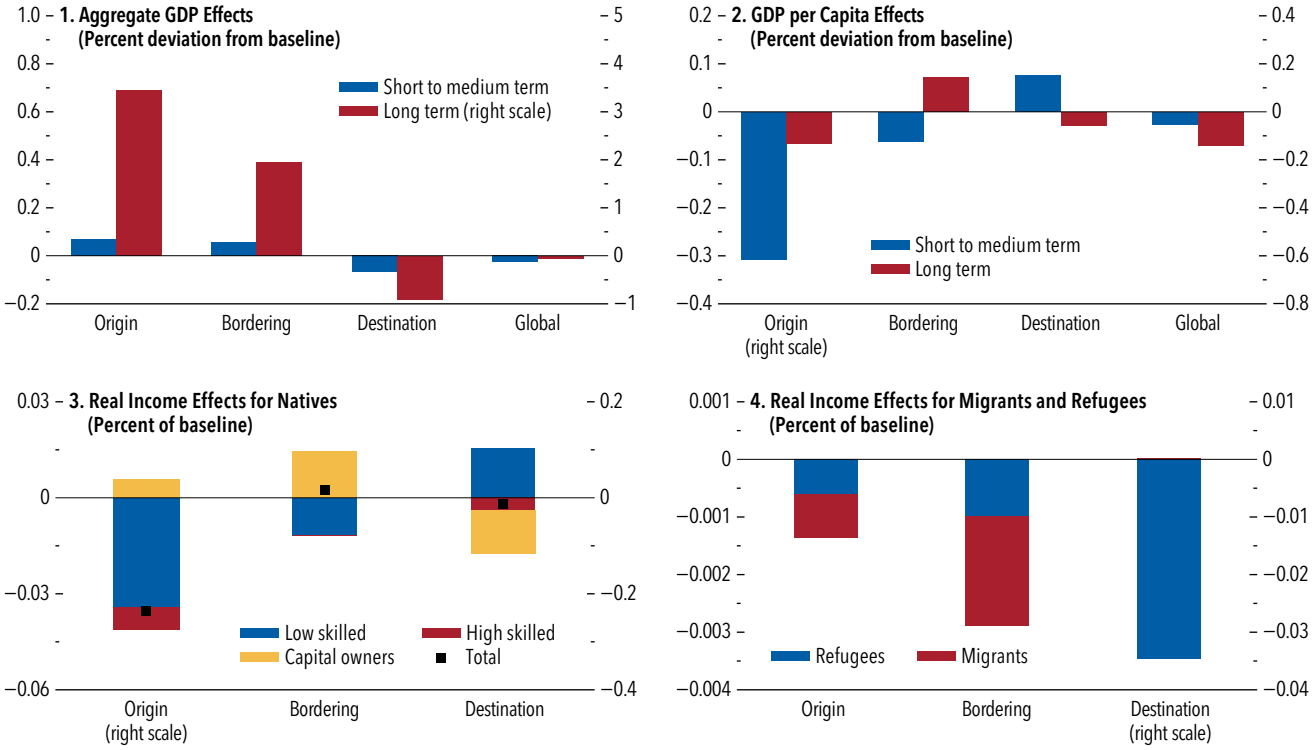


Source: IMF staff calculations.

Note: The panel presents the results from counterfactual simulations of a general equilibrium model of trade and migration. Figures show the responses of migration flows after five years.

The exercise also finds significant deflection of migrants toward bordering destination economies (*destination substitution*). The increase in flows to these alternative destinations from the targeted origin economies is broad-based across migrants and refugees, although larger in the case of low-skilled refugees, which increase by 2 percent (Figure 3.10, panel 2). The increased inflows of low-skilled refugees reflect relatively lower barriers for this pathway compared with the baseline, and the prospect of higher incomes for low-skilled workers. The results also indicate that the implementing jurisdiction receives larger flows of low-skilled migrants and refugees from economies bordering those to which the tighter migration policies were targeted (*origin substitution*). By contrast, a higher share of high-skilled workers from these bordering economies refrain from emigrating altogether to take advantage of the productivity gains from skill complementarities with the deflected low-skilled workers and agglomeration.

Figure 3.11. Economic Effects of Stricter Economic Migration Policy



Source: IMF staff calculations.

Note: The figure presents the results from counterfactual simulations of a general equilibrium model of trade and migration. In panels 1 and 2, output responses after five years are denoted as "short to medium term"; lifetime output effects are denoted as "long term." Panels 3 and 4 show compensating variation in lifetime real income from the policy intervention, weighted by income shares in country of residence.

The resulting reallocation of labor across countries—both its level and its composition—can have redistributive and efficiency implications. In the short to medium term, output in the implementing jurisdiction declines modestly by close to 7 basis points, partly as a result of the smaller flows relative to the baseline, which leads to reduced labor supply and agglomeration (Figure 3.11, panel 1). The reduction in migrants is only partly offset by more refugees (*categorical substitution*), who cannot easily integrate into the labor force and whose skills are more often mismatched. Meanwhile the origin and bordering economies see a small increase in output. Lower output per worker in origin and bordering economies results from greater congestion, while lower inflows alleviate congestion in the implementing jurisdiction (Figure 3.11, panel 2).

Over the long term, output in the implementing jurisdiction is lower relative to the baseline, as capital accumulation slows and output per worker declines. Targeted origin economies also incur costs from lower output per worker in the long term, with the rate of capital accumulation—absent free capital mobility across countries—being insufficient to offset negative congestion effects.[17] In contrast, bordering economies are assumed to be able to replenish capital over the long term, because the gains from agglomeration are stronger and investment opportunities greater, resulting in higher output per worker relative to the baseline.

