



IMMIGRANTS IN STRATEGIC SECTORS OF THE U.S. ECONOMY AND AMERICA'S LABOR SHORTAGE CRISIS

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Introduction

The COVID-19 pandemic has had a range of negative impacts on the U.S. economy—from labor shortages and supply chain constraints to higher inflation and more. Of particular concern are the continued labor shortages in the U.S. economy, the focus of this paper. Without workers, companies cannot produce the quantity of goods and services the market demands. This affects both pricing and wages, adding inflationary pressures to the economy and ultimately impacting the nation's gross domestic product (GDP). Prices of goods and services are rising at their fastest rate since the early 1980s (reaching a 40-year high in 2022), and this trend appears more persistent than many economists expected.¹ Consequently, the U.S. economy is experiencing slow growth and high inflation, a phenomenon known as “slowflation.”

Labor shortages are not new. Even before the pandemic, the United States was beginning to experience labor shortages, primarily due to an aging workforce, a decline in national fertility rates, and, more recently, a fall in immigration rates—all of which have led to fewer people participating in the national workforce.² The pandemic has only exacerbated these ongoing trends. Labor shortages have also had secondary effects, including workers demanding better salaries and flexible working hours and even resigning, leading to a loss of expertise and the need to retrain new workers.

Moreover, recent reports show that there are more job openings in the United States than there are people willing to work. Indeed, there were 11.3 million job openings in February 2022 alone, but fewer than 6.3 million unemployed individuals still actively looking for work.³ To make matters worse, 4.3 million people left their jobs, and by the end of 2021, there were about 2 million fewer working-age immigrants compared to pre-pandemic trends.⁴ The sectors affected by labor shortages are also numerous, including accommodation and food services, construction, wholesale trade, and state and local government education, among others.⁵ This shortage has led to massive supply chain disruptions in the United States, and there is little to indicate that these disruptions will improve for any of these industries.

Clearly, one effective solution to labor shortages is to attract more workers—domestic and foreign—to the labor market. U.S. citizens would have to be incentivized through higher wages and benefits. Foreign workers, however, require a different kind of system. Since many foreign workers are willing to work, the solution would imply an increase in legal immigration, which decreased during the pandemic due to travel restrictions, a slowdown in immigrant processing services, and decreased mobility in general.

Given this state of affairs, this paper examines labor shortages in the United States, drawing attention to the role of immigrants in the U.S. labor market as a strategy to overcome the shortage. It also offers data to support the importance of these workers and examines how the lack of immigrants in the U.S. labor market in 2020 and 2021 impacted the U.S. economy—as well as what the labor shortage may look like by 2030—under three scenarios. The first scenario considers the decrease in visas issued in 2020 and 2021 and

explores the effects of this on the U.S. economy. In the second scenario, the economic impact of having about 2 million fewer working-age immigrants living in the United States in 2020 and 2021 is assessed. Finally, the third scenario estimates the total number of unfilled jobs the U.S. economy could have by 2030. Given these scenarios, the paper concludes that the only way to close the labor gap is to allow more foreign workers to participate in the U.S. labor market.

Labor Shortages: Main Factors

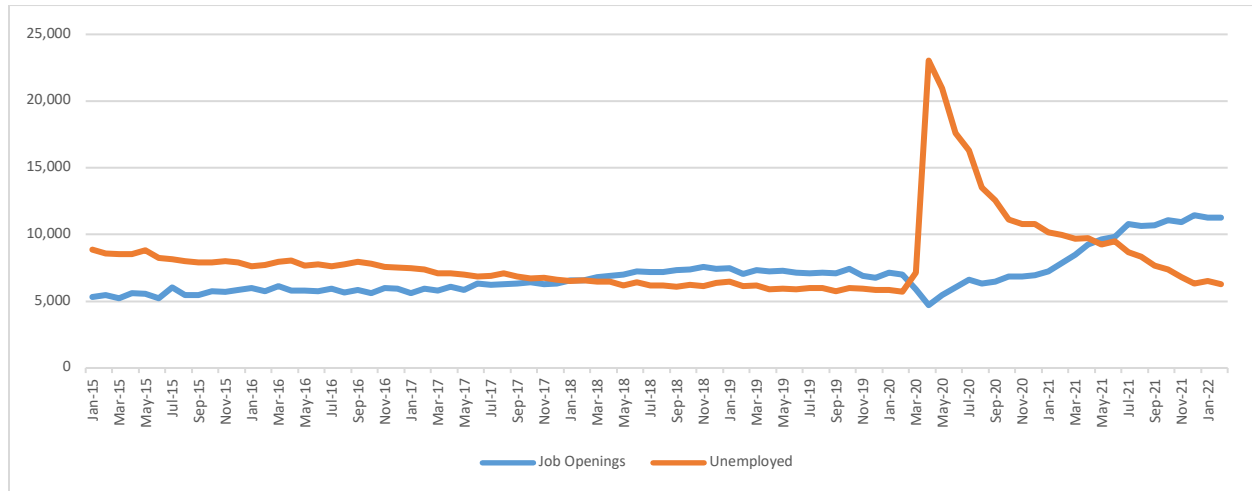
Labor shortages occur when the demand for workers is greater than the supply of workers. When this happens, employers struggle to fill job vacancies, which in turn can generate distortions in the economy. The main economic impact of a labor shortage is that employers are pressured to increase wages. Some employers do raise wages to recruit and retain employees. In other cases, firms transfer the higher wage costs to consumers, causing the prices of goods and services to increase. Other employers absorb higher labor costs, with a consequent fall in profits.⁶

Labor shortages also generate supply chain problems as logistics chains are starved for workers. Reduced production is yet another economic impact of a labor shortage, as firms cannot operate at full capacity. In the absence of product and service options, consumer spending patterns may change over time. Moreover, not all workers experience the same level of wage growth, so wage pressure may create distortions in the salary market, often to the detriment of older workers. All of these disruptions cause firms to have lower profits, lower competitiveness, and logistical problems, negatively impacting national output or GDP.

This is where United States is today: facing an acute labor shortage due to the presence of nearly all of these different variables.⁷ The COVID-19 pandemic, though often blamed for this, only accelerated these trends. In fact, it could be argued that the pandemic has merely highlighted the existing labor shortage problem, particularly in the sectors that heavily rely on immigrant workers, such as agriculture, food services, health care, transportation, and construction.⁸ Many firms in these industries are still facing unprecedented challenges in trying to find workers to fill their open jobs. It did not help that the pandemic slowed the legal immigration process as well.

The gap between jobs available and workers willing to work has existed since 2015, though at the time it was considerably narrower. By 2018, however, the U.S. economy had increasingly more job openings than unemployed workers. In 2020, the pandemic-induced lockdowns accelerated that trend further. By February 2022, as the pandemic was easing, there were already an accumulated 11.3 million job openings, but only 6.3 million unemployed workers.⁹ At present, the gap between unfilled jobs and unemployed workers has reached serious levels (Figure 1). Indeed, even if every unemployed worker found a job, there would still be 5 million jobs left unfilled, and these trends are predicted to continue in the short and long terms.

