

Holzer, Harry J.

Working Paper

Immigration and the U.S. Labor Market: A Look Ahead

IZA Discussion Papers, No. 12881

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: Holzer, Harry J. (2020) : Immigration and the U.S. Labor Market: A Look Ahead, IZA Discussion Papers, No. 12881, Institute of Labor Economics (IZA), Bonn

This Version is available at:

<https://hdl.handle.net/10419/215277>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

DISCUSSION PAPER SERIES

IZA DP No. 12881

**Immigration and the U.S. Labor Market:
A Look Ahead**

Harry J. Holzer

JANUARY 2020

DISCUSSION PAPER SERIES

IZA DP No. 12881

Immigration and the U.S. Labor Market: A Look Ahead

Harry J. Holzer

Georgetown University, American Institutes for Research and IZA

JANUARY 2020

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Immigration and the U.S. Labor Market: A Look Ahead

The U.S. labor market will be buffeted by major changes in the next few decades, such as an aging population, automation that displaces workers and requires skill adjustments, and increases in independent or informal work and “fissured” workplaces. These forces will likely raise worker productivity over time while also raising inequality, reducing labor force participation and creating worker shortages in high-demand industries. In this context, immigration will help reduce costs in key high-demand industries (like health care and elder care), raise labor force and economic growth, and contribute somewhat to the nation’s fiscal balance. Highly-educated immigrants will notably contribute to economic productivity and dynamism; but less-educated immigrants may substitute for native-born non-college workers and thereby further contribute to earnings inequality. Reforms should therefore modestly increase overall immigration over time, while shifting its composition somewhat toward more-skilled and labor-market-driven migrants. These reforms should occur within the broader context of “comprehensive” reform that also raises enforcement efforts against illegal immigrant flows while establishing a path to citizenship for the currently undocumented. These changes should also be tied to a range of efforts to raise earnings among all non-college workers.

JEL Classification: J1, J2, J6

Keywords: immigration, labor supply, labor demand, education

Corresponding author:

Harry J. Holzer
Georgetown Public Policy Institute
401 Old North, Georgetown Univ.
37 and O St. NW
Washington, DC 20057
USA

E-mail: hjh4@georgetown.edu

I. Introduction

The U.S. labor market is poised to undergo dramatic changes over the next few decades, caused by changing population demographics, rising automation, and evolving staffing arrangements at firms. These changes will likely result in rising worker compensation levels but also rising inequality and falling labor-force participation, among other effects.

Given these trends and the effects they will have on U.S. workers and employers, policymakers face the pressing questions: What role can immigration potentially play to improve economic outcomes? And what changes in federal policy, both on immigration and more broadly, would be needed for immigration to play a positive role?

This issue brief will provide some tentative answers to these questions. First, it will review what trends can be expected on both the *supply* and *demand* sides of the U.S. labor market—in other words, those involving workers and jobs. Based on this, the brief examines some likely outcomes in employment and earnings for U.S. workers. The next section will briefly review what has been learned about the impact of immigration on U.S. labor markets in recent decades, and what standard economic theory and the (frequently mixed) empirical evidence suggest about its likely future impacts. Drawing on all of this information, the brief will conclude by exploring how immigrants might play a positive role in the future U.S. labor market, and the policy changes that would be needed to maximize the benefits (net of costs) that immigration can provide.

II. Supply and Demand in the U.S. Labor Market: Likely Future Trends

The United States is likely to experience a number of labor-market trends over the next few decades—on both the supply and demand sides.¹ A key question will be how these trends affect employment and earnings for workers.

A. Labor Supply

Population growth, labor-force participation, and educational attainment trends all shape the number and characteristics of workers in the United States. Based on (admittedly uncertain) projections, the following trends in U.S. labor supply seem most likely to occur:

- ***U.S. population growth will decline, especially among the native born, while the overall population continues to age.*** due to baby boomer aging and declining birth rates among younger cohorts.
- ***The population will grow more racially and ethnically diverse.*** as immigrants replace baby boomers and as young immigrant families have higher birth rates than older native-born Americans.
- ***Labor-force participation rates will decline.*** (except within older cohorts, who will likely work more than before) as workers age and retire, and also if compensation continues to decline for less-educated or displaced workers (thereby making work relatively less attractive).
- ***Higher educational attainment will rise less rapidly than it has in recent decades.*** All else equal, and absent changes in the current patterns of immigration and educational attainment, the rising presence of immigrant workers from Latin America—who arrive with

less education than the native-born workers they replace and whose lower skills and incomes will make it more difficult for them to obtain college degrees—will likely depress the educational attainment of the overall U.S. workforce, while the arrival of Asian immigrants will increase it. However, immigration of less-educated Latin Americans has decreased over the past decade, weakening this predicted change. The extent of this trend will depend heavily on both education and immigration policy.²

In short, a shrinking and aging U.S. population will likely generate fewer workers, while greater diversity will likely imply lower levels of educational progress than before.

B. Labor Demand

The most likely trends in labor demand are increasing globalization, and especially automation, and increasing use of alternative staffing practices by U.S. businesses. These trends are somewhat harder to predict than those on the supply side of the labor market, and therefore merit a bit more discussion.

I. Automation

Predictions about the likely impacts of automation³ hinge on two sets of information: the task content of occupations currently held by workers, and the predicted abilities of technology to automate these tasks in the future, as foreseen by top computer scientists. Needless to say, the rate and extent to which employers will swap workers for automated solutions, and how they will do so (as well as how hard they will work to retrain their incumbent employees for newer job tasks), is very hard to predict.⁴

To take an example, though self-driving vehicles will soon be technologically sound, it will likely take many more years after that for the U.S. population and industry to fully use them. Maintenance and technical supports will need to be changed, and new occupations will emerge to perform the new tasks needed to facilitate the delivery of products and transportation of people using such vehicles.

Nevertheless, it is widely predicted that artificial intelligence and the growing abilities of robots to learn will render automation more disruptive over time. But it is unlikely that massive numbers of workers will be completely displaced by robots, as some observers predict; workers in almost every occupation perform a range of tasks, some of which will be much more immediately automatable than others.