Overall, targeted tighter migration policies lead to slightly lower global output than under the baseline in both the short to medium term and in the long term, as more workers remain in relatively lower-productivity economies. Global output declines by about 2 basis points in the short to medium term and 7 basis points over the long term.

[17]This assumption implies conservative output effects, as deviations from free capital mobility imply slower capital adjustment. The latter is consistent with evidence that capital fails to flow from rich to poor countries (April 2024 WEO, Chapter 3), and with the weak effect of remittances on economic growth, as remittance inflows tend to be accompanied by labor outflows (Clemens and McKenzie 2018).

The distributional effects of a targeted tightening of migration policies in destination economies vary within and between economies (Figure 3.11, panels 3 and 4).

- Real incomes of native *capital owner*s in the implementing jurisdiction will be lower than the baseline because of the decline in the labor supply and associated productivity losses. In contrast, capital owners in origin and bordering economies will benefit.
- Native *low-skilled workers* in the implementing destination economy will also benefit from the protection afforded by tighter migration controls, but an increase in low-skilled labor in the origin and bordering economies depresses real incomes in those locations.
- With fewer opportunities to migrate, *high-skilled workers* in origin economies are adversely affected because of congestion. High-skilled workers are also worse off in destination economies relative to the baseline because the inflow of complementary low-skilled workers has decreased.
- The negative welfare impact on *natives* in origin economies reflects fewer opportunities to relocate to higher-productivity destinations. Moreover, *migrants* and *refugees* stand to lose in all locations from restricted mobility.

Can Cooperation Help Destination Economies Achieve Better Outcomes?

The second exercise assesses the potential for international cooperation to help destination economies manage inflows. Three alternative policy scenarios are simulated relative to a baseline. The latter is calibrated using a large historical episode of forced displacement, in which additional inflows impose short- to medium-term congestion costs, which may be more than the implementing jurisdictions would be prepared to accept.[18] The scenarios consider the trade-off at different horizons under alternative policy-tightening settings for a set of bordering (emerging market and developing) destination economies and a large nonbordering (advanced) destination economy.[19]

- The first two scenarios consider unilateral policy tightening by both the bordering and the nonbordering destination economies, under the assumption that congestion costs in the baseline are greater than what these economies are prepared to bear: In the first scenario, policy barriers are raised by the bordering emerging market and developing destination economies, and in the second by the large advanced economy. In both cases, policy barriers are temporarily increased to reduce short- to medium-term inflows by 25 percent relative to the baseline.
- The third scenario explores the outcome of international cooperation. Both destinations agree to take more inflows than under the previous two scenarios. Therefore, each jurisdiction temporarily tightens its policies to reduce short- to medium-term net inflows by 12.5 percent relative to the baseline.

In the first two scenarios, tighter policies reduce congestion in each implementing jurisdiction in the short term, boosting per capita consumption relative to the baseline (Figure 3.12). However, there is a long-term cost once the capital stock adjusts, with smaller agglomeration effects lowering total factor productivity. The impact on aggregate consumption in each destination is negative in the short to medium term, as the labor force shrinks relative to the baseline. The smaller labor force leads to lower investment, amplifying the initial decline in aggregate consumption. However, the long-term impact is smaller as policy barriers return to the baseline.

In the third scenario, both sets of destination economies experience more congestion in the short to medium term and stronger agglomeration effects in the long term (Figure 3.12, red squares). Because the labor force does not shrink as much as in the first two scenarios, aggregate consumption decreases by less over time. In this way, destination economies can coordinate to choose policies that produce stronger long-term benefits.

Conclusions and Policy Implications

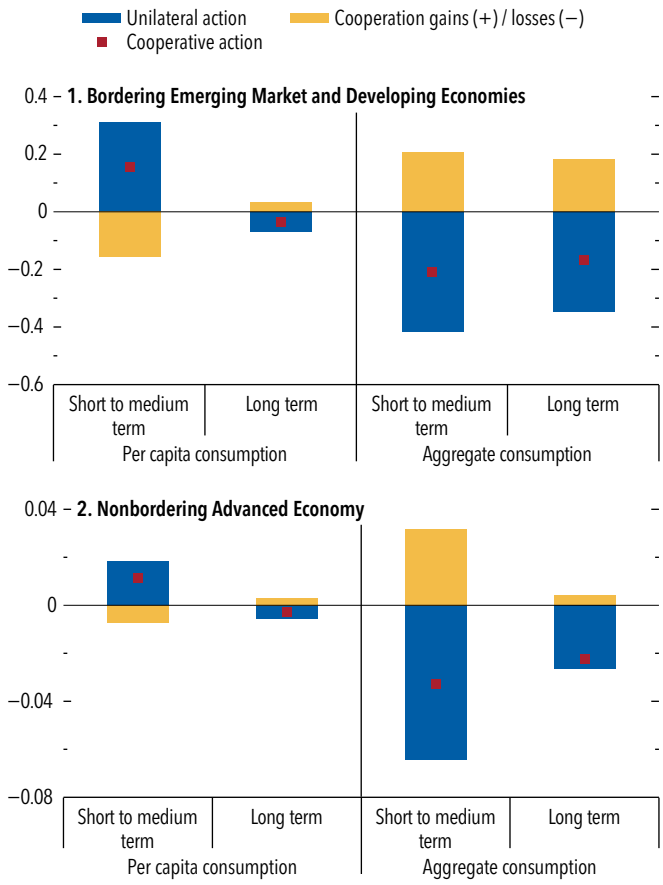
Migration and refugee policies have become a critical part of public policy in the context of an anemic growth outlook and growing demographic pressures. In addition to documenting rising legal migration and refugee flows—particularly between emerging market and developing economies—and barriers, the chapter finds the following:

- Changes in migration and refugee policies can have large and significant effects on flows both within and between economies. However, it is important to note that such flows constitute a small share of the

[18]The focus of this exercise is on regional cooperation, consistent with findings that most migration and refugee flows are intraregional (Figure 3.4).

