A closer look

Immigration: bane or boon?

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Immigration is a contentious issue, to put it mildly. It has sparked intense political battles, and forms a key fault line in the broader debate about globalization. It also has important economic implications, which we explore in this note. But first, some context.

Recent trends in perspective

Despite all the hubbub, immigration to the U.S. is not particularly elevated. Compared to other advanced economies, and adjusted for the size of its population, the U.S. is actually a bit below average as a recipient of immigrants. And looking at U.S. history, recent immigration doesn’t stand out either; as a share of the domestic population, it’s similar to what prevailed in the country’s early years, and well shy of the rates sustained from the mid-19th through early-20th Centuries. If there is an outlier in U.S. history, it’s the period roughly from WWI through the 1960s, when immigration was quite limited, restrained not only by two World Wars and the Great Depression, but by deliberate U.S. efforts to pull up the welcome mat. A series of quotas and immigration restrictions were enacted, most notably in the 1920s, driven by a long-simmering rise in nativist, isolationist sentiment—including fears that immigrants were replacing domestic workers, depressing wages, and imperiling the nation’s

Figure 1: International comparisons: net immigration flow as % of population, 2014

Source: OECD
social, cultural, and demographic character. Sound familiar? Today’s backlash against immigration echoes many similar themes, and reminds us that the U.S. has not always welcomed immigrants with open arms. Attitudes have waxed and waned. After the half-century immigration lull, for example, the U.S. began softening its position again in the mid-1960s, gradually easing entry restrictions and paving the way for the modest rebound in immigration that persists to this day—and the renewed backlash it has spawned.

Adding fuel to the fire is the shifting source of immigration. For much of U.S. history, immigrants came overwhelmingly from Europe (and involuntarily from Africa, until the importation of slaves was banned in the early 19th Century). In recent decades, by contrast, the lion’s share (roughly 80%) have come from Latin America and Asia, stoking fears that today’s immigrants will fundamentally alter the country’s demographic and cultural fabric. But similar alarms were sounded in previous eras, especially as the sources of immigration shifted to different parts of Europe—from England to Ireland, Germany, and Scandinavia in the mid-19th Century, and then to Southern and Eastern Europe during the Ellis Island era. It took a while, but concerns about these newcomers eventually subsided, and they (or at least their children and grandchildren) became accepted, integral members of society. Indeed, once-prominent distinctions based on European ethnicity, religion, and country of origin have blurred considerably; today’s immigrants (or at least their descendants) may someday also be woven seamlessly into the American tapestry.

It’s not helping, though, that they’ve been arriving during an era of sluggish economic growth and rising inequality. That makes it harder for them to gain a foothold, and easier for them to be vilified as the cause of the struggles of working-class natives—a critique especially apt to resonate when many immigrants are in the U.S. illegally. Estimates suggest there are about 11 million undocumented immigrants in the country, up from 5-1/2 million or so in the mid-1990s. But all of that increase occurred prior to the Great Recession. Since then, illegal immigration has come to a screeching halt. In fact, it actually reversed in 2008-’09—as a million more undocumented immigrants left than entered —and has stabilized near zero (net) ever since. So in recent years all the net immigration to the U.S. has been lawful. Still, the controversy surrounding illegal immigrants persists.

Immigrants are also increasingly on the radar screen because they’re casting a wider net—moving to parts of the country that had not traditionally had much exposure to newcomers. And even though immigration rates are much lower than during the Ellis Island era, so are fertility rates among natives, so immigrants are accounting for more of the growth of the U.S. population. That’s why the foreign-born share of the population has climbed back nearly to record highs, and roughly one in four Americans is either an immigrant or has at least one immigrant parent—not far below the peaks seen when immigration rates were much higher. And with Baby Boomers aging and retiring, immigrants are especially important contributors to the working-age population, with their share of the labor force up from 11% in the mid-1990s to over 16% today.

Figure 2: Net migration to the U.S. (as % of domestic population)

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All told, it’s not hard to see why immigration has gripped the country’s attention—and why it can have potentially profound economic implications.