Accordingly, it is more likely that a small fraction of jobs (about 10 percent) will be completely automatable over the next few decades, while more (perhaps 30 to 40 percent) will be partially automated.⁵ As has been true over the past few decades, the more routine the tasks being performed by workers, the more likely they are to be automated; this means the current “skill bias” of technology, in which less-educated workers are more easily replaced by technology and more likely to suffer falling demand for their labor than highly educated workers, will likely continue. This will be the case even though highly educated professionals (including physicians, lawyers, accountants, financial managers, and others) face potential risks too.⁶ Some tasks performed by workers in hard-to-fill, middle-skill technical jobs, such as those in health care and advanced manufacturing, will likely face some automation risks over time, though human contact and judgment will likely remain necessary in many such jobs as well.⁷

This is not the first time that workers in modern industrial economies have feared massive replacement by automation. The Luddites of the 19th century, who destroyed factory machinery in protest that it would replace textile craftworkers, were the first known group to express such fears, and definitely not the last. Indeed, another “automation scare” occurred in the United States during the late 1950s and early 1960s, when the public first became aware of modern computers and their potential labor-saving powers. Needless to say, mass unemployment never resulted from these changes.⁸

Such fears ignore the more complicated economic relationships between workers and machines, and also the ability of modern workforces to adapt to change. In particular:

- As higher productivity raises worker incomes and as product prices fall, new demands for goods and services emerge, which generates demand for workers.⁹
- While workers for whom machines are *substitutes* will face displacement and reduced labor demand, those whose work machines *complement* will face rising demand.
- Workers will have strong incentives to undertake education and training to become more complementary to automation and less substitutable by it, and policymakers have strong incentives to assist them in this process.¹⁰

It is unlikely that automation in the next few decades will generate mass unemployment, as some neo-Luddites fear. But given that automation has historically generated as many new jobs as it has destroyed,¹¹ and the struggles of workers and societies to adapt, the questions then become: Is this time different? Will the wider and deeper reach of artificial intelligence create such a large wave of displacement as to overwhelm the usual adjustment mechanisms, creating more and lasting unemployment than in previous periods of technological innovation? Will the earnings prospects of the less educated become even worse than they are now, leading them to continue to withdraw from the labor force, as so many have done in recent decades?¹²

Most economists, including the author, doubt that the worst-case scenarios will materialize.¹³ Among workers displaced by future automation, some will adapt more successfully than others, with younger and/or better-educated workers generally holding the advantage. These more adaptable workers will likely reenroll in higher education and gain the requisite skills needed to land new (and perhaps better) jobs. But others will experience long periods of unemployment, and then either return to the labor market with lower earnings than before or withdraw from the market altogether.¹⁴

2. Alternative Staffing and “Low-Road” Employment

Staffing arrangements and the institutions of work are also undergoing change. Over the past few decades, there has been a rise in the use of “temp” work, independent contractors (or firms with regular employees who receive contracts by other firms), franchising, and workers in the “gig” economy (such as Uber drivers) who do not keep regular hours and who work as much and when they see fit. Of course, while recent data from the U.S. Department of Labor’s Bureau of Labor Statistics cast some doubt on the speed and extent to which such work practices are growing, there does appear to be a gradual increase in this direction, which is likely to continue.¹⁵

The implications of these trends for workers are quite mixed. For those seeking more flexible work arrangements, these are somewhat attractive options, often chosen voluntarily; but when imposed on them by their employers, the benefits are much less clear. David Weil, a renowned expert in evolving workplace structures and norms, has described a “fissuring” of the U.S. labor market, in

which workers are hurt by working for multiple employers (who, as a result, have less need to invest in them) and by their status as independent contractors who forego benefits and legal protections in the workplace (e.g., against discrimination and unsafe conditions).¹⁶

And, perhaps related to these same trends, it seems as though more employers are opting for a set of workplace strategies that leave many of their employees worse off than they would otherwise be. There is some evidence that employers can compete either through minimizing labor costs or through investing in employees to decrease turnover costs and improve worker performance and productivity.¹⁷ Stagnant compensation among U.S. workers, even controlling for education, along with flat productivity suggests a trend in employers choosing the lowest employee costs possible, as does declining unionization in the private (and now perhaps public) sectors.

There has also been evidence of increased employer power in the labor market. This is due in part to a greater willingness on the part of employers to enhance their power through anticompetitive practices such as nondisclosure and noncompete agreements, which limit worker information and mobility, and ultimately their earnings.¹⁸ Reducing worker mobility compounds an already disturbing trend towards less dynamism and labor-market mobility among workers—the opposite of what is needed in response to automation and other forces that could further weaken workers' attachments to their jobs.¹⁹ The growing labor-market power of employers can negatively affect workers in other ways as well, such as by making very unstable working hours the norm in retail and hospitality industries.

Of course, whether such trends will continue is difficult to know. Much will depend on how employers choose to implement new technologies and organize their workplaces over the coming decades.²⁰

C. Likely Labor-Market Outcomes

As a result of these expected trends in labor supply and demand, the United States will likely observe the following employment and earnings outcomes:

- rising productivity and average worker compensation;
- rising earnings inequality between workers;
- higher displacement rates and job instability;
- declining employment and labor-force activity among less-educated workers or those directly displaced by ongoing automation; and
- periodically tight labor markets (and perhaps shortages) in some industries and regions, especially during cyclical peaks and associated tight labor markets.

At best, labor compensation will rise, though less rapidly than GDP, since labor's share of aggregate income will decline with automation while that of capital will rise.²¹ But on average, rising productivity will continue to mean higher average worker compensation, including the value of benefits as well as direct earnings, even if the latter does not fully keep pace with the former.²²

On the other hand, inequality in earnings is almost certain to continue rising, as a more diverse workforce with many less-educated immigrants will likely create larger gaps in educational attainment across racial/ethnic groups, and as the more educated are better able to adapt to the risk of automation-related displacement by obtaining new skills.²³ Less-educated and/or older displaced workers will likely face more permanent declines in their earning capacities, and are therefore more likely to withdraw from the workforce altogether. Unemployment rates may rise as

displaced workers have trouble securing new work; but the shrinking size of the labor force and some workers' withdrawal from it will temper this phenomenon, even as employment-to-population ratios decline.

At the same time, the shrinking labor force could mean more shortages of labor in particular industries and regions, especially during periods when the economy is operating at its cyclical peak (as it appears to be in 2019). The country might also see greater “mismatches” in the labor market between the newer skills employers seek and those held by workers.²⁴ Mismatches across sectors and geographic regions could also grow over time.

It is important to note that the relative magnitudes of these trends remain unclear, thus creating a range of possible scenarios with better or worse overall outcomes for U.S. workers and the economy. If, for instance, rising productivity along with better and more widespread worker adaptation to changing labor demands generate widely shared increases in worker compensation and living standards, these improvements might offset and overcome any expected increases in inequality that would otherwise lead to permanent worker withdrawals from the labor market. But if productivity increases fail to result in widespread increases in worker earnings (and especially if increasing health-care costs continue to capture large shares of compensation increases), inequality and labor-market withdrawal will be relatively more common experiences. Under the latter scenario, the employment costs imposed on so many workers will increasingly fuel political polarization and upheaval, as witnessed in the 2016 presidential election in the United States and in the Brexit referendum and its chaotic aftermath in the United Kingdom.²⁵

III. The Role of Immigration in the U.S. Labor Market

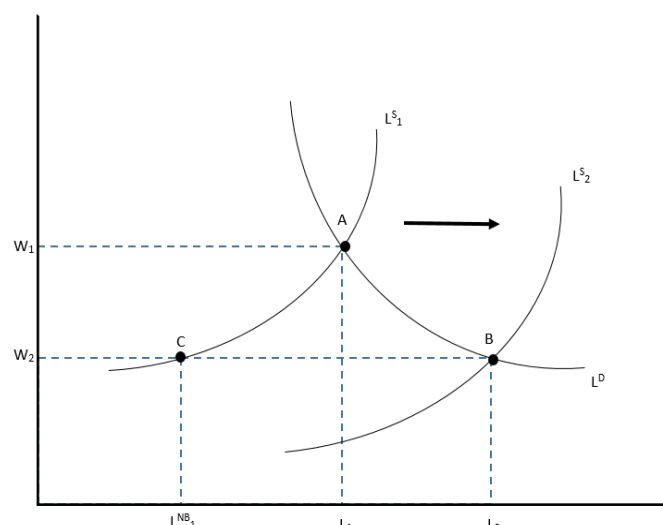
Before considering the potential role of immigration amid these labor-market changes, it seems worthwhile to briefly review what economic theory indicates about the likely impacts of immigration on labor, and what recent empirical evidence has shown.