[19]The model used in this exercise does not feature skill heterogeneity and has only one migration pathway, owing to data limitations and to focus the analysis on the short- to medium-term impact.

Figure 3.12. Benefits of Regional Cooperation by Destination
(Percent change relative to baseline)



Sources: Abel and Cohen 2019; Caliendo and others 2021; Eora Global Supply Chain Database; Penn World Table; United Nations, Global Migration Database; and IMF staff calculations.

Note: "Short to medium term" refers to results for 2025; "long term" refers to results in 2075.

population of advanced destination economies—averaging about 2 percent over five years.

- Spillovers from migration and refugee policy shifts propagate globally through a mix of channels—primarily *destination substitution* and *categorical substitution*—with macroeconomic implications. By altering the size and composition of legal migrant and refugee flows, policy changes can impose short-term costs—particularly when flows are diverted to jurisdictions in which labor market integration is challenging or skill mismatches are more severe—but also offer long-term gains.
- Beyond the better handling of large unexpected forced displacement shocks, international cooperation can help distribute the short-term costs of hosting refugees more evenly across countries, while alleviating the burden on individual economies.

Such initiatives stand to benefit emerging market and developing economies, which tend to lack fiscal space and absorptive capacity.

Overall, domestic migration and refugee policies can help manage inflows in a beneficial way for destination economies while also providing opportunities for migrants and refugees. Precise policy prescriptions in response to inflows will vary according to country characteristics, economic circumstances, and the nature of the inflows being received. However, overarching recommendations include the following:

- *Improving integration of migrants and refugees to maximize gains for destination economies.* Integration challenges can undermine the benefits of migration and tend to be more severe for refugees than for migrants. Possible explanations include the unexpected nature and scale of these inflows (relative to local populations), as well as the time it takes to be granted refugee status and refugees' relatively limited access to local labor markets thereafter:
  - Emerging market and developing destination economies tend to receive a disproportionate share of refugees, who are more often absorbed into the informal economy. Strengthening incentives to take up formal work—including through well-designed tax and transfer systems and improved access to public health and education services—can help these economies reap the benefits of these inflows.
  - More broadly, integration efforts across destination economies require minimizing domestic barriers to occupational mobility. Policies to improve skills matching among, and employment outcomes for, refugees include minimizing administrative delays, which can cause harmful gaps in employment history; providing language training; and improving recognition and transferability of qualifications. Other policies that can further improve labor market flexibility—for natives, migrants, and refugees—include providing access to job search services and investment in education to allow for upskilling and (re)training of new entrants. Such policies allow migrants to fill labor shortages as they arise, including those in youth-intensive activities.[20]

[20]Many advanced destination economies already use targeted (skills-based) migration policies—such as the H1B visa program in the United States and points-based systems in Australia, Canada, New Zealand, Singapore, and the United Kingdom—to fill short-term shortages in labor markets.

- *Prioritizing productive public spending and structural reforms to alleviate congestion.* Governments in destination economies should seek to minimize the strain that large inflows may put on resources, by prioritizing public investment in infrastructure and health and education services.[21] Furthermore, in the wake of unexpected inflows of refugees and potential short-term congestion costs, governments should also work together to provide humanitarian support and services, as well as capacity development. These efforts should be complemented with domestic reforms to increase private sector development to help economies better absorb inflows by providing greater opportunities, notably where fiscal space is limited.

Large unexpected and diverted migration and refugee inflows can aggravate social tensions, particularly where the capacity to absorb inflows is limited. Yet implementing restrictive migration and refugee policies can, in some cases, cut off a valuable opportunity to boost productivity and potential output while shifting the burden of congestion elsewhere. Furthermore, migration and refugee policies cannot fully address pressures from forced displacement or structural bottlenecks, including labor market imbalances associated with sectoral and demographic shifts.[22]

[21]Such investments critically rely on the availability of fiscal space and of financing and emphasize a potentially important role for international financial assistance for many emerging market and developing economies. The latter aligns with the Global Compact on Refugees, which seeks to ease pressures on destinations and foster macroeconomic stability and growth (as seen in Jordan [Hoogeveen and Obi 2024]).

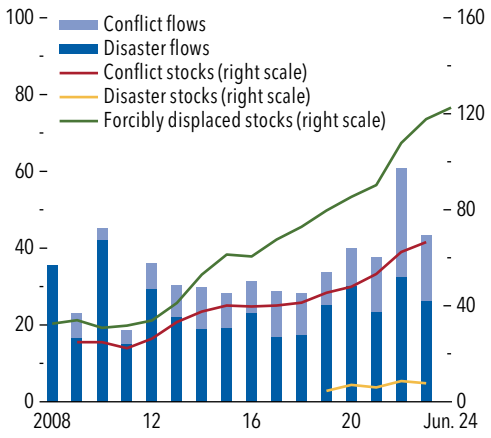
[22]It is worth noting that although development may narrow income differentials, and so reduce the desire to migrate, the relaxation of binding credit constraints can itself increase migration (Clemens and Postel 2018).