**Aggregate economic effects**

The most direct impact of immigration is to boost the size and growth rate of the receiving economy by increasing its population, labor force, and base of consumption. Even for a huge economy like the U.S. that takes in relatively few immigrants, this effect can be meaningful, especially when the domestic, working-age population is growing so slowly. Net migration currently accounts for nearly half of the growth of the U.S. population, and since immigrants tend to be younger, on average, than natives (increasingly so in recent years), their contribution to the growth of the working-age population is expected to be near 60% between now and 2040 (and even more when taking account of the children of recent immigrants who will come of working age). What’s more, immigrants are inclined to work—even a bit more so than natives (at least among men, especially at lower education levels). Yes, immigrants tend to be less educated on average, with a smaller share of college and especially high-school graduates than the US-born population, and in some cases the education/skills they acquired abroad may not be easily transferable, which is likely why they are estimated to boost the level of U.S. gross domestic product (GDP) by “only” 10%-12%, though they currently make up more than 16% of the labor force. Still, that’s a big boost, and will likely increase over time, not only from the sheer force of numbers, but because the education/skill gap between immigrants and natives has been narrowing among the young, especially the highly educated; indeed, a slightly higher share of immigrants now have at least a master’s degree than their U.S.-born contemporaries. Even before considering any positive spillover effects that the presence of these highly-skilled immigrants may have on the productivity of domestic-born workers, their presence directly lifts the average skill level of the U.S. labor force and amplifies their economic impact.

In sum, though we can quibble about specific point estimates, there is no doubt that immigration makes the U.S. economy bigger and enables it to grow faster.
channel resources to their best uses). In some cases, migration may substitute for international trade, but in others it might be a complement, impacting sectors where cross-border trade is not feasible (e.g., child care, nursing, home repair). The boost to global output could be substantial if more rich countries eased immigration restrictions. But that’s unlikely; political sentiments are leaning heavily in the opposite direction. And even if restrictions were eased, most people probably wouldn’t come. Relatively few opt to move from poorer to wealthier areas within the European Union (EU), for example, though they can, and most Puerto Ricans choose to stay though they can freely move to more affluent areas in the U.S. For many, cultural and familial ties, coupled with the risks of moving are too much to overcome. Still, if restrictions were relaxed, global migration would likely increase, and with it, the GDP of receiving countries (and of the world). Those who migrate would be better off, but what about the natives in the receiving countries—how might their living standards be affected by the immigrants?

Impact on wages, employment, and the return to capital

Immigration can affect domestic households and firms in a number of ways. If the existing stock of capital (equipment, offices, factories, etc.) is fixed, impossible to expand in the short run, then yes, critics are right, although the additional immigrant workers will enable more output to be produced from that capital, boosting its rate of return, they will also depress the wages of domestic workers—because firms won’t meet this increased supply of labor with an increased demand (at a given wage) if they can’t equip them with more capital. Rather than accept lower wages, some domestic workers might even drop out of the labor force and this reduced labor supply will mitigate the adverse effect on the wages of those who do work, but at the cost of lower aggregate employment of natives. Either way, the labor income of the domestic population falls, and any increased output (income) for the economy as a whole accrues to the owners of capital (and to immigrants). This is the classic argument made by those who decry the economic effects of immigration.

But it is an incomplete and misleading characterization. It assumes the economy is static—that the stock of capital and the demand for labor remain fixed, despite changes in their rates of return. That’s deeply unrealistic. Over time, the higher return to capital investment will likely encourage more of it—financed by saving from domestic and/or foreign sources, lured by those higher returns—and as firms expand, they’ll demand more labor to work that extra capital, lifting domestic wages. It’s a process borne not of altruism, but self-interest (a more reliable motivator), and it’s apt to continue until the extra returns to capital that initially accompanied the rise in immigrant labor have been squeezed out, restoring them (and domestic wages) to pre-immigration levels. In the end, the economy will simply be a scaled-up version of its former self, larger in output, employment, and capital stock than before, but with the same capital-labor ratio, wages, native employment, and rates of return. Any adverse effects that immigration might have had on domestic workers in the short run will disappear once capital has had a chance to adjust and accommodate their presence.

And it’s not only capital than will adjust. Firms will have an incentive to adapt new technologies that complement the kind of skills that immigrants provide, and the economy’s mix of output will naturally shift toward industries that use relatively more of the kind of labor that immigrants supply, further mitigating any adverse impact on the wages or employment of comparably-skilled domestic workers.