A. What Does Theory Say?

Figures 1 and 2 present the standard analysis of how immigration will affect labor markets. All else equal, immigrants tend to increase the available supply of workers in certain occupations, industries, and regions, as shown in Figure 1. To the extent that these workers can be substituted for the native born, the increase in labor supply tends to increase overall employment in the market but reduce wages, as the market equilibrium shifts from point A to point B. While overall employment rises, that of native-born workers declines, as seen in point C, as their declining wages induce some to leave the labor market.

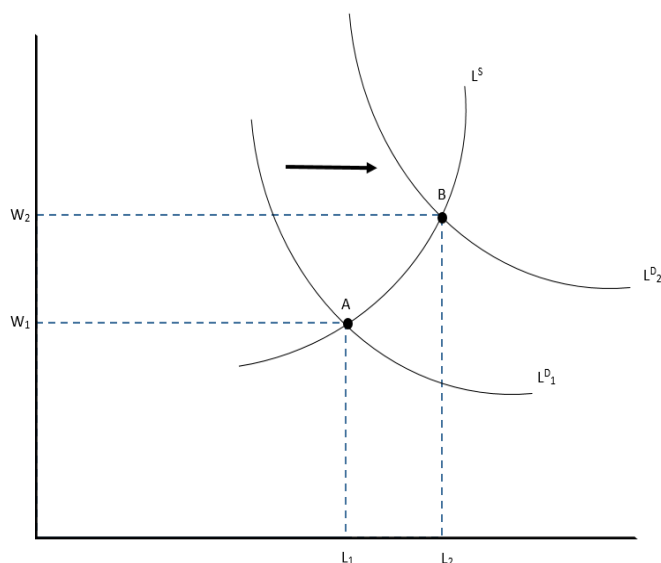
But what if the new immigrants have skills and experience that make them complements to certain groups of workers rather than substitutes? This possibility is presented in Figure 2. In this case, demand for native-born workers increases, raising both their wages and employment.

Figure 1. Labor-Market Impacts of Immigrants as Substitutes for Native-Born Workers



W = market wages; L = employment levels; NB = native-born workers; S = supply; D = demand.
 Source: Generated by the author.

Figure 2. Labor-Market Impacts of Immigrants as Complements to Native-Born Workers



W = market wages; L = employment levels; S = supply; D = demand.
 Source: Generated by the author.

A few more points are relevant in both cases. For one thing, immigrants and their families are consumers of goods and services as well as producers; as such, their growing presence in the United States will increase demand for goods and services, as well as the supply of both complementary and substitute workers—something that will partially (but not fully) offset the wage and employment losses of substituted native-born workers in Figure 1 and that will add to wage increases for complementary native-born workers in Figure 2.

In addition, the scale of the effects in both figures depends crucially on the shapes of the relevant labor supply and demand curves, which economists call “elasticities;” these measure the responsiveness of quantities supplied or demanded to changes in the price of labor (in this case, the

market wage). Thus, the flatter (or more elastic) the employer demand for labor, the more modest the decline in market wages in Figure 1 and the increase in Figure 2 caused by immigration. At the same time, the steeper (or more inelastic) the supply of labor, the smaller the impact of immigration on native-born workers' employment in each case (though the magnitude of wage changes in these situations would grow).²⁶

It should also be noted that in the very short term, labor demand in most sectors is quite inelastic, but it can become more elastic over time; that is why markets can accommodate varying levels of workers over time, but the immediate effects of large increases or decreases in the availability of immigrant workers can be quite disruptive.²⁷ And inelastic labor supply among native-born workers in growing sectors—perhaps due to specific skill demands or unpleasant working conditions—might also create labor shortages, at least in the short term, that immigrants could help relieve.

If this analysis is accepted, one crucial question remains: When are immigrant and native-born workers substitutes for one another and when are they complements? The exact degree of complementarity and substitutability between specific groups is, in the end, an empirical question. If an increase in immigration raises earnings for a particular native-born group, the two groups are complementary; if it reduces the earnings (or employment) for other native-born groups, then they are substitutes. But in general, the more similar the two groups of workers are in terms of abilities, locations, and preferences for work, the more substitutable they will be.

Interestingly, the degree of substitutability or complementarity between specific groups of U.S.-born workers and immigrants is not immutable. As more immigrants become present in a region, native-born workers may adapt by gaining new skills and moving into occupations or industries where they are less substitutable by immigrants; they may also relocate geographically, thereby avoiding the effects of the influx of immigrants into their occupations or industries. Of course, with either type of adjustment, the native born can become more substitutable by other native workers who already have those skills or reside in those newer locations.

B. What Does Empirical Evidence Show?

The evidence on the extent to which specific groups of immigrants are complements or substitutes for different groups of native-born workers is somewhat mixed. This section provides an overview of relevant studies published in the past few decades. In doing so, it uses the term “highly educated” to describe workers with a bachelor’s degree or higher, while “less educated” refers to those with a high school diploma or less.²⁸

On the one hand, highly educated immigrants tend to have fairly very few adverse impacts on native-born workers, except perhaps those who hold the same degrees in the same fields (or students hoping to obtain such degrees).²⁹ In addition, since highly educated immigrants create many business start-ups and patents, reflecting innovation, they can boost the demand side of the labor market for all workers, thus generating some complementarity with them.³⁰ Increasingly, immigrants have also taken on middle-skill technical jobs such as nursing, which have been somewhat hard to fill with U.S.-born workers.³¹

On the other hand, analyses of the impacts of less-educated immigrants on similarly educated native-born workers vary. When comparing across geographic units, such as states or metro areas, that have greater or fewer numbers of less-educated immigrants, some researchers (e.g., David Card, Gianmarco Ottaviano, and Giovanni Peri) have found little evidence of lower employment

among native-born workers, even the less educated, as a result of immigration.³² But when comparing across education groups in different age cohorts and different years, other studies (notably, those by George Borjas and colleagues) have found stronger evidence of adverse impacts of less-educated immigrants on native-born workers of similar age and education levels.³³

What accounts for these different estimates? Borjas and his colleagues allege that cross-area comparisons understate the negative impacts of immigration on native-born workers for two reasons: 1) immigrants tend to settle in more thriving geographic areas, thereby minimizing any negative impacts observed in these data; and 2) as immigrants move into an area, native-born workers tend to move to other locations, where these workers become substitutes for others like them, rather than competing with immigrants in their original locations.