Box 3.1. Natural Disasters, Conflict, and Forced Displacement

Forced displacement (see Online Annex 3.1 for definition) can reflect a complex combination of push factors. Although conflict remains the primary driver, climate change and natural disasters can contribute by aggravating vulnerabilities and inequalities (Berlemann and Steinhardt 2017; Kaczan and Orgill-Meyer 2020; UNHCR 2024). Forced displacement typically occurs over short distances—as part of refugees' search for the closest viable place to find safety—with the degree of cross-border displacement often linked to the size of the affected country (Beltran and Hadzi-Vaskov 2023).

In mid-2024, the stock of forcibly displaced persons reached a record high of 123 million globally, with the number of those internally displaced—at just over half that total—marking its 12th consecutive year of increase (Figure 3.1.1). Although conflict-driven movement accounts for most of the stock of displaced persons, natural disasters have become a key driver of internal displacement. Indeed, over the past 20 years, among the nearly 27 million internally displaced persons each year, about two-thirds of these displacements were triggered by natural disasters.

Figure 3.1.1. Stocks and Flows of Forcibly Displaced People, 2008–23
(Millions)



Sources: Internal Displacement Monitoring Centre; United Nations High Commissioner for Refugees; and IMF staff calculations.

Note: The stock of forcibly displaced people comprises internally displaced persons and those displaced because of conflicts or natural disasters.

Conflict and Displacement

Conflict, violence, and persecution have uprooted millions of people globally. High-intensity conflicts can result in significant refugee flows from the conflict-affected economy that persist longer than those sparked by natural disasters (Figure 3.1.2; April 2024 *Regional Economic Outlook: Middle East and Central Asia*). With skilled and educated individuals more likely to flee from violence, conflicts can also result in a substantial brain drain (Rother and others 2016). Moreover, because legal and administrative barriers in destination economies often limit refugees' access to formal labor markets and basic services, displacement often pushes many into low-productivity, low-skill, and informal jobs, curtailing their contribution to local economies at their destination (Bassanetti, Sacco, and Tieman, forthcoming).

The Intersection of Natural Disasters and Displacement

Natural disasters can affect land productivity; food, energy, and water security; and general habitability, contributing to forced displacement. For instance, sudden-onset natural disasters (for example, storms and floods) can lead to destruction of homes and infrastructure and the interruption of basic services, forcing people to flee. Even absent sudden-onset natural disasters, slower-onset phenomena (for example, sea-level rises, desertification, sustained decrease in rainfall, and temperature increases) will progressively erode living conditions, essential resources, and livelihood opportunities, while triggering displacement, and potentially driving conflicts over access to resources and weakening social cohesion (Raleigh 2010; Vesco and others 2020).

At the same time, natural disasters may also reduce household incomes and resources, thereby limiting people's ability to migrate (Kaczan and Orgill-Meyer 2020).

In Africa, natural disasters in migrants' and refugees' countries of origin are positively associated with migration and refugee flows—often to another African country. Higher precipitation levels and floods have been identified as key push factors, with refugee flows from landlocked African economies also sensitive to temperature levels and anomalies (Kanga and others 2024). Such findings are corroborated more generally across emerging market and developing economies—by contributing to cross-border displacement, natural disasters drive much of climatic shocks' impact on economic outcomes (Beltran and Hadzi-Vaskov 2023; Figure 3.1.3). Impacts are most prominent in small states, where internal mobility is limited during natural

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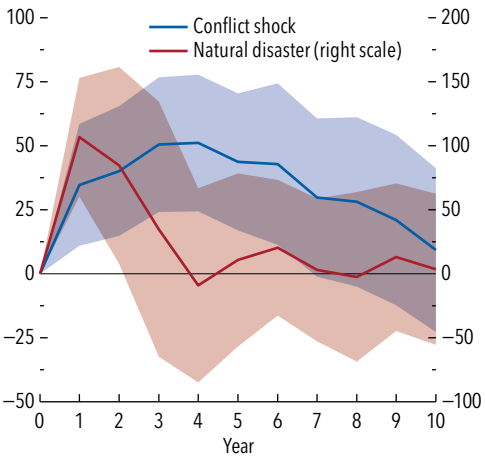
Box 3.1 *(continued)*

Figure 3.1.2. Impact of Conflicts and Natural Disasters on Refugee Outflows from LIDCs

(Percent)

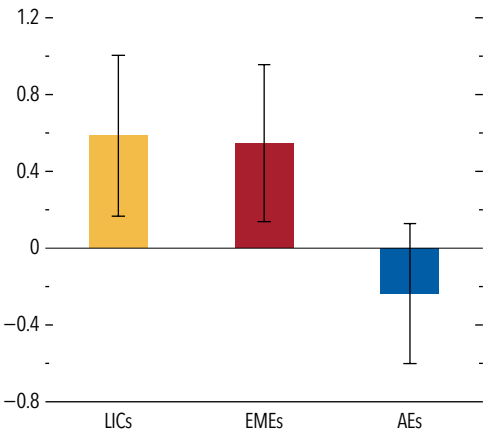


Sources: EM-DAT: The International Disaster Database; United Nations High Commissioner for Refugees; Uppsala Conflict Data Program Georeferenced Event Dataset Global version 23.1; IMF, April 2024 *Regional Economic Outlook: Middle East and Central Asia*; and IMF staff calculations.

Note: Shock occurs in year 1 and corresponds to an increase in conflict (natural disaster shock) intensity to the 75th percentile of the sample distribution. Included natural disaster shocks are droughts and tropical cyclones. The solid line is the point estimate and the shaded area is the 90 percent confidence intervals range. LIDCs = low-income and developing countries.

Figure 3.1.3. Response of Migration Outflows to Natural Disasters

(Percent of initial population in origin economy)



Sources: Beltran and Hadzi-Vaskov 2023; and IMF staff calculations.