Figure 1. Job Openings and Number of Unemployed Workers, 2015-2022

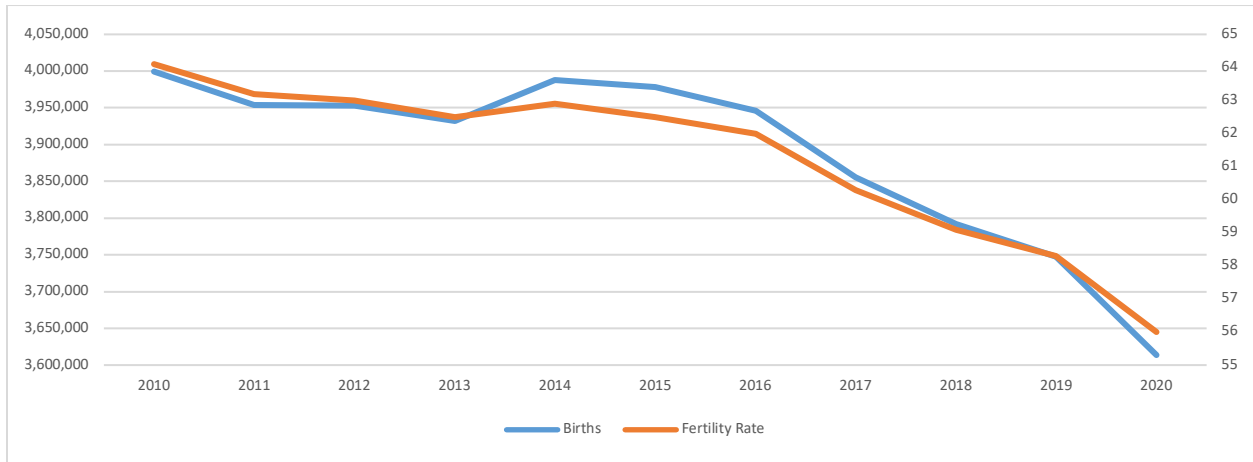


Source: Elaborated with data from the Bureau of Labor Statistics (BLS).

Main Causes of the Labor Shortage

On the supply side, several factors are affecting the U.S. labor market in the short and long terms. These include a reduction in the national birth rate, the rising number of people retiring due to the aging of the labor force, and a decrease in the number of immigrants who can work. On the first score, in 2020, 3.6 million births were registered in the United States, down 9.6% from 2010. The general fertility rate was 56.0 births per 1,000 females ages 15 to 44, down 12.6% from 2010 (Figure 2).¹⁰ This has resulted in a population growth rate that has been slowing for years in the United States. For example, it grew only 0.1% in 2021—fewer than a million people.¹¹ In comparison, between July 1, 2020, and July 1, 2021, the growth by birth (natural increase) was only 148,043, while net international migration was 244,622—making it the first time that net international increase exceeded natural increase for a given year in the United States.¹² This can only mean one thing: Low births and fertility rates in the United States will lead to a decline in the labor force in the future. This points to the necessity of allowing more immigrants to enter the labor force to offset this decrease.

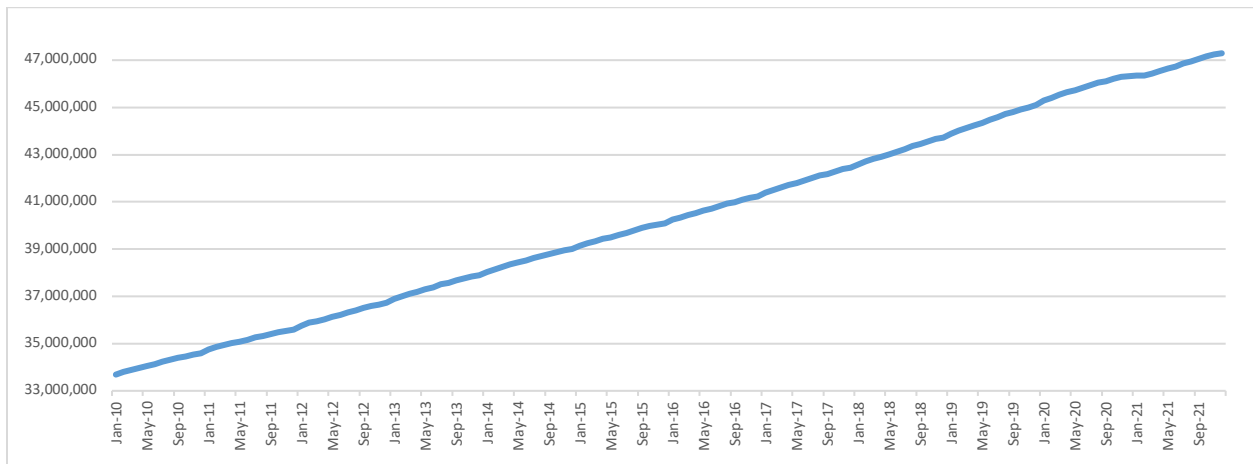
Figure 2. Live Births and General Fertility Rates, 2010-2020



Source: National Center for Health Statistics, National Vital Statistics System.

On the second score, an aging population is also likely to exacerbate labor shortages in the United States. The number of retired workers receiving Social Security benefits has risen significantly in the last decade, particularly after the initial COVID-19 outbreak (Figure 3) when many individuals chose to retire early. The number of retirees increased from approximately 33.6 million in 2010 to 47.3 million in 2021 (an increase of 40.4%). This number is likely to continue rising in the future, creating further labor shortages.¹³ Again, this too suggests that immigrants could be a key to improving the ratio of workers to retirees and supporting the next generations in their retirement years.

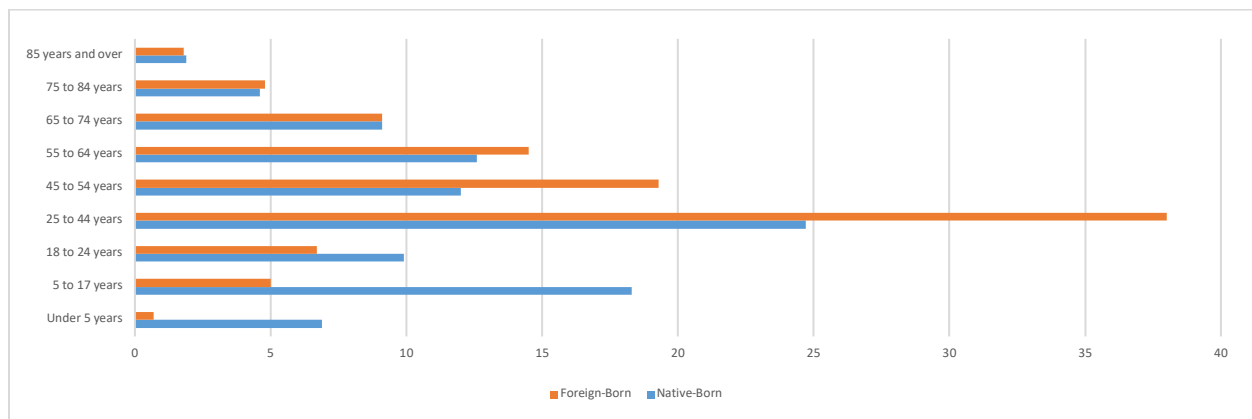
Figure 3. Number of Retired Workers Receiving Social Security in the United States, 2010-2021



Source: Elaborated with data from the U.S. Social Security Administration.