In contrast, Card and his colleagues tend to dispute both of these claims, and to argue that available statistical techniques (such as the use of certain “instrumental variables”) mitigate against the first claim, while evidence on native-born worker migration sheds doubt on the second. In addition, a 2009 study showed that native-born workers in many lower-skilled occupational groups tend to upgrade their skills somewhat in response to influxes of similarly educated immigrants, thereby providing an additional way to avoid substitutability.³⁴

The research of Card and Borjas likely provides lower and upper bounds, respectively, to the negative impacts of less-educated immigrants on the similarly situated native born. Card’s statistical techniques probably do not fully account for the tendencies of immigrants to choose economically vibrant locations in which to settle, creating biases towards zero in his estimates. And, while native-born workers can partly offset substitutability by improving their skills and choosing different occupations, this response is unlikely to completely offset competition with new immigrants.

On the other hand, Borjas’ estimates might well confound the effects of immigrant supply with those of declining demand for less-educated native-born workers, who suffer most acutely from technological change, globalization, decreasing unionization, and other factors exactly when and where they face larger cohorts of similarly educated immigrants.³⁵ His estimates thus likely overstate the negative impacts of less-educated immigrants, especially in the short run.

Taking Borjas’ estimate that immigrants who arrived in the late 20th century reduced the earnings of native-born workers by about 8 percent (but less in the long run, due to the presumed mobility of capital towards lower-wage sectors and regions), and the estimates of Card and colleagues that the impact is closer to zero, it is likely that the true impact of less-educated immigrants on the earnings of the native born over the long run is somewhere in the middle—perhaps a reduction of between 2 percent and 4 percent.

While not trivial, such a decrease would be smaller than the negative effects of other forces, such as skill-biased technical change, globalization, and weakening unions, on the earnings of less-educated workers, and especially men. Indeed, a 2018 report by Borjas and Richard Freeman found much greater labor-market displacement associated with robotics than with immigration, and that gap will likely grow over time as robots improve in quality.³⁶ Unfortunately, immigrants are often scapegoated for the negative effects of these other forces on earnings and employment. At the same time, immigration can have a negative impact on the earnings of (particularly less-skilled) U.S. workers, and this is likely to exacerbate the effects of other labor-market forces.

The degree of substitutability also likely varies with the industry and occupations into which immigrants move. In agriculture or other low-wage/low-status work, substitutability is low, as interest in such positions is relatively low among native-born workers; in other sectors, such as residential construction or manufacturing, substitutability is likely higher. Where employers prefer immigrants to natives in such work and actively recruit them, the substitutability will be greater still.³⁷ Yet the greatest negative impacts of less-educated immigrants are almost certainly on other immigrants with very similar characteristics, those from their home countries or regions who migrated to the United States in earlier years.

Interestingly, less-educated immigrants likely complement highly educated native-born workers in a variety of ways. By reducing the costs of household chores such as cooking, cleaning, child care, and lawn care, they make it easier for highly educated workers—and especially women—to supply more of their own labor to the market.³⁸ And, by reducing costs to employers in certain key occupations, they likely increase employer demand for highly educated labor in others.

Also, while less-educated immigrants are somewhat less likely to start their own businesses or enter high-demand occupations than their more highly educated counterparts,³⁹ some do so as well—opening their own businesses or entering occupations such as elder care where labor shortages might well exist as U.S. demand grows rapidly.

Given the somewhat different impacts that highly and less-educated immigrants have on the U.S. labor market and economy, it is important to take note of a shift underway in the educational attainment of recently arrived immigrants. Over the past decade, as Asians have made up a larger share of newcomers and Latin American immigrants a smaller share, the college-educated share of recent immigrants has risen.⁴⁰ But whether this trend continues is somewhat uncertain, and therefore cannot be relied upon exclusively (in other words, without policy changes) to increase the fraction of immigrants who are highly educated.

C. The Non-Labor Impacts of Immigration to the United States

There are some additional areas where immigrants, both highly and less educated, likely have substantial positive effects on the U.S. economy. These include:

- lowering the costs and increasing the availability of a variety of goods and services, which raises consumer wellbeing;
- boosting economic growth, as immigrants contribute to labor-force growth that otherwise would be much more anemic; and
- supporting fiscal balance, as immigrants contribute more workers over time to pay taxes and help finance currently underfunded programs, such as Social Security and Medicare.

Immigration lowers costs and prices the most in those sectors where immigrants are most concentrated and where demand pressures might otherwise lead to escalating costs, absent immigrants. These sectors include health care, child and elder care, food (agriculture), and housing (residential construction). Though a 2008 study calculated that immigration's benefits to consumers accrue disproportionately to higher-income households, its list of consumer items did not fully include goods and services from all of those sectors, some of which actually constitute a larger share of household budgets for lower-income families.⁴¹

The contribution of immigration to overall GDP growth has been well documented by the National Academies of Sciences, Engineering, and Medicine.⁴² Economic growth is strictly a function of labor-

force and productivity growth, and the latter has been very flat over the previous decade;⁴³ the diminishing labor force as baby boomers retire (and as some low-wage workers drop out) thus reduces the one possible mechanism through which growth could be generated in the short term. And although having higher numbers of less-educated workers in the United States does not immediately lead to higher per-capita income, their contribution to overall GDP growth can still be important, as growing economies tend to be more dynamic and innovative, with higher rates of investment, than shrinking ones.

Studies by the Congressional Budget Office⁴⁴ and the National Academies⁴⁵ have clearly shown that immigration contributes positively to the country's federal fiscal balance over time.⁴⁶ As baby boomers retire and live longer than past generations, the United States is facing a looming federal fiscal crisis, especially because of the reluctance of both political parties to reform programs such as Social Security and Medicare by raising taxes or limiting the growth of benefits. Immigration can help at least a bit in this regard, especially at the federal level, where even unauthorized immigrants often pay payroll taxes while accessing few public benefits (though they might draw more on state or local services for which they are more often eligible). This is particularly true for younger or higher-earning immigrants, who have many working years ahead of them or higher incomes from which to contribute fiscally. And, as their descendants experience social integration and rising incomes, this contribution to long-term fiscal solvency grows over time.⁴⁷

IV. Policy Implications: What Role Should Immigration Play in the Future U.S. Labor Market?

Given the challenges the U.S. labor market will likely face in the next few decades, as well as what is known about the effects of immigration on both employment and non-employment measures of economic wellbeing, how can federal immigration policy ensure that immigration helps the country address these challenges in the most positive manner possible?