Note: The figure presents the impact of a one-standard-deviation shock from climate disasters on migration outflows by country group. AEs = advanced economies ; EMEs = emerging market economies; LICs = low-income countries.

disasters. These findings underscore the amplifying effect of natural disasters on migration and refugee flows (Koubi, Stoll, and Spilker 2016), similar to the effect of precipitation (Hunter, Murray, and Riosmena 2013) and temperature (Cattaneo and Peri 2016).

Spillovers from Forced Displacement

Natural disasters and conflict-related shocks often intersect.[1] The precise impact on displacement across borders will depend on the nature of underlying vulnerabilities—and shocks—and the region in which they occur (Abel and others 2019).[2] What is clear, however, is that most forced displacement occurs within (and between) emerging market and developing economies. Indeed, nearly two-thirds of refugees under the United Nations High Commissioner for Refugees' mandate and other people in need of international protection come from just four countries (Afghanistan, Syria, Ukraine, and Venezuela), and nearly 73 percent are hosted in emerging market and developing economies, with half the global total in just 10 such economies.

The concentration of refugees among emerging market and developing destination economies—including many with limited fiscal capacity—highlights the challenges caused by poor integration. Evidence suggests that labor market outcomes of refugees are significantly worse than those of native populations and initially tend to generate net fiscal costs (Evans and Fitzgerald 2017; Brell, Dustmann, and Preston 2020). Recent research on the Middle East, North Africa, and Central Asia also finds that host countries often experience higher fiscal deficits following refugee inflows; the increases are associated with the provision of health, education, and subsistence services. Better integration of refugees can therefore help alleviate such pressures, because better labor market outcomes can not only help resolve labor shortages but also boost tax revenues and, more generally, aggregate demand and GDP growth (Bassanetti, Sacco, and Tieman, forthcoming).

[1]About half of forcibly displaced people are living in countries affected by both (Goldberg and others 2024).

[2]Cross-country studies likely underestimate the impact on overall displacement owing to data limitations regarding internal displacement.

Box 3.2. The Demographic Dividends from Migration

Increased longevity and falling fertility are driving a secular rise in old-age dependency largely in advanced economies, but also in maturing emerging market economies. Advanced economies are projected to see old-age dependency rise from 20 older people for every 100 working-age individuals at the turn of the century to 50 by the end of 2050, an increase that effectively leaves one person over the age of 65 in the care of two working-age adults. The shrinking labor force is not only holding back potential growth (see the April 2024 *World Economic Outlook*, Chapter 3), but it is also increasing fiscal strains caused by higher health-spending needs alongside fewer workers to pay into pension systems. At the same time, many low-income developing countries are still in the early stages of demographic transition, experiencing a so-called youth bulge, with a high proportion of young people set to enter the workforce. However, challenges associated with high levels of informality, lack of jobs, and limited social protection are preventing the full absorption of these young people into workforces.

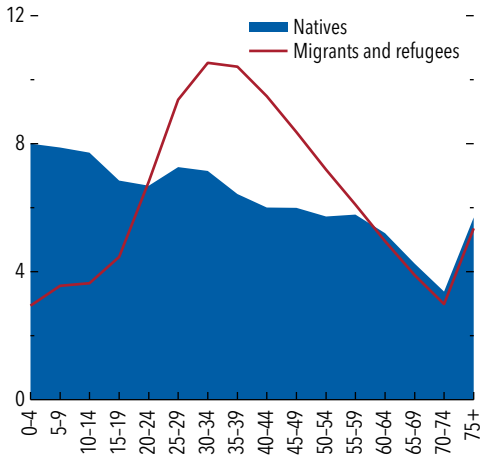
This imbalance of labor supply, between youth-poor and youth-rich countries, can be partly alleviated by a flow of younger migrants and refugees into aging countries. Such a global resource reallocation could simultaneously ease the economic pressures from a smaller labor force in destination economies and a lack of opportunities in origin economies. However, these potential gains in a world of asynchronous aging hinge on a market-based match between the skills of young migrants and the youth-intensive comparative advantages of destination economies. Migration policies can support or hinder the redistribution of young workers by affecting individuals' ability to move to countries where their skills are most needed.

Migration and the Demographic Match

Globally, migrants and refugees are typically younger—with a larger proportion of them of working age—than natives (Figure 3.2.1). For instance, 78 percent of migrants and refugees are of working age, compared with only 63 percent of native populations. Fertility rates of migrants are also higher than those of natives, providing a longer-term boost to the working-age population.

Enabling age-based labor market matches through migration can yield substantial economic gains. Previous research also finds that immigrants can have a positive net fiscal contribution over the medium term (Orrenius 2017; Clemens 2022)—that is, fiscal revenue per migrant and refugee exceeds the cost of public-goods provision, especially when adequate integration measures are in place. A double dividend can be also achieved if migration confers gains on origin economies. This, however, requires productively absorbing migrants' excess labor and positive diaspora spillovers in knowledge transfers and human and physical capital investments linked to remittances inflows, to offset a negative effect on labor supply (Carare and others 2024; Fackler, Giesing, and Laurentsyeva 2020; Leblang and Helms 2023; Williams 2024; Prato 2025).

Figure 3.2.1. Age Distributions of Migrants and Refugees Compared with Those of Natives, 2020
(Percent of total)



Sources: United Nations Department of Economic and Social Affairs; and IMF staff calculations.

Note: "Natives" are derived as total population less migrants.