As a secondary issue, the rapid increase in retired persons points to another growing problem: There is likely to be enormous pressure on government resources as millions of retirees claim their Social Security benefits. These individuals paid taxes for their social benefits and are entitled to them, but they are making up a greater percentage of the population by the day. On this point too, immigrants can provide a solution. As foreign workers engage in the labor market, they will be ever more responsible for the increase in tax contributions. This is further reinforced by their demographics. In 2019, approximately 78.5% of the foreign-born population was of working age (between 18 and 64 years), compared to 59.2% of the native-born population (Figure 4).¹⁴ These percentages have remained practically the same in recent years. For example, in 2010 around 80.5% of the foreign-born population was working, compared to 60.4% of the native-born population.¹⁵ This trend will likely continue, as the share of the population age 65 and older is projected to rise from 17% to 21% between 2020 and 2030.¹⁶ Older people tend to work fewer hours, and their productivity tends to be lower than that of younger workers. If no additional workers are brought in through immigration in the coming years, the impact on the overall economy is expected to be profoundly negative.¹⁷

Figure 4. United States Population by Age and Place of Birth, 2019



Source: Elaborated with data from the U.S. Census Bureau.

Immigrants in the U.S. Labor Market

Demographic Characteristics

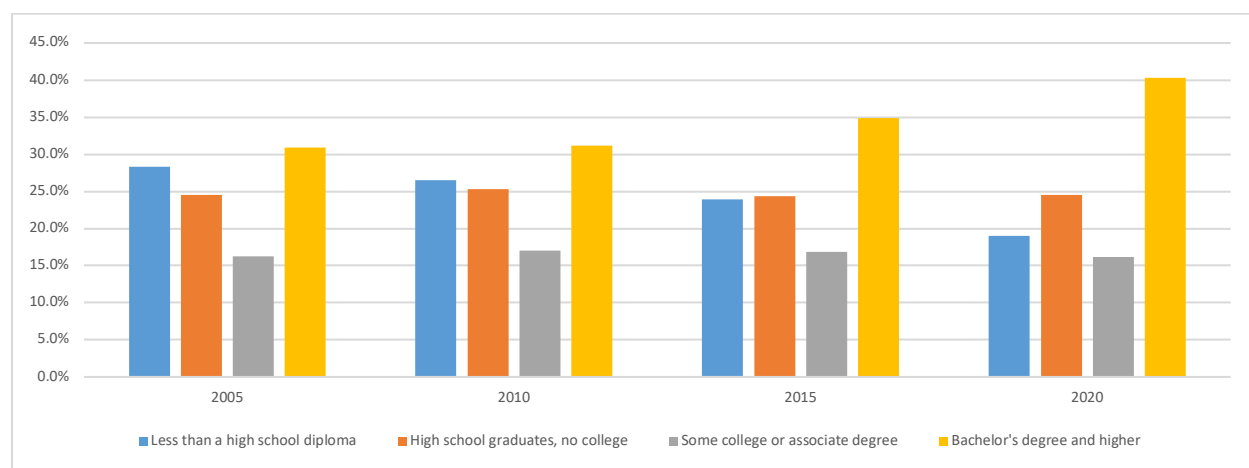
This section explores the demographic characteristics that distinguish foreign-born workers and native-born workers.¹⁸ In 2020, the majority of the labor force—for both foreign-born and native-born workers—was male, 57.3% and 52.1% respectively.¹⁹ The foreign-born labor force between the ages of 25 and 54 comprised 71.8%, while 62.2% of the native-born labor force was between these ages.²⁰ This trend has been the same for both groups in recent years.

In 2020, 47.5% of foreign-born workers were Hispanic and only 25.1% were Asian. Meanwhile, the figures are much lower for native-born workers, with 12% for Hispanics and 2.4% for Asians.²¹ Comparing these figures with those of 2010 for foreign-born workers, the percentages changed a bit. Hispanics decreased by 2.4%, and Asians increased by 3.2%.²²

Regarding educational attainment, in 2020, 19% of the foreign-born labor force ages 25 years and older had not graduated from high school. This figure is much higher than that of native-born workers at 3.5%. Native-born workers were also more likely to have some college or an associate's degree compared to foreign-born workers (28.1% versus 16.2%). In terms of having a bachelor's degree or higher, both figures are similar with 24.5% for foreign-born and 24.8% for native-born.²³ In the case of foreign-born workers, the distribution of educational attainment has changed in recent years, particularly for those with no high school diploma or a bachelor's degree. From 2005 to 2020, more immigrants working in the U.S. labor market have moved from not having a high school diploma to having a bachelor's degree. In other words, this group is becoming more educated and thereby gaining skills for better jobs (Figure 5).

Although these statistics may not signify much on their own, in the context of the shrinking labor force of the United States, they point to higher levels of immigration as a solution to what is becoming a structural problem—the gap between unfilled jobs and available workers, particularly in the context of current and worsening trends.

Figure 5. Education Attainment of Foreign-born Labor Force in the United States, 2005-2020



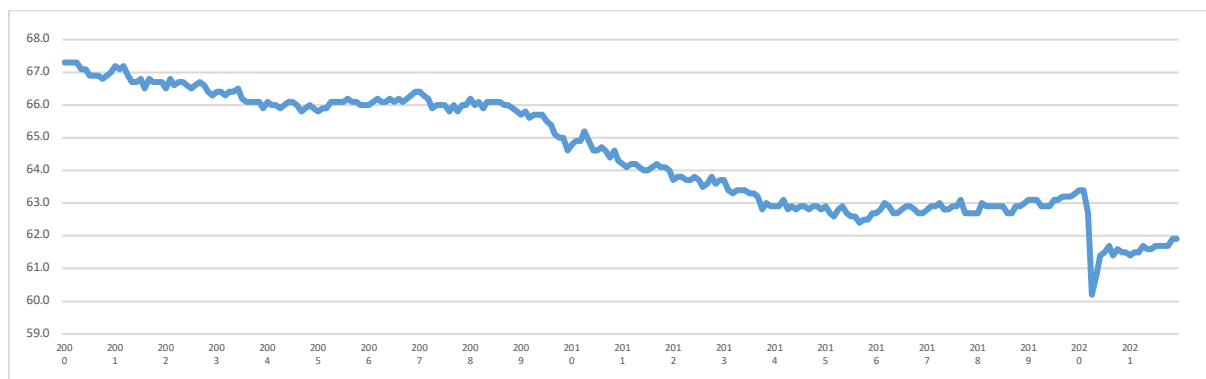
Source: Elaborated with data from the BLS.