There may, though, be some additional subtleties. For one, labor is not homogeneous. Some immigrants may be substitutes for native workers, others complements. Much depends on their relative skills.
If immigrants are disproportionately lower-skilled, for example, their entry will tend to depress the wages of lower-skilled natives, while augmenting the output that can be produced by a given stock of capital and higher-skilled domestic workers, raising the return to these factors of production. Over time, as the capital stock increases in response to the rise in its rate of return, average wages for domestic workers will return to pre-immigration levels, but distributional effects could persist; the wages of low-skilled natives might not fully recover, while the benefit to high-skilled workers may not completely disappear (at least not unless and until people respond to the increased wage differential by getting more skills). If immigrants are predominantly high-skilled, these distributional effects will be reversed. What’s more, since skills and capital often go together—capital tends to lift the productivity (and wages) of the high-skilled more than the low-skilled (for whom it often substitutes), and those with more skills enable more output to be produced from a given stock of capital—immigrants who are high-skilled will provide more of a boost to the return to capital and the wages of complementary domestic workers. And that bigger rise in the return to capital will ultimately induce more capital accumulation and more of a recovery in the wages of domestic workers who may initially have been harmed by the influx of comparably skilled immigrants. Finally, high-skilled immigrants are more likely to generate positive externalities—lifting the productivity of others through their innovation, entrepreneurship, and contributions to technological change (think Silicon Valley).

That’s not to say there’s no benefit from lower-skilled immigrants. They may be just what the economy needs if it has relatively few low-skilled workers to start with. Not only will they fill important niches, and displace relatively few domestic workers, even in the short run, but their arrival into a predominantly high-skilled economy will sharply alter the economy’s skill distribution and create more opportunities for natives to exploit their comparative advantages.

In sum, immigration can have consequences. Much hinges on who migrates, where, and when. Pinning down what these consequences are in practice is an empirical exercise.

**Empirical evidence**

Great efforts have been made to estimate the effects of immigration. Much of the focus has been aimed at teasing out the impact that immigrants have on the wages and employment of domestic workers. That isn’t easy, not least because the counterfactual—what would have happened absent immigration—is not directly observable, so various (imperfect) proxies have to be constructed to simulate the control. It’s also difficult to disentangle immigration from the many other forces that may be simultaneously affecting labor markets. And the impacts can vary by time and place, so extrapolating the results from any particular study can be hazardous.

Even when circumstances appear to provide an ideal “natural experiment,” there are complications. Consider the Mariel boatlift—the sudden influx of thousands of low-skilled Cubans to Miami in 1980, which added 7% to the local economy’s labor force in just a few months, purely because of events in Cuba. It would seem a perfect set-up to investigate the impact of immigration: compare Miami natives after the boatlift with workers in comparable cities that did not receive any migrants. The seminal study that adopted this approach found that this sudden, enormous influx of immigrants had no negative effects on the wages or employment of Miami workers, likely because local industries that use low-skilled workers were able quickly to expand production.³ This finding was corroborated by several follow-on studies, but not all;⁴ some used slightly different techniques (especially for identifying suitable cities to use as controls), and estimated that low-skilled Miami natives were adversely affected, and that it took the better part of a decade for these impacts to fade. Even if that’s true, it would still be an encouraging testament to the economy’s ability to absorb a flood of immigration much more intense than what the U.S. typically sees.

Looking beyond this particular case to the vast array of empirical work in this area, several themes emerge:⁵ there is widespread agreement that the impact of immigration on aggregate levels of employment and wages for domestic workers is quite small, usually indistinguishable from zero—at least when considered over several years. There is less consensus on the effects for particular subgroups; some estimate little adverse impact, but others find some, particularly for those most similar to immigrants—the lower-skilled, including prior immigrants, native teens, and minorities. These effects tend to be greater in the short term, and decline over time as the economy adapts.
And sometimes it adapts quite quickly. In late 1964, the U.S. suspended a program that had allowed Mexican seasonal workers ("braceros") to be employed on U.S. farms. The exclusion of braceros was designed by immigration opponents, who thought it would improve conditions for domestic farm workers. But it appears to have failed utterly in that goal. Indeed, a recent study found that in terms of wages and employment, domestic farm workers fared no better in states where the braceros were excluded than in ones where they had never been employed. Farms adjusted to the bracero exclusion by adopting technologies (like mechanization) for crops where it was feasible, and by reducing production for those where it was not, resulting in little net change in their demand for domestic labor.

Much of this empirical work has been focused on lower-skilled immigration. More recently, however, researchers have been turning their attention further up the skill ladder. Though findings here are less well-established, there is evidence that high-skilled immigrants may adversely affect labor market outcomes for natives in certain narrow fields in which they directly compete, but boost the wages and employment of broad classes of domestic workers who they complement. One of the reasons may be that high-skilled immigrants, disproportionately concentrated in STEM fields, are more innovative, lifting overall patenting levels, for example, and this innovation has positive spillover effects to the productivity of other workers and to overall economic growth. Not all studies concur, and these findings are quite tentative, but still intriguing.