Alignment of Migration Flows with Comparative Advantage and Demographic Needs

Countries vary in the youth intensity of their economic activity—the required cognitive and physical skills, which can depend on age. For instance, certain sectors require strong physical skills (such as mining and construction) and naturally favor younger workers. In this context, population aging can have a disproportionate impact on sectors that require young workers (Cai and Stoyanov 2016; Gu and Stoyanov 2019). Skill shortages can emerge, with

The authors of this box are Paula Beltran Saavedra and Manasa Patnam.

Box 3.2 *(continued)*

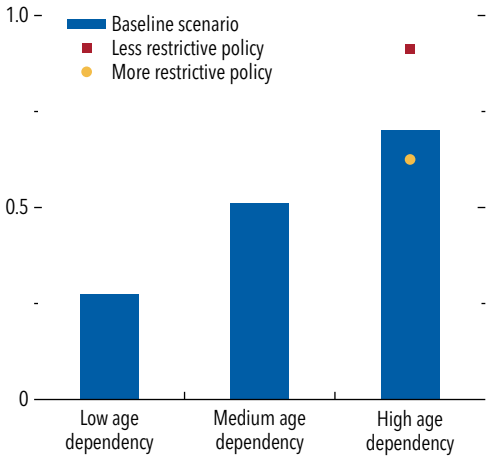
an increased demand for younger workers in sectors requiring peak physical and cognitive abilities. If the matching of cross-border labor flows is efficient, migrants—comprising mainly younger workers—will be allocated to countries that have a *comparative advantage* in youth-intensive sectors.

Local projections using indices of economies' revealed comparative advantages in youth-dependent industries show that migration patterns broadly match comparative advantages in destination economies: Migrant workers generally move to countries where trade is more dependent on youth-related skills. Indeed, a one-standard-deviation increase in a country's comparative advantage with respect to youth-intensive trade is associated with higher net migration inflows (Figure 3.2.2).

The overall magnitude of the effect varies with the age dependency of the destination economy as well as its migration policies. The response of migration and refugee inflows to an increase in the youth intensity of trade is greatest for aging countries, suggesting that migration is efficiently channeled not only to countries that specialize in youth-intensive trade, but also to countries likely to face an acute shortage of the cognitive and physical skills required for their trade. Furthermore, more restrictive migration policies lower the elasticity of migration flows to the youth intensity of trade, potentially hindering the efficient global allocation of labor. In aging economies this could mean constraints on alleviating youth-related skills shortages, potentially affecting the structure of these economies' trade. Such findings are in line with existing literature that underscores the importance of aligning migration policies with labor market needs (Ortega and Peri 2013; Platt, Polavieja, and Radl 2022).

Figure 3.2.2. Impact of Stronger Comparative Advantages on Net Migration Flows

(Percent of old-age population)



Sources: International Migration Institute, Determinants of International Migration; United Nations, UN Comtrade Database; World Bank, *World Development Indicators*; and IMF staff calculations.

Note: Youth-related skills, as broadly defined in line with Cai and Stoyanov (2016), include communication, memory, attention, speed of closure, and physical abilities at the occupational level. The baseline scenario corresponds to the average estimated impact for a given age dependency ratio. Low, medium, and high age dependency refer to 1st through 25th percentiles, median, and 75th through 99th percentiles of the distribution. The youth-intensive trade index measures the size-weighted average of youth intensity at the industry level, using industry-specific intensities of youth skills. The figure presents the contemporaneous impact of a one-standard-deviation increase in the youth-intensive trade index on net migration inflows measured as percent of median old-age population. Migration policy is measured using the migration policy index sourced from the Determinants of International Migration data set.

Box 3.3. The Impact of Immigration on Government Finances

Although migration holds the promise of alleviating structural demographic challenges for countries with aging societies, its overall impact on fiscal outcomes—including revenues, spending pressures, and overall debt burdens—can vary and be difficult to determine with any certainty (Vargas-Silva, Sumption, and Brindle 2024; Vargas-Silva 2015). This box provides an overview of some of the main channels and mechanisms at play.

The fiscal impact of immigration will be influenced by the characteristics of a particular destination economy, the migration pathway used, migrants' age profile, the degree of complementarity of their skills with those of natives, and investment needs to ease public services congestion.

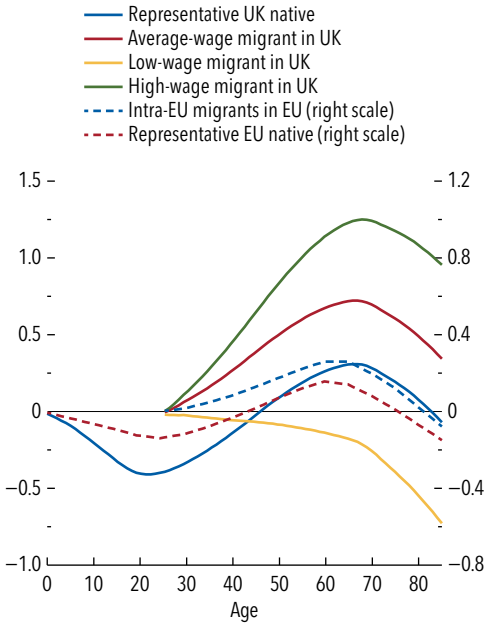
In advanced economies, evidence exists that migrants and refugees have on average a more favorable net fiscal impact than that of natives (Sallam and Christl 2024; UK OBR 2024). Such findings are linked to typical age profiles—with working-age immigrants providing a more positive fiscal boost to destination economies than those outside of working age (de Matos 2021) and evidence that a higher proportion of migrants are of working age than in the native population (Box 3.2). Similarly, the fiscal contributions of some economic migrants are on average greater than those of other immigrants (van de Beek and others 2024). Likewise, migrants who are highly educated (or more highly paid) and relatively young can place substantial downward pressure on budget deficits over their lifetimes, whereas migrants with fewer qualifications (or who are relatively lower paid) and older may induce net fiscal costs (Di Martino 2024; UK OBR 2024; Figure 3.3.1). Taken together, this implies that positive contributions of some migrants may be partly offset by negative contributions of others (Rowthorn 2008). But once capital taxes paid by employers of immigrant labor are taken into consideration, the benefits of working-age immigrants for fiscal outturns may be positive, even those for immigrants who do not have a high school education (Clemens 2022). Furthermore, if migrants do not make claims on government expenditure in old age, then net lifetime benefits to their destination economies may be enhanced (Rowthorn 2008).