Labor Force Participation

The labor force participation rate measures the number of people in the labor force as a percentage of the total working-age population. Therefore, it represents the relative number of labor resources available for the production of goods and services in any economy. Labor force participation is mainly affected by long-term structural changes. One main factor is the change in the age composition of the population due to an aging workforce, something that is happening in the United States.²⁴

The labor force participation rate has been falling in the United States since 2009 (Figure 6). This decline means that more people are unable or unwilling to work at current wages, which has resulted in a labor shortage. This has led to slower economic growth because fewer individuals are contributing to the output of goods and services. An economy with a lower participation rate is also burdened with higher tax rates, since the government has a smaller tax base from which to draw revenue.²⁵ In the case of foreign-born people, their labor participation rate has been higher than that of native-born people (Figure 7).

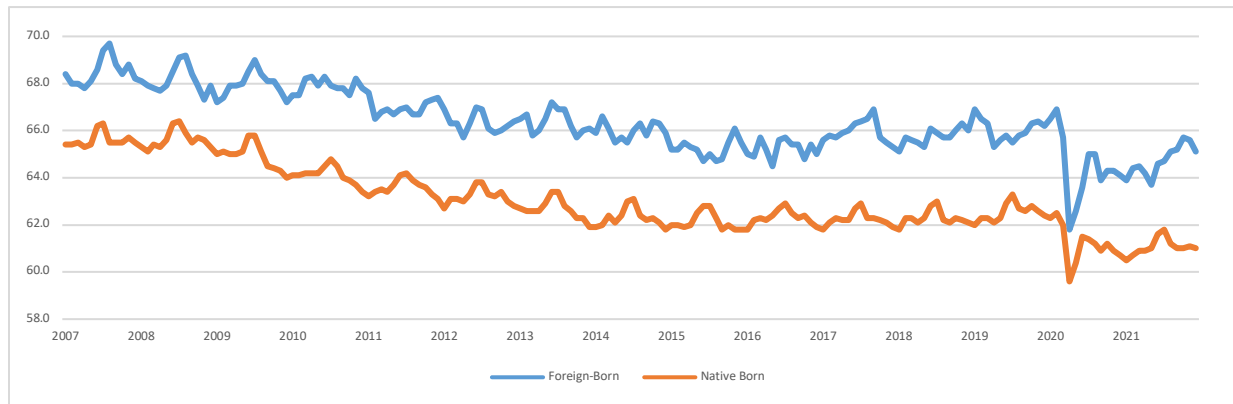
Figure 6. Civilian Labor Force Participation Rate, 2000-2021 (monthly)



Note: Seasonally adjusted.

Source: Elaborated with data from the BLS.

Figure 7. Civilian Labor Force Participation Rate—Foreign-born and Native-born, 2007-2021 (monthly)

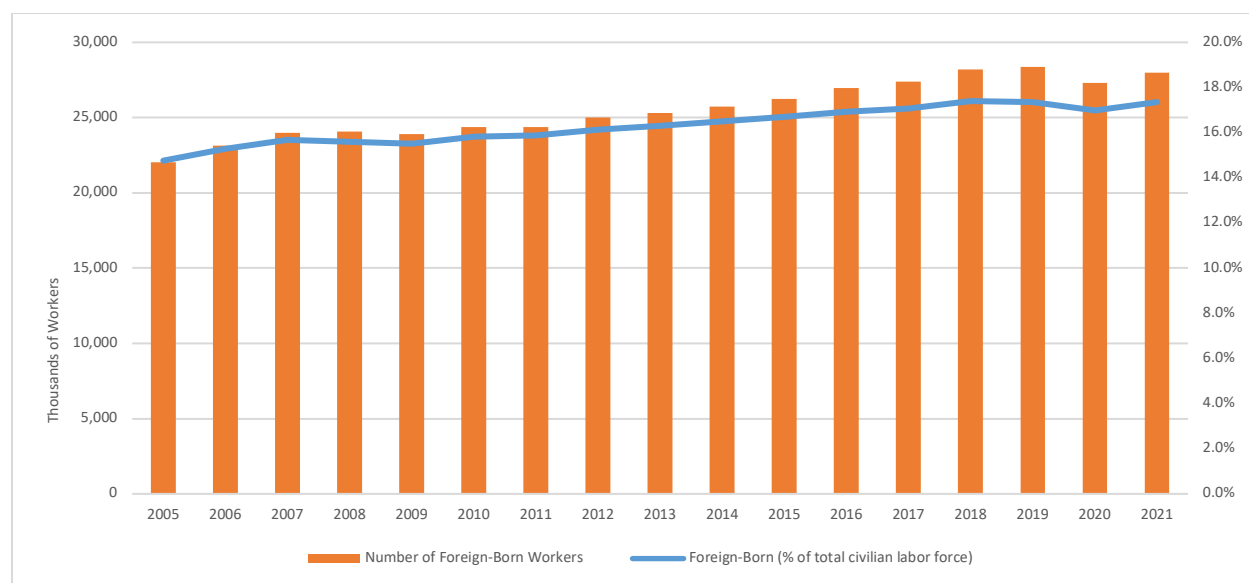


Note: Not seasonally adjusted.

Source: Elaborated with data from the BLS.

The foreign-born population made up 17.4 % of the total civilian labor force in the United States in 2021, or about one in six workers. This percentage has increased in recent years, from 14.8% in 2005 to 17.4% in 2021 (Figure 8). There were approximately 27.9 million foreign-born workers age 16 years and older in the civilian labor force in 2021.²⁶ Lawful immigrants represented the majority of the immigrant workforce, about 20.7 million. An additional 7.2 million immigrant workers were undocumented. These workers accounted for 4.4% of the civilian labor force.²⁷

The number of foreign-born workers has increased at a faster rate than the number of native-born workers. In 1990, there were approximately 11.6 million foreign-born and 111.9 million native-born workers.²⁸ By 2021, there were approximately 27.9 million foreign-born workers and 133.2 million native-born workers in the U.S. civilian labor force. Therefore, the growth rate for foreign-born workers was approximately 140.5% compared to 19% for native-born workers. The growth rate for the total civilian labor force was around 30.4% from 1990 to 2021.²⁹