The U.S. labor market will be buffeted by three major changes in the coming years. The native-born population and workforce will age and shrink. Automation, while unlikely to cause mass unemployment, will nonetheless displace workers at a higher rate and require many to make major career adjustments, especially less-educated workers. And as alternative staffing practices become even more prevalent, firms will rely more heavily on independent contractors and other forms of outsourced human resources, with many adopting employment practices that offer workers fewer benefits and less stability. Together, these forces will contribute to rising inequality and a shrinking workforce, leaving some employers facing very tight labor markets.

In this context, higher immigration can help shrink the costs and raise the availability of important goods and services (such as child and elder care) for American consumers. It can also contribute some amount of balance to the federal budget and raise economic dynamism and growth. Highly educated immigrants will contribute the most to these outcomes, especially those who launch start-ups and create business innovations that help generate jobs and raise productivity. At the same time, less-skilled immigrants are sometimes substituted for native-born workers, particularly those without a college education, who have been disproportionately hurt by other forces such as technological change and globalization, thereby modestly increasing earnings inequality (though they are often blamed for much more of it).

Accordingly, the future U.S. immigration agenda should strive to:

- moderately raise immigration rates overall;
- shift the immigration system at least somewhat away from one based primarily on family reunification and toward one that places *relatively* greater weight (compared to the current system) on the needs of the U.S. economy; and
- invest more in a range of federal and state efforts to help less-educated and displaced workers, both native born and immigrants, who have been (or will be) most hurt by the labor-market and institutional forces discussed in this brief, and who are most vulnerable to unanticipated labor-market changes.

Because immigration provides substantial labor and non-labor benefits to the U.S. economy, there is a strong case for increasing it somewhat—especially since the United States is running large fiscal deficits, which will only grow as baby boomers retire. Diminishing labor-force participation as the population and workforce continue to age, and its negative effects on economic growth, provide other strong arguments for more immigration.

On the other hand, in the current political climate, substantial increases in overall admissions would be divisive and polarizing, which does not help sensible policymaking efforts in any way. And, given the tendency of less-educated Americans who have been hurt by economic dislocations to hold immigrants (and trade) responsible for their plights—even though such blame overstates the negative impacts of immigration—it would be insensitive to dramatically increase admissions. Accordingly, modest or moderate increases in overall immigration are the best course of action for the near future.

But, based on arguments presented above, there is a strong case for shifting the *relative* weight of admissions away from family-based immigrants, who tend to be predominantly less skilled, and toward immigrants selected on the basis of national economic needs; this should include highly educated immigrants and those trained for work in growing industries that are most likely to experience worker shortfalls, such as health and elder care, as well as advanced manufacturing and IT. Temporary increases in immigration to support industries experiencing labor shortages during cyclical economic peaks, through adjustments to the number of specific work visas granted to such workers, could occur as well.

Research has shown how highly educated immigrants generate net benefits for the U.S. economy. If the country favors a lasting shift towards more highly educated immigrants, it cannot rely exclusively on existing educational attainment and migration trends, without policy changes; instead, these preferences should be incorporated into immigration laws and procedures. On the other hand, any changes should also allow for *flexibility* and *responsiveness* to a dynamic labor market, given that the skill needs of the United States might well vary over time in ways that are hard to predict. To the extent that certain middle- or even low-skill jobs remain particularly hard to fill, immigrants able to take on these roles can be given some priority as well.

Overall, however, the immigration of less-educated workers presents more of a tradeoff. Native-born workers that hold a similar position in the labor market have been badly hurt by a range of economic and institutional trends, and they are the most likely to be substituted for foreign-born workers. As such, it is important that policymakers acknowledge the effects that immigration can have on this group. On the other hand, given that less-educated immigrants appear to make important contributions to the United States' non-labor economic outcomes, and that the evidence of their effects on the labor market remains mixed, there is also no strong case to be made for greatly limiting their overall numbers. Accordingly, increases in overall immigration should come

primarily from those who are highly educated or who meet some other economic need, while dramatic changes in less-educated immigration in either direction should be avoided.

This discussion, of course, rests heavily on the author's assessment of the *economic* interests of American workers and households. But it is reasonable to argue that immigration should not be exclusively driven by economics, but rather should at least partly be based on American *values*, and that facilitating family reunification and providing a safe haven for refugees serves those values, if not always U.S. economic interests.

The author leaves it to the political process to figure out exactly what the appropriate relative weights on economic versus values-based immigration should be. But the economic challenges the United States has experienced to date and that it will face in the future are substantial, and as a result, the relative weight placed on economic issues in the U.S. immigration system should be substantially greater than it currently is.

Finally, given the economic forces that have hurt less-educated Americans to date, and that threaten them and others in coming years, any discussion of immigration should occur in the broader context of how to help all American workers—both native and foreign born—adapt successfully to the major technical and demographic shifts that will likely occur. Among the priorities for helping all workers should be:

- reforms and funding increases for community colleges and other training providers to generate stronger educational pathways (such as sector-based training and apprenticeships) to labor-market success for workers without bachelor's degrees;⁴⁸
- a growing emphasis on teaching "21st century skills" (such as problem-solving, communication, and teamwork) in U.S. education systems, as well as much greater access to lifelong learning and labor-market services (e.g., career counseling and relocation assistance) for those threatened by automation;⁴⁹
- financial incentives and technical assistance for employers who retrain their less-educated incumbent workers to avoid dislocations associated with automation;
- subsidized jobs for workers in regions that are badly hurt by major economic dislocations, as the Midwest has been by declining employment in manufacturing;
- modest strengthening of regulations to limit anticompetitive employer behaviors and the use of unstable work hours that hurt low-income families, while expanding benefit and legal protections for independent contractors and "gig" workers;⁵⁰
- public-sector support and rewards for firms that adopt "high-road" employment practices, or at least that engage in practices such as apprenticeships and profit-sharing that benefit employees; and
- strengthening policies that "make work pay," such as paid family leave and the Earned Income Tax Credit (EITC), while providing wage insurance for displaced workers and reforming Unemployment Insurance in ways that strengthen worker resilience in the face of a more dynamic and uncertain labor market.⁵¹

If immigration reforms are linked to a broader agenda to help American workers navigate economic challenges, the debate on immigration is less likely to be dominated by demagogic statements than it has been to date, and opposition to sensible adjustments in immigration policy will hopefully diminish.

Besides the newer elements of an immigration (and labor-market) agenda outlined in this brief, many aspects of comprehensive immigration reform—as expressed most clearly in the 2013

reform bill that passed in the U.S. Senate but not the House of Representatives⁵²—remain highly relevant from an economic perspective. Accordingly, the following broad goals from that effort should continue to be pursued:⁵³

- a path to full citizenship for unauthorized workers who meet eligibility requirements, whose children are now hurt by their lack of legal status (thus limiting their health, education, and future earning outcomes, especially absent a firm legal foundation for the DREAM Act); such immigrants undercut native-born workers in the labor market to a greater extent (since they earn sub-market wages) than they would if they had legal status;
- limits on illegal immigration (though some flows have already declined, such as those from Mexico),⁵⁴ based on both border and workplace enforcement efforts; and
- enhanced legal immigration, based on reforms to existing visa programs to create new or strengthened legal pathways to employment that are relatively more attractive for both immigrant workers and employers than illegal immigration.