Investment and labor market integration challenges may be more pertinent for some emerging market and developing economies because of broader institutional-capacity constraints. Furthermore, these economies are often the largest recipients of refugee flows, which—if they are large and unexpected—can result in more acute integration challenges and skills mismatches (Evans and Fitzgerald 2017; Brell, Dustmann, and Preston 2020). Indeed, even in regard to advanced economies there is evidence that refugees have lower labor force participation rates than migrants (Figure 3.3.2). Cultural, legal, and structural barriers can also drive refugees into informal employment with relatively lower fiscal benefits than those in the formal sector. The combined result of such challenges is to constrain the potential fiscal benefits from hosting migrants and refugees—indeed, the short-term fiscal costs of hosting refugees are sizable in

The author of this box is Samuel Mann.

Figure 3.3.1. Cumulative Fiscal Impacts from Immigration

(Millions of British pounds, left scale; millions of euros, right scale)

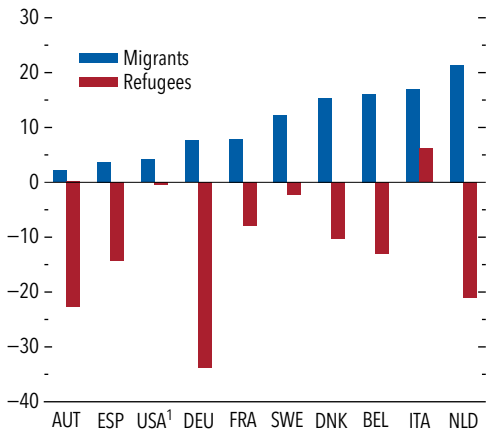


Sources: Christl and others 2022; UK Office for Budget Responsibility 2024; and IMF staff calculations.

Note: "Average-wage migrant in UK" is assumed to have the same economic and fiscal profile as a representative UK resident, with three exceptions. Such migrants are estimated to pay visa fees and the immigration health surcharge, be ineligible for welfare benefits for the first five years of their stay, and require an increase in public spending to keep the capital stock constant.

Box 3.3 *(continued)*

Figure 3.3.2. Labor Force Participation Rate Gaps Relative to Those of Natives
(Percentage points)



Sources: Eurostat; Integrated Public Use Microdata Series; and IMF staff calculations.

Note: Data labels in the figure use International Organization for Standardization (ISO) country codes.

[1]Calculations for migrants include all prime-age foreign nationals.

some countries (see the October 2016 *World Economic Outlook*, Chapter 4). At the same time, overcoming constraints on the full economic participation of refugees could lower costs of assistance in low- and middle-income countries by about 75 percent (World Bank and UNHCR 2024).

The capacity to adapt to migrants and refugees and fully integrate them into the workforce is also important in determining how quickly economies may benefit from higher labor income tax revenues and increasing returns to capital. Where impediments to business investment (and to capital accumulation) exist, the full benefits from an increase in the supply of labor may be delayed (Caliendo and others 2023). Furthermore, where integration challenges exist, congestion effects including increased demand for public services and infrastructure—for instance, access to health care and housing—may (at least temporarily) place strains on public finances.

Across generations, immigration may provide more pronounced benefits as first-generation immigrants better integrate into destination economies, capital adjusts, and subsequent generations contribute to labor force growth, economic activity, productivity, and higher tax revenues (Sultanov 2021).[1] Sustained economic growth from enhanced productivity, combined with larger revenue streams, can improve fiscal outcomes and, ultimately, the sustainability of public finances. At the same time, descendants of immigrants generally tend to have more favorable net fiscal impacts, reflecting slightly higher educational achievements and higher wages and salaries (Blau and Mackie 2017).

[1]Indeed, projections by the US Congressional Budget Office estimate that a multiyear wave of 6 million immigrants would reduce the US federal deficit by $0.9 trillion by 2034 (US CBO 2024). The UK Office for Budget Responsibility has projected that an increase in annual net migration from 129,000 to 245,000 arrivals would reduce public debt as a share of GDP by 30 percentage points (UK OBR 2023).

Box 3.4. Immigration and Inflation

The relationship between migration and inflation is complex. Larger migration flows can do the following:

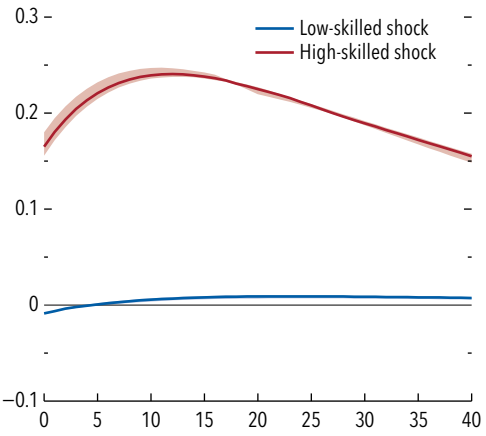
- *Increase labor supply*, by placing downward pressure on wages, and therefore inflation. Such increases may vary depending on the speed of integration of migrants into labor markets and existing economic and labor market conditions. With migrants often being more mobile and more willing to take low-paying jobs than natives, migration can even cause structural shifts in the relationship between inflation and unemployment (Bentolila, Dolado, and Jimeno 2008).
- *Increase the demand for goods and services*, as they contribute to local consumption following arrival. This can stimulate demand for goods and services and exert upward pressure on inflation in the short term, if the supply of goods and services is inelastic.