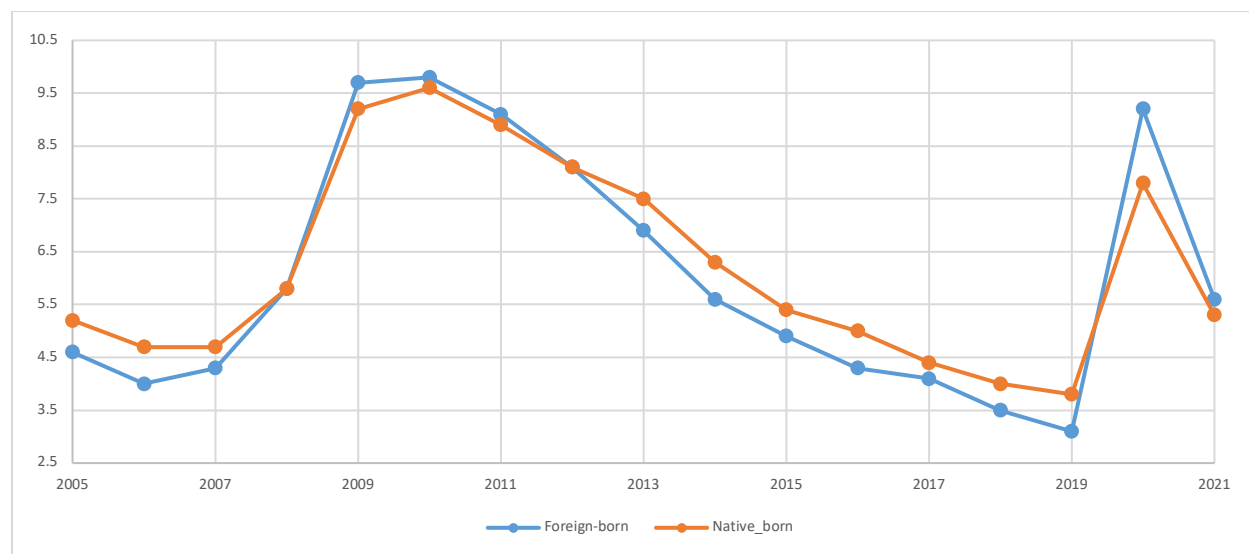
Figure 8. Foreign-Born as a Percentage of Total Civilian Labor Force, 2005-2021

Source: Elaborated with data from the BLS.

Employment, Unemployment, and Earnings

Employment among foreign-born workers has risen by 4.4 million from 2010 to 2021, an increase of 20.3%. Employment also rose among native-born workers, around 9 million, but this increase was only 7.7%.³⁰ Foreign-born workers had lower unemployment rates than native-born workers between 2012 and 2019 (Figure 9). The foreign-born group reached a record low of 3.1% in 2019. Both groups of workers were affected by the shutdown of the U.S. economy due to the COVID-19 pandemic. Thus, in 2020, the unemployment rates increased to 9.2% for foreign-born and 7.8% for native-born workers. From 2020 to 2021, both unemployment rates fell to 5.6% and 5.3%.³¹ Before the pandemic, the unemployment rate for younger age groups in the foreign-born population (ages 16 to 44) tended to be lower than their native-born counterparts, while for older workers (ages 45 and up), the opposite was the case.³²

Figure 9. Unemployment Rates in the United States (16 Years and Older), 2005-2021



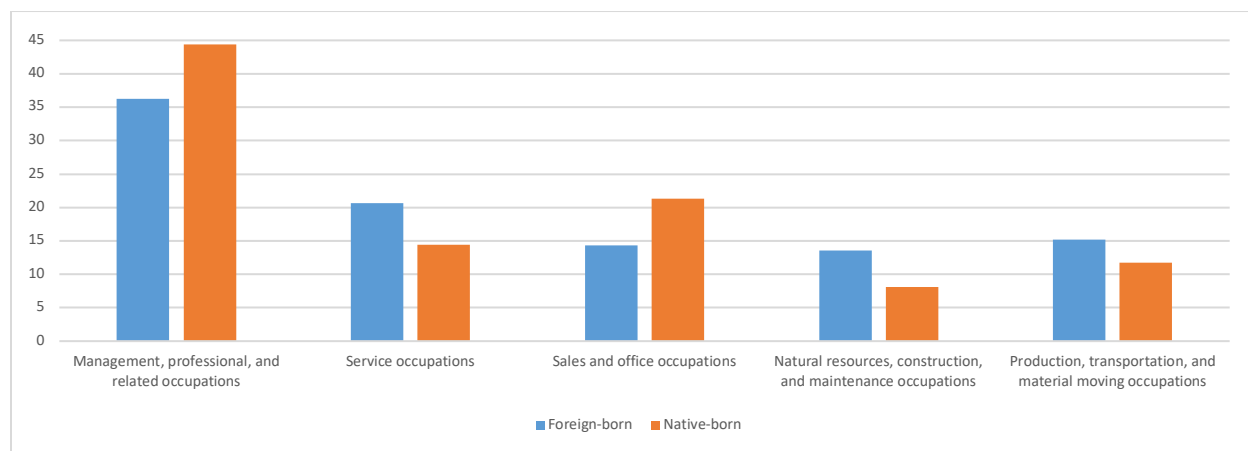
Source: Elaborated with data from the BLS.

The median weekly earnings of foreign-born, full-time wage and salary workers were lower than their native-born counterparts in 2020, \$885 and \$1,000 respectively.³³ In other words, foreign-born workers earned about 88.5 cents for every dollar earned by native-born workers. Foreign-born workers also earned less than native-born workers at almost all levels of education. However, among college graduates, foreign-born workers earned slightly more than native-born workers (\$1,492 versus \$1,409).³⁴

Occupation

Foreign-born workers were more likely than native-born workers to be employed in the following occupations in 2020: 1) service occupations, 2) natural resources, construction, and maintenance occupations, and 3) production, transportation, and material-moving occupations (Figure 10). Half of these workers were in these three major industrial groups. In contrast, foreign-born workers were less likely than their counterparts to be employed in management, professional, and related occupations, and in sales and office occupations. The trend for both cases has been the same during the last decade.