Finally, immigrants of all skill levels tend to be more eager than comparably aged and skilled natives to pursue alternative job opportunities, even in other parts of the country. That eagerness helps improve the matching efficiency of the labor market, better enabling firms with job opening to find appropriate workers, lowering frictional unemployment.

**Fiscal impacts**

Immigrants also affect public finances. Not only directly—via the taxes they pay less the public services they use—but indirectly, through their effects on the incomes, taxes, and public benefits of natives. Much depends on the socio-demographic characteristics of immigrants relative to natives—their age, education, skills, family structure, citizenship-status, and documentation (which affects their eligibility for many public programs). There are two basic approaches to analyzing the fiscal impacts of immigrants: a short-run, or static analysis that estimates the effects in a particular year (or years) in the past—essentially, a snapshot at a point in time; and a forward-looking, dynamic analysis that estimates the net-present-value of immigrants’ (and their descendants’) impacts on government coffers over several generations. The static analysis requires fewer assumptions and is often more precise, but less revealing, dependent on the particular characteristics of immigrants at the time under study. Dynamic analyses offer a fuller portrait, capturing the effects that immigrants and their descendants have over their life cycles, but require more assumptions and are subject to greater uncertainty.

Given all the moving parts, it’s not surprising that different studies produce somewhat different results. Still, there are some general takeaways: static analyses suggest that since the mid-1990s, the net fiscal contribution of first-generation immigrants at all levels of government has been less favorable than the native-born. That’s largely because immigrants during this period were on average less educated, earned less, and paid less in taxes. Although they weren’t as old as natives, so they put fewer demands on federal programs like Social Security and Medicare, they tended to have more children, placing greater burdens on state and local governments (particularly for schooling). Second-generation Americans (i.e., those born in the U.S. to immigrant parents), had a more favorable net fiscal impact, closing in on, and in some cases exceeding, Americans with deeper lineages (third generation and above).

Looking ahead, dynamic analyses suggest that over the next few generations, the net fiscal impacts of immigrants and their descendants will be generally positive at the federal level, and negative at the state and local level. This is consistent with much past research. Federal benefits tilt toward the elderly, so the relative youthfulness of immigrants is a plus, helping slow the overall aging of the U.S. population. Indeed, the ratio of the working-age to the elderly would fall even more sharply in coming decades if not for immigrants (and their descendants). Also, if we assume that the marginal cost of providing public goods like defense on an extra immigrant is zero (i.e., the country doesn’t need to spend more on things
like defense because more immigrants arrive), the net benefit of immigrants to the federal government becomes more clearly positive (and even the shortfall relative to natives in the recent past narrows sharply). State and local governments, by contrast, largely bear the burden of education, and recoup relatively little of the future contributions that result from the resulting educated taxpayers, so immigrants are more costly here, though their impact varies widely across regions, depending on where they settle. In general, the children of immigrants, when they become adults, contribute positively to state and local finances.

One overriding finding is that for the same characteristics—e.g., age, education, skills—immigrants and natives have roughly the same fiscal impact. The more educated they are, the more positive the impact. So today’s immigrants, being more educated than those in the past, should eventually contribute more positively to fiscal coffers.

Conclusion

Immigration matters. Especially for a country facing demographic challenges, immigrants are an indispensable source of vitality. Yes, there can be some adjustment pains, especially in the short-run as the economy adapts to their presence. But that’s a reason to consider tailoring the immigrant inflow to meet the economy’s needs, and helping those who might be adversely affected by their arrival—not restricting that arrival in the first place.

Figure 7: Demographics in the U.S. (pop’n aged 25-64/pop’n aged 65+)

Source: Pew research center

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8 For a good review of this literature, see: https://www.nap.edu/catalog/23550/the-economic-and-fiscal-consequences-of-immigration, Chapter 5.
Definitions

**Baby boomers** are people born approximately between the years 1946 and 1964, i.e. during the baby boom after World War II.

The **capital-labor ratio** allows analysts to understand if costs are being reduced by purchasing assets to automate labor-intensive tasks. An increase to the capital-labor ratio over time can signal an attempt to remain competitive or improve margins through automation.

The **European Union (EU)** is a unique economic and political partnership between 28 European countries covering much of the continent, which developed from the European Economic Community (EEC), created in 1958 by six countries.

The **Great Depression** starting in 1929 was the deepest and longest-lasting economic downturn in the history of the Western industrialized world.

The **gross domestic product (GDP)** is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

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