Inflationary dynamics may also vary with complementarities between capital and labor. For instance, stronger complementarity would mean that an expansion in the workforce from migration can enhance capital returns, subsequently boosting investment. If the capital stock is slow to adjust, the initial investment surge may outpace increases in output, generating an inflationary response. Such investment effects may be muted if the complementarity between migrants and capital is lower—particularly relevant where migrants are low-skilled or their skills are poorly matched to labor market needs in destination economies (Cheremukhin and others 2024). These effects can be smaller when capital in a destination economy is not used at full capacity.

Model simulations across a range of countries highlight how these different channels can alter the inflationary implications of migration surges. With capital able to adjust, a surge in high-skilled migration of about 0.7 percent of the population[1] triggers a boost in investment, such that demand effects dominate and inflation increases up to 0.25 percentage point within three years of the shock (Figure 3.4.1; Online Annex 3.4). In contrast, a similar surge in low-skilled migration has very little impact on inflation. Despite the inflationary effects of stronger aggregate consumption demand from a larger population, these are offset by the disinflationary effects of greater labor supply and muted investment from the assumption of limited complementarity between low-skilled migrant labor and capital.[2]

Migration inflows can also have varying effects on wages of natives, migrants, and refugees, depending

Figure 3.4.1. Inflation Response to Immigration Shock
(Percentage points)



Sources: Luxembourg Income Study Database; national authorities; Organisation for Economic Co-operation and Development; United Nations Department of Economic and Social Affairs; and IMF staff calculations.

Note: Horizontal axis shows quarters. Responses are in percentage deviations from the detrended steady state. The solid line is the median and the shaded area the interquartile range.

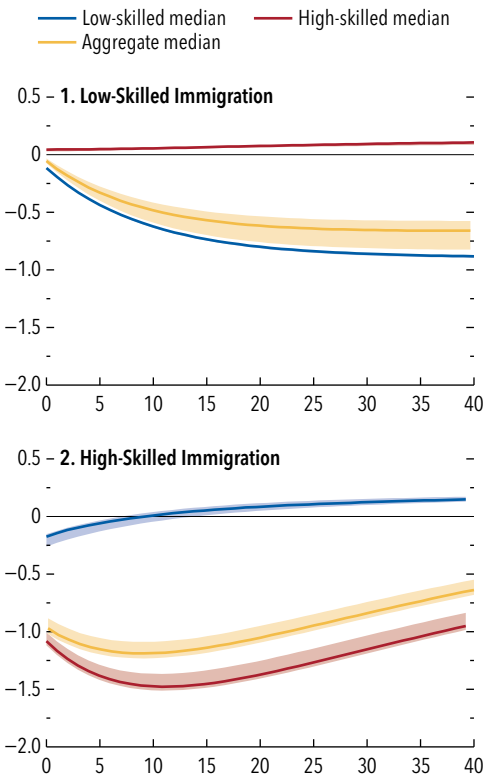
The author of this box is Samuel Mann.

[1]In line with the case in Cheremukhin and others (2024), this shock roughly corresponds to the postpandemic immigration surge seen in the United States.

[2]More generally, modifications to variables such as the wage skill premium, capital income share, and population growth rates yield similar qualitative outcomes, affirming that Cheremukhin and others' (2024) results for the United States are applicable in a broader context.

Box 3.4 *(continued)*

Figure 3.4.2. Wage Response to Immigration
(Percentage points)



Sources: Luxembourg Income Study Database; national authorities; Organisation for Economic Co-operation and Development; United Nations Department of Economic and Social Affairs; and IMF staff calculations.

Note: Horizontal axis shows quarters. Responses are in percentage deviations from the detrended steady state. The solid line is the median and the shaded area the interquartile range.

on their skill levels when joining the workforce. Given complementarity between low-skilled and high-skilled labor, model simulations suggest that a surge in low-skilled immigration tends to marginally increase the wages of high-skilled native workers as their marginal productivity increases (Figure 3.4.2). In contrast, wages for low-skilled native workers decrease slightly—by less than 1 percentage point over the long term—as their marginal productivity declines. In comparison, greater levels of high-skilled migration have the opposite effect, with a marginal decrease in the wages of high-skilled native workers—by up to 1.5 percentage points—and a slight increase in wages of low-skilled native workers over the long term (Figure 3.4.2).

The instances of downward pressure on wages for natives with skills matching those of migrants suggested by these simulations are modest and may be dampened further in practice because of labor market frictions. For instance, downward nominal wage rigidities, the fact that low-skilled migrants are unlikely to be perfect substitutes for low-skilled natives (Clemens and Lewis 2022), and migrant integration challenges can attenuate such pressures. The existing literature also finds only very small effects of migration surges on native employment and wages (Card 1990), and different effects of such migration surges on subgroups of the native workforce (Borjas 2015).

Although at the aggregate level, migration can have a muted effect on wages and inflation, there can still be significant effects on subcomponents of the consumer goods basket and local prices. For instance, in the United States, higher rates of immigration are found to lower local goods inflation, but to increase local housing and utilities inflation (Barrett and Tan 2025).

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