Figure 10. Employed Persons 16 Years and Older by Occupation (%), 2020

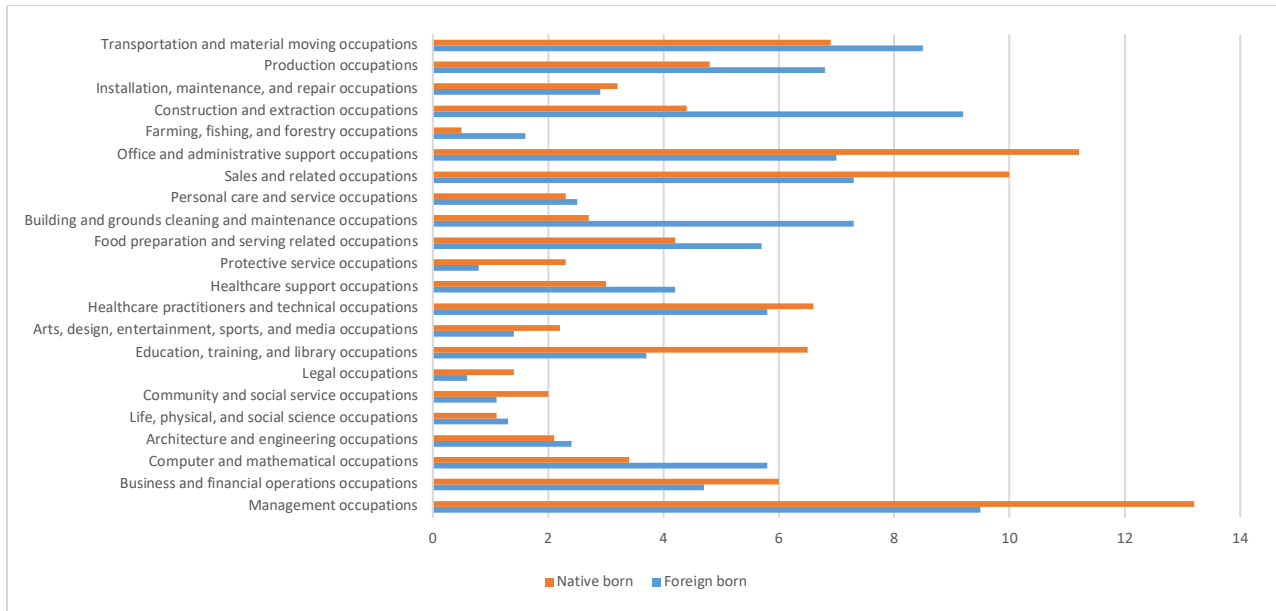


Source: Elaborated with data from the BLS.

If occupations are disaggregated (using 2020 data), it is evident that key industries rely heavily on immigrant labor (Figure 11). For example, there was a majority of foreign-born workers in building cleaning and maintenance, construction, manufacturing, food preparation, and transportation compared to native-born workers. By focusing on the makeup of workers in different industries, it is apparent that specific occupations depend on immigrant labor more than others. While only 1.6% of immigrants work in farming, fishing, and forestry, they represent around 39.2% of the total labor force of these occupations. And, while only 7.3% of immigrants work in building cleaning and maintenance, they represent about 35.3% of all workers in these occupations. Similarly while just 9.2% of immigrants work in construction and extraction, foreign-born workers make up approximately 29.7% of the construction and extraction labor force (Figure 12). These distributions have not changed significantly over the last decade, even with the pandemic. Of course, there was a small reduction in 2020 in almost all occupations for immigrant workers, except for health care support occupations.

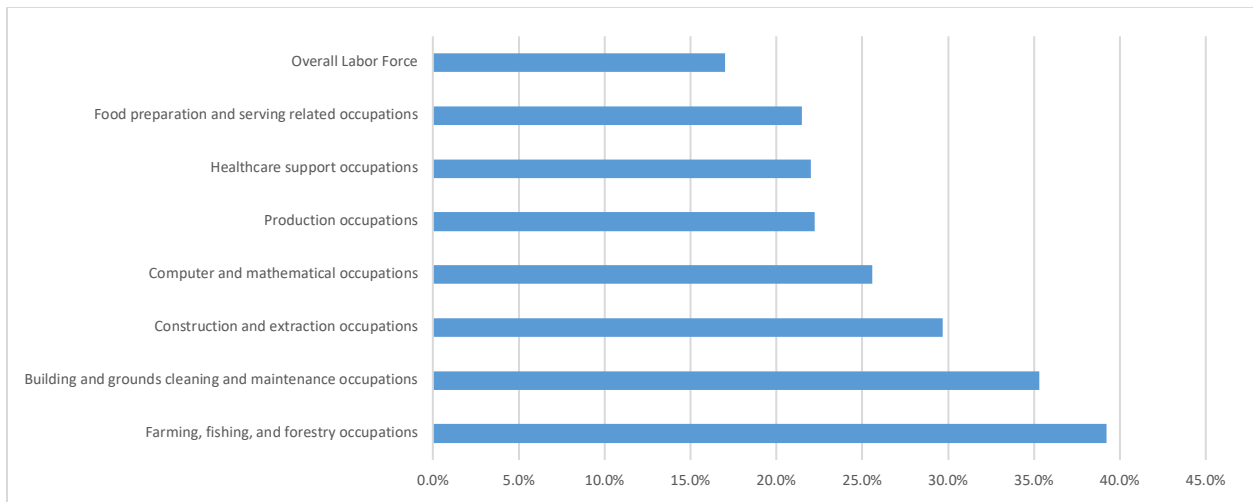
Immigrants in Strategic Sectors of the U.S. Economy and America's Labor Shortage Crisis

Figure 11. Employed Persons 16 Years and Older by Occupation, 2020



Source: Elaborated with data from the BLS.

Figure 12. Percentage of Foreign-born Workers in Select Occupation Category, 2020



Source: Elaborated with data from the BLS.

Temporary Worker Visas

To reiterate, the U.S. labor market needs workers with specific skills to continue its economic growth, but unfortunately in recent years the labor market has suffered from shortages in key sectors of the economy. As mentioned, there are various reasons for this. Native-born people often prefer not to work in low-wage sectors, where migrants do often work. Thus, foreign-born workers should be allowed to enter the United States to fill these jobs.³⁵ Demographic trends show reductions in the number of native-born individuals, and the demand for workers highlights the presence and need for immigrant workers, making this all the more urgent.³⁶ Although the U.S. immigration system already offers some paths for foreign-born workers to work in the United States, either temporarily or permanently, it is not enough.

Regarding temporary employment, different visas allow employers to hire and request foreign workers for specific jobs for a defined period. In these cases, temporary workers must only work for the employer that petitioned for them. If their visa expires or if their job ends, they must leave the United States. The most common temporary nonimmigrant work visas are summarized in Table 1.

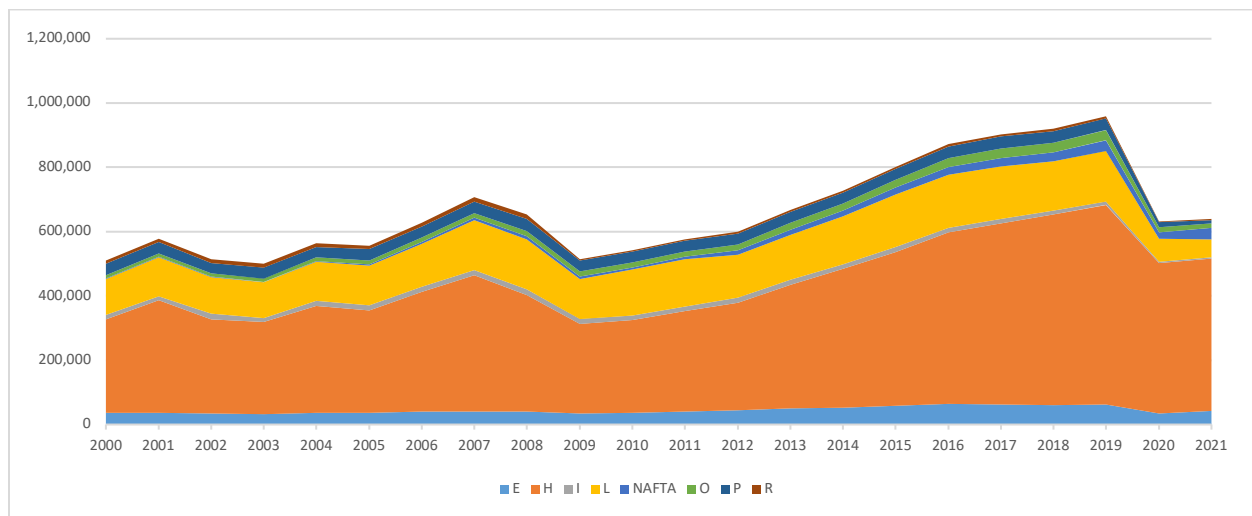
Table 1. Nonimmigrant Classification for Temporary Workers³⁷