Though the exact mechanisms through which these goals are pursued might look quite different than they did in 2013, the broad goals remain sensible for any new immigration reform efforts.

Endnotes

¹ This section draws on research conducted by the author for a paper on the U.S. labor market in 2050 for the US 2050 project of the Ford and Peter G. Peterson Foundations. See Harry J. Holzer, “The US Labor Market in 2050: Supply, Demand, and Policies to Improve Outcomes” (working paper, US 2050, Ford and Peter G. Peterson Foundations, New York NY, March, 15, 2019), www.pgpf.org/us-2050/research-projects/The-US-Labor-Market-in-2050-Supply-Demand-and-Policies-to-Improve-Outcomes.

² See William H. Frey, *Diversity Explosion: How New Racial Demographics Are Remaking America*, 2nd ed. (Washington, DC: Brookings Institution Press, 2018); Gordon H. Hanson, Chen Liu, and Craig McIntosh, *Along the Watchtower: The Rise and Fall of Less-Skilled Immigration* (Washington, DC: Brookings Institution, 2017), www.brookings.edu/bpea-articles/along-the-watchtower-the-rise-and-fall-of-u-s-low-skilled-immigration/.

³ This brief focuses on automation rather than new forms of globalization here, although new forms of automation might increase the efficiency with which work is offshored or services imported, thus increasing globalization as well. Earlier concerns about potentially large risks to U.S. workers from offshoring have mostly not been borne out to date. See Alan S. Blinder, “Offshoring: The Next Industrial Revolution?” *Foreign Affairs*, March/April 2006, www.foreignaffairs.com/articles/2006-03-01/offshoring-next-industrial-revolution.

⁴ For a discussion of employer discretion in how to implement new technologies and the extent of worker involvement in such implementation in advanced manufacturing, see Susan Helper, “Value Migration and Industry 4.0 in the Auto Industry: Theory, Field Evidence, and Propositions” (working paper presented at the Annual Meetings of the American Economic Association, Philadelphia, January 5-7, 2018), www.aeaweb.org/conference/2018/preliminary/paper/H83bOK3y.

⁵ Ljubica Nedelkoska and Glenda Quintini, “Automation, Skills Use and Training” (Social, Employment, and Migration Working Paper no. 202, Organization for Economic Cooperation and Development Publishing, Paris, March 2018), <http://dx.doi.org/10.1787/2e2f4eea-en>. Earlier work by Carl Frey and Michael Osborne predicted much larger displacement effects; see, for instance, Carl Benedikt Frey and Michael A. Osborne, *The Future of Employment: How Susceptible Are Jobs to Computerisation?* (Oxford: Oxford Martin School, 2013), www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf.

⁶ See David Autor, “Why Are There Still So Many Jobs? The History and Future of Workplace Automation,” *Journal of Economic Perspectives* 29, no. 3 (Summer 2015): 3–30.

⁷ Though unskilled middle-wage jobs—especially clerical and production positions—have been disappearing, a robust “middle-skill” sector requiring postsecondary education or training remains, and employers continue to have some difficulty filling these jobs, especially in tight labor markets. See Harry Holzer, *Job Market Polarization and U.S. Worker Skills: A Tale of Two Middles* (Washington, DC: Brookings Institution, 2015), www.brookings.edu/wp-content/uploads/2016/06/polarization_jobs_policy_holzer.pdf; National Academies of Sciences, Engineering, and Medicine, *Building America’s Skilled Technical Workforce* (Washington, DC: The National Academies Press, 2017), <https://doi.org/10.17226/23472>.

⁸ See Kirkpatrick Sale, *Rebels against the Future: The Luddites and Their War on the Industrial Revolution* (New York: Perseus Publishing, 1996); Rick Wartzman, “The First Time America Freaked out over Automation,” *Politico*, May 30, 2017, www.politico.com/magazine/story/2017/05/30/rick-wartzman-book-excerpt-automation-donald-trump-215207.

⁹ In some cases—such as Henry Ford’s production changes when building the Model T, or the falling prices of personal computers, cell phones, and tablets in recent decades—costs and prices fall so dramatically that product demand greatly increases as well, leading employment in the automating industries to rise instead of fall. In other cases, when employment falls in automating industries, new jobs arise in other industries, as consumers with higher real incomes spend more on other kinds of products and services than before. However, it is hard to predict whether the quality of the new jobs will be as high as those they are replacing.

¹⁰ These dynamics are not new. Indeed, economists Claudia Goldin and Lawrence Katz argue that the second phase of the Industrial Revolution, which occurred about a century ago, created a need for more workers with high school diplomas, to which policymakers responded with the free public high school movement. See Claudia Goldin and Lawrence F. Katz, *The Race Between Education and Technology* (Cambridge, MA: Harvard University Press, 2008).

¹¹ See Autor, “Why Are There Still So Many Jobs?”; Frank Levy and Richard Murnane, *Dancing with Robots: Human Skills for Computerized Work* (Washington, DC: The Third Way, 2013), www.thirdway.org/report/dancing-with-robots-human-skills-for-computerized-work.

¹² Katherine Abraham and Melissa Kearney, “Explaining the Decline in the US Employment-to-Population Ratio: A Review of the Evidence” (working paper no. 24333, National Bureau of Economic Research, Cambridge, MA, February 2018), www.nber.org/papers/w24333.

¹³ Autor, “Why Are There Still So Many Jobs?”; Levy and Murnane, *Dancing with Robots*.

¹⁴ Louis S. Jacobson, Robert J. LaLonde, and Daniel G. Sullivan, “Earnings Losses of Displaced Workers,” *American Economic Review* 83, no. 4 (1993): 685–709; Henry S. Farber, “Job Loss in the Great Recession and Its Aftermath: U.S. Evidence from the Displaced Workers Survey” (working paper no. 21216, National Bureau of Economic Research, Cambridge, MA, May 2015), www.nber.org/papers/w21216.

¹⁵ Data from the U.S. Department of Labor's Bureau of Labor Statistics (BLS) show little increase in these categories since 1995, though their measures do not include secondary jobs and "gig" work or franchising more broadly. Many questions remain about these trends, though their use has almost certainly risen over a period of several decades. See BLS, "Contingent and Alternative Employment Arrangements Summary" (news release, June 7, 2018), www.bls.gov/news.release/conemp.nr0.htm.

¹⁶ David Weil, *The Fissured Workplace* (Cambridge, MA: Harvard University Press, 2014).

¹⁷ These competing strategies are sometimes called "high road" and "low road," respectively. See Paul Osterman, "In Search of the High Road: Meaning and Evidence," *Industrial and Labor Relations Review* 71, no. 1 (2017): 3–34.

¹⁸ Noncompete and nondisclose agreements impede the abilities of workers to work for a competitor of their current employer and to disclose their compensation to other workers, respectively. Both limit the ability of workers to use healthy labor-market competition and information to raise their pay. See Jay Shambaugh, Ryan Nunn, and Patrick Liu, "How Declining Dynamism Affects Wages" (framing paper, Brookings Institution, Washington, DC, February 2018), www.hamiltonproject.org/assets/files/how_declining_dynamism_affects_wages.pdf.