Visa Category		Description
E	E-1	Treaty traders
	E-2	Treaty investors
	E-3	Certain "specialty occupation" professionals from Australia
H	H-1B	Person in specialty occupation
	H-1C	Registered nurses working in a health professional shortage area (determined by the U.S. Department of Labor)
	H-2A	Temporary or seasonal agricultural workers
	H-2B	Temporary non-agricultural workers
	H-3	Trainees other than medical or academic
I	I	Members of the foreign media, press, and radio
L	L-1A	Intracompany transferees in managerial or executive positions
	L-1B	Intracompany transferees in positions utilizing specialized knowledge
O	O-1	Persons with extraordinary ability in sciences, arts, education, business, or athletics and motion picture or TV production
	O-2	Persons accompanying solely to assist an O-1 nonimmigrant
P	P-1	Individual or team athlete, or member of an entertainment group
	P-2	Artist or entertainer (individual or group) in an exchange program
	P-3	Artist or entertainer (individual or group)
R	R-1	Religious workers
NAFTA	TN	North American Free Trade Agreement (NAFTA) temporary professionals from Mexico and Canada

Source: U.S. Citizenship and Immigration Services.

The total number of temporary employment-based visas issued since fiscal year (FY) 2000 increased until FY 2007.³⁸ Then, there was a small decline until FY 2009, and after that, there was a steady increase through FY 2020. The year 2020 was particularly difficult for foreign-born workers due to the COVID-19 pandemic and the decisions of the Trump administration to limit immigration. The Trump administration used the pandemic as a pretext to suspend the entry of immigrants and nonimmigrants, presumably to protect American workers from the spread of COVID-19.³⁹ On top of that, President Trump temporarily suspended new work visas and barred foreigners from seeking employment in the United States.⁴⁰ The main goal was to limit the entry of immigrants into the country, but it came at a high cost for the U.S. economy. Given these restrictions, the number of nonimmigrant visas issued at foreign service posts abroad plummeted in FY 2020 and remained low in FY 2021 (Figure 13).

Figure 13. Nonimmigrant Visas Issued, FY 2000-FY 2021



Note: Totals include spouses and children of primary beneficiaries.

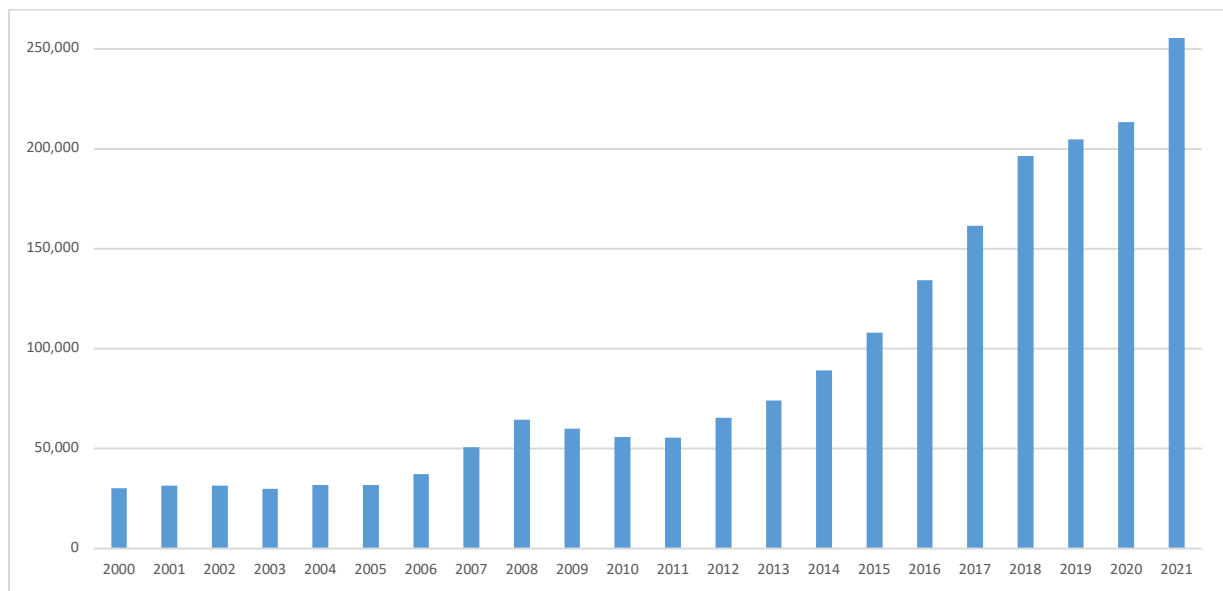
Source: Elaborated with data from the U.S. Department of State.

The temporary worker visas that increased the most in their share of the total number of visas issued from 2000 to 2021 were the NAFTA or TN visas (temporary professionals from Mexico and Canada) and H visas (specialty occupations, registered nurses, etc.—see Table 1). The ones that decreased in their percentage were I visas (members of the foreign media, press, and radio), L visas (intracompany transferees), and P visas (athletes, artists, and entertainers). Figure 13 also shows that even with President Trump's policies, the number of nonimmigrant visas issued increased, except for FY 2020. From FY 2016 to FY 2017 the increase was 3.5%; from FY 2017 to FY 2018 only 1.9%; from FY 2018 to FY 2019 the increase was 4.3%; from FY 2019 to FY 2020 there was a decrease of 34%; and from FY 2020 to FY 2021 an increase of 1.0%.

There was only one type of visa that increased during the pandemic under the Trump administration. This was the only case, but it speaks for itself. This visa, the H2-A, is related to an essential sector: agriculture. The number of H2-A visas has increased in recent years due to their importance and the need for more workers in this sector (Figure 14). H1-B (specialty occupations), H2-B (temporary, non-agricultural workers), and TN visas took a big plunge of around 35% from FY 2019 to FY 2020. The H1-B visa did not recover and in FY 2021 had another big drop. On the contrary, H2-B and TN visas had strong increases for that period. The H2-B visa almost returned to pre-pandemic levels, and the TN visa far exceeded that level. This visa and the H2-A had the highest growth of visas issued during the period from 2000 to 2021 (Figure 15).