¹⁹ See Shambaugh Nunn, and Liu, "How Declining Dynamism Affects Wages."

²⁰ Appelbaum, Bernhardt, and Murnane provide case studies within different industries of employer choices in this regard, while Ton highlights some cases of firms choosing "higher-road" practices as part of broader strategies to compete by improving product or service quality. But the extent to which firms can implement "high-road" strategies in competitive markets remains somewhat unclear. See Eileen Appelbaum, Annette Bernhardt, and Richard J. Murnane, *Low-Wage America: How Employers are Reshaping Opportunity in the Workplace* (New York: Russell Sage Foundation, 2003); Zeynep Ton, *The Good Jobs Strategy: How the Smartest Companies Invest in Employees to Lower Costs and Boost Profits* (Cambridge, MA: MIT Press, 2014); Osterman, "In Search of the High Road."

²¹ Daron Acemoglu and Pascual Restrepo, "Artificial Intelligence, Automation and Work" (working paper no. 24196, National Bureau of Economic Research, Cambridge, MA, January 2018), www.nber.org/papers/w24196.

²² While worker compensation has failed to keep pace with worker productivity in the past few decades—at least partly for technical reasons, such as the use of different price indices between the two that have risen less rapidly for productivity—earnings and productivity growth remain highly correlated over time. Worker earnings have also been reduced because of the continuing rise in costs of health-care benefits over time. See Anna M. Stansbury and Lawrence H. Summers, "Productivity and Pay: Is the Link Broken?" (working paper no. 24165, National Bureau of Economic Research, Cambridge, MA, December 2017), www.nber.org/papers/w24165.

²³ Whether gender gaps in pay rise or fall depends on the extent to which male and female workers face different displacement risks, and differences in their abilities to adapt to changing labor demands. Rising educational attainment among women relative to men in recent years suggests a greater ability on their part to adapt to these changes, all else equal. Returns to general experience, and the resulting earnings inequality between older and younger workers, might well narrow as the latter more easily adapt to labor-market changes.

²⁴ Whether a "mismatch" exists between the skills workers possess and those employers need is hotly debated by economists and other researchers. On the one hand, there does not appear to have been a rise in structural unemployment after the Great Recession, though the withdrawal from the labor market of workers who would have otherwise been unemployed might mask their existence. See Katherine Abraham, "Is Skill Mismatch Impeding US Economic Recovery?" *Industrial and Labor Relations Review* 68, no. 2 (2007): 291–313. Also, a lack of more rapid wage or training increases in growing sectors during this time period further suggest little such mismatch to some analysts. See Peter Cappelli, "Skill Gaps, Skill Shortages, and Skill Mismatches: Evidence for the US" (working paper no. 20382, National Bureau of Economic Research, Cambridge, MA, August 2014), www.nber.org/papers/w20382; On the other hand, a range of market failures and constraints from capital markets on firms might impede their abilities to respond to tight labor markets in the manners expected by economists, while other barriers to occupational and geographic mobility impede workers from adjusting to unmet employer needs. See Harry Holzer, "Worker Skills and the US Labor Market: The Role of Public Policy," in *The US Labor Market: Questions and Challenges for Public Policy*, ed. Michael R. Strain (Washington, DC: American Enterprise Institute, 2016), www.aei.org/wp-content/uploads/2016/10/The-US-Labor-Market.pdf; National Academies, *Building America's Skilled Technical Workforce*.

²⁵ Darrell M. West, *The Future of Work: Robots, AI, and Automation* (Washington, DC: Brookings Institution Press, 2018).

²⁶ The analysis indicates the extent to which activists on both sides of this issue make claims that represent extreme cases. On the one hand, pro-immigration activists argue that some jobs are so unpleasant or low in status that no native-born workers will ever accept them; this implies completely inelastic supplies of U.S. workers in such industries, which is unlikely to ever be true, except in agriculture and domestic service. On the other hand, anti-immigration activists argue that every employed immigrant eliminates a job that would otherwise be available to native-born workers, which could only be true if labor demand were completely inelastic, even in the long run. The labor-market trends discussed earlier in this brief, including automation, play a role in shaping these dynamics. Focusing on Figure 1, an elastic labor demand curve would indicate employers responding to the increased presence of immigrants by reorganizing their workplaces to accommodate additional workers to a greater extent, perhaps by foregoing mechanization that they otherwise would adopt; conversely, in the absence of these immigrants, employers would presumably mechanize the work to a greater extent, and cut back substantially on the availability of such jobs. Furthermore, in the case of inelastic labor supply (where

workers must work and take jobs at any wage), workers would accept wage reductions in Figure 1 to remain employed, while in a scenario with more elastic supply (where they have more choice about whether or not to work) they are more likely to withdraw from the market as wages fall.

²⁷ For instance, an immediate elimination of immigrants in Figure 1 would result in an initial shortage of workers equal to the distance between points B and C, until the market gradually adjusts and returns to point A. That is why large-scale deportations of unauthorized immigrant workers would likely create havoc in industries that depend on them within the first year of such an action. Over the long run, wage effects in either direction will dissipate somewhat if capital is very mobile and flows from higher-wage to lower-wage localities. This is likely true to a limited extent in that time period, but not completely.

²⁸ Those with some college and no degree, or an associate degree, are sometimes included in the higher-education category but are omitted in other occasions.

²⁹ George J. Borjas, "Immigration in High-Skill Labor Markets: The Impact of Foreign Students on the Earnings of Doctorates" (working paper no. 12085, National Bureau of Economic Research, Cambridge, MA, March 2006), www.nber.org/papers/w12085.

³⁰ Jennifer Hunt and Marjolaine Gauthier-Loiselle, "How Much Does Immigration Boost Innovation?" (working paper no. 14312, National Bureau of Economic Research, Cambridge, MA, September 2008), www.nber.org/papers/w14312; Enrico Moretti, *The New Geography of Jobs* (Boston and New York: Houghton Mifflin Harcourt, 2012).

³¹ Holzer, *Job Market Polarization and U.S. Worker Skills*; National Academies, *Building America's Skilled Technical Workforce*.

³² David Card, "Is the New Immigration Really So Bad?" (working paper no. 11547, National Bureau of Economic Research, Cambridge, MA, August 2005), www.nber.org/papers/w11547; Gianmarco I. P. Ottaviano and Giovanni Peri, "Rethinking the Effects of Immigration on Wages" (working paper no. 12497, National Bureau of Economic Research, Cambridge, MA, May 2008), www.nber.org/papers/w12497.

³³ George J. Borjas, "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," *Quarterly Journal of Economics* 118, no. 4 (2003): 1335–74; George J. Borjas, Jeffrey Grogger, and Gordon H. Hanson, "Immigration and African-American Employment Opportunities: The Response of Wages, Employment, and Incarceration to Labor Supply Shocks" (working paper no. 12518, National Bureau of Economic Research, Cambridge, MA, May 2007), www.nber.org/papers/w12518.

³⁴ Giovanni Peri and Chad Sparber, "Task Specialization, Immigration, and Wages," *American Economic Journal: Applied Economics* 1, vol. 3 (2009): 135–69.

³⁵ Harry Holzer, *Immigration Policy and Less-Skilled Workers in the United States: Reflections on Future Directions for Reform* (Washington, DC: Migration Policy Institute, 2011), www.migrationpolicy.org/research/US-immigration-policy-less-skilled-workers.

³⁶ George J. Borjas and Richard Freeman, "From Immigrants to Robots: The Changing Locus of Substitutes for Workers" (paper presented at the conference "Improving Employment and Earnings in the 21st Century" at the Russell Sage Foundation, September 2018).

³⁷ For ethnographic evidence on employer preferences for immigrant over native-born labor in relatively unskilled jobs, see Philip Moss and Chris Tilly, *Stories Employers Tell: Race, Skill, and Hiring in America* (New York: Russell Sage Foundation, 2001).

³⁸ Patricia Cortés and José Tessada, "Low-Skilled Immigration and the Labor Supply of Highly Skilled Women," *American Economic Journal: Applied Economics* 3, no. 3 (2011): 88–123.

³⁹ See George J. Borjas, "The Self-Employment Experience of Immigrants," *Journal of Human Resources* 21, no. 3 (Autumn 1986): 485–506.

⁴⁰ See William H. Frey, "21st Century Immigration Favors Asians and College Grads as the US Foreign-Born Share Rises," Brookings Institution, September 24, 2018, www.brookings.edu/blog/the-avenue/2018/09/24/21st-century-immigration-favors-asians-and-college-grads-as-the-us-foreign-born-share-rises/.

⁴¹ Patricia Cortes, "The Effect of Low-Skilled Immigration on U.S. Prices: Evidence from CPI Data," *Journal of Political Economy* 116, no. 3 (2008): 381–422.

⁴² National Academies of Sciences, Engineering, and Medicine, *The Economic and Fiscal Consequences of Immigration* (Washington, DC: The National Academies Press), <https://doi.org/10.17226/23550>.

⁴³ Martin Neil Baily and Barry P. Bosworth, "Productivity Trends: Why Is Growth So Slow?" (presentation slides, Brookings Institution, Washington, DC, March 26, 2015), www.brookings.edu/wp-content/uploads/2016/07/productivity_baily_bosworth.pdf.

⁴⁴ Congressional Budget Office (CBO), *How Changes in Immigration Policy Might Affect the Federal Budget* (Washington, DC: CBO, 2015), www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/49868-Immigration4.pdf.

⁴⁵ National Academies, *The Economic and Fiscal Consequences of Immigration*.

⁴⁶ A contrary but less compelling view on the federal fiscal costs of immigration appears in Robert Rector and Jason Richwine, *The Fiscal Cost of Unlawful Immigrants and Amnesty to the U.S. Taxpayer* (Washington, DC: The Heritage Foundation, 2013), <http://thf.media.s3.amazonaws.com/2013/pdf/sr133.pdf>.

⁴⁷ In the short term, very unskilled immigrants might raise public costs, through their use of transfer programs, as well as schools and hospitals, and especially at the state and local levels. But in the subsequent generations of any cohort of immigrants, incomes rise and fiscal contributions become more positive. At the federal level, the fiscal impacts of immigrants even in the short term are more positive than at the state and local levels.

⁴⁸ Harry Holzer and Sandy Baum, *Making College Work: Pathways to Success for Disadvantaged Students* (Washington, DC: Brookings Institution Press, 2017).

⁴⁹ The term “21st century skills” is generally used to refer to skills such as problem-solving, critical thinking, communication, and social skills that make workers more adaptable and complementary to automation. Lifelong learning could be enhanced through personal accounts, funded by payroll reductions over time, as now exist in Maine and Washington State. See Harry Holzer, “Building a New Middle Class in the Knowledge Economy” (policy memo, Progressive Policy Institute, Washington, DC, April 2017), www.progressivepolicy.org/publications/policy-memo/building-new-middle-class-knowledge-economy/.

⁵⁰ Seth D. Harris and Alan B. Krueger, “A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The ‘Independent Worker’” (discussion paper 2015-10, Brookings Institution, Washington, DC, December 2015), www.hamiltonproject.org/assets/files/modernizing_labor_laws_for_twenty_first_century_work_krueger_harris.pdf.

⁵¹ For a more in-depth discussion of these policies, see Holzer, “Building a New Middle Class”; Harry Holzer, *Jobs for the Working Class: Raising Earnings among Non-College Graduates* (Washington, DC: Brookings Institution, 2018), www.brookings.edu/research/jobs-for-the-working-class-raising-earnings-among-non-college-graduates/. Note that the author does *not* endorse Universal Basic Income (UBI) or broad job guarantees, which would be enormously expensive and would undercut current labor-market functioning in a variety of ways. The author’s recommended labor agenda would, however, require significant new public revenues, on top of what is already needed to fully fund retirement programs. The agenda is thus incompatible with the “no new taxes” pledge taken by most Republican members of Congress.

⁵² See American Immigration Council, *A Guide to S.744: Understanding the 2013 Senate Immigration Bill* (Washington, DC: 2013), www.americanimmigrationcouncil.org/research/guide-s744-understanding-2013-senate-immigration-bill.

⁵³ Holzer, *Immigration Policy and Less-Skilled Workers in the United States*.

⁵⁴ See Frey, “21st Century Immigration.”

About the Author

Harry J. Holzer is the LaFarge SJ Professor of Public Policy at Georgetown University, a Nonresident Senior Fellow at the Brookings Institution, and an Institute Fellow at the American Institutes for Research. He is also a former Chief Economist of the U.S. Department of Labor.

Acknowledgments

The author thanks Michael Fix, Doris Meissner, and other participants in a seminar organized by the Migration Policy Institute (MPI) for their helpful comments on an earlier draft of this issue brief.

For their generous support, MPI is grateful to the Ford Foundation, the Open Society Foundations, the Carnegie Corporation of New York, Unbound Philanthropy, and the 21st Century International Ladies' Garment Workers' Union (ILGWU) Heritage Fund.

© 2019 Migration Policy Institute.
All Rights Reserved.

Cover Design: April Siruno, MPI
Layout: Sara Staedicke, MPI

No part of this publication may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopy, or any information storage and retrieval system, without permission from the Migration Policy Institute. A full-text PDF of this document is available for free download from www.migrationpolicy.org.

Information for reproducing excerpts from this publication can be found at www.migrationpolicy.org/about/copyright-policy. Inquiries can also be directed to: communications@migrationpolicy.org.

Suggested citation: Holzer, Harry J. 2019. *Immigration and the U.S. Labor Market: A Look Ahead*. Washington, DC: Migration Policy Institute.