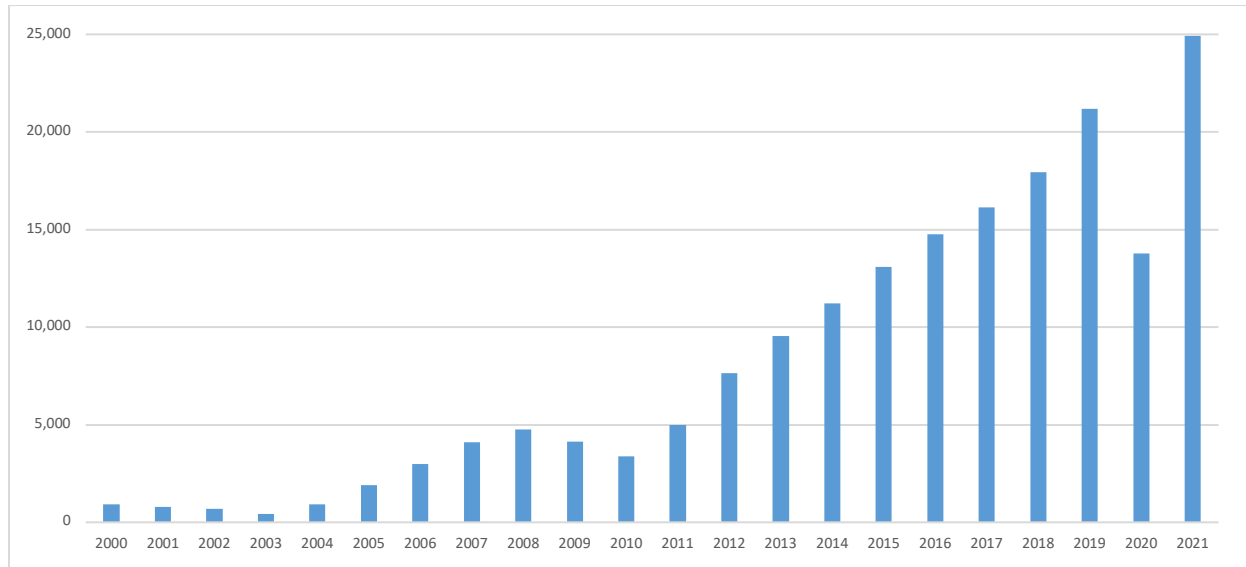
The number of temporary visas is still low and insufficient compared to the number of workers needed in the U.S. labor market to avoid labor shortages. For example, a clear indicator of the labor shortage in the agricultural sector is the fact that the number of H2-A visas requested and approved has increased more than fivefold since 2011. This sector depends on immigrants; indeed, they represent around 73% of all farmworkers in the United States.⁴¹ The H2-B and TN visas, on the other hand, have doubled and quintupled respectively since 2011, both only decreasing in 2020.

Figure 14. H2-A Visas Issued, FY 2000-FY 2021



Source: Elaborated with data from the U.S. Department of State.

Figure 15. TN Visas Issued, FY 2000-FY 2021



Source: Elaborated with data from the U.S. Department of State.

Economic Impact Analysis

Methodology

It would appear that the recent labor shortages in the United States will continue in the following years. Coupling this reality with an analysis of the immigration system, however, may point to a solution. Immigrants have been a major component of the labor market and a key driver of the U.S. economy for years, and they may yet be the solution to the current quandary. Increasing immigration has many additional positive outcomes for the economy, such as the restoration of supply chains, a higher tax base from which to draw revenue, an increase in aggregate demand, and an increase in production that would generate economic growth.

This section analyzes the economic impact of having a labor shortage on the U.S. economy under three scenarios. Two scenarios are based on the lack of immigrants in the U.S. labor market in 2020-2021 to highlight their importance, and the third scenario examines the potential labor shortage by 2030. This analysis was conducted using the Impact Analysis for Planning (IMPLAN) software. IMPLAN estimates the economic impact of different shocks, in this case labor shortages in different sectors of the U.S. labor market. This software combines a set of extensive databases (the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, and the U.S. Bureau of Economic Analysis) with economic factors, multipliers, and demographic statistics. IMPLAN accurately replicates the U.S. economy using a model with more than 540 sectors and the above data.

IMPLAN allows for the identification of direct, indirect, and induced effects. Direct effects refer to the initial changes in U.S. industries due to labor shortages. Applying these initial changes to the multipliers in IMPLAN shows how the economy will respond to them. The multipliers then estimate the changes in related economic sectors that will also be affected by these shortages to generate the indirect effects. The change in employment levels due to direct and indirect effects will affect household income in the United States. So, induced effects are the values derived from household spending due to the changes in household incomes. The sum of these three effects represents the total impact on the U.S. economy of the labor shortage in each of these three scenarios. All of these cases use the 2019 IMPLAN data.

Results

Scenario 1

Due to the COVID-19 pandemic, there were restrictions on the issuance of temporary worker visas that would have allowed immigrants to work legally in the United States. This caused a decrease in the number of potential immigrant workers in the U.S. labor market and contributed to the current job shortage. In this case, the key question is: What is the economic impact of the decrease in the issuance of visas for temporary, foreign-born workers in the United States in 2020 and 2021?

To answer this question, we must examine the issuance of these visas before the pandemic, in the year 2019, and compare it with the number of visas in 2020 and 2021. The difference provides an estimate of the total reduction in those visas and, with this, the reduction of workers who should have been working in those years (labor shortage due to temporary worker visas not granted).

The total number of temporary worker visas in 2019 was 958,812. This figure incorporates the visas established in Table 1. By comparing this number with that of 2020 and 2021, we obtain an estimated reduction of 326,540 visas and 320,234 visas, respectively. By distributing and adjusting these figures based on the distribution of foreign-born workers by occupation for the last few years in the United States, and assuming that those workers who did not enter the U.S. could not work in the sectors that they normally would (based on their distribution of occupation obtained by the Bureau of Labor Statistics or BLS), it is estimated that the reduction of more than 320,000 foreign-born workers in 2020 generates a total loss of around 800,000 jobs in the United States (Table 2). For 2021, the total number of jobs lost is approximately 789,000 jobs (Table 3). The impacts on labor income derived from this scenario are also negative for both years. In terms of GDP (the "Value Added" column in Tables 2 and 3), the total cost of not issuing those visas represents around 0.4% each year. Finally, the loss of taxes collected from all governments under this scenario is about 0.5% of the total revenue collected from the government each year.

Table 2. Economic Impacts of Not Issuing Temporary Worker Visas, 2020

	Employment	Labor Income	Value Added	Total Taxes
Direct	-326,540	\$-21,738,895,278	\$-31,058,754,000	\$-6,880,030,360
Indirect	-182,750	\$-13,011,010,557	\$-22,099,925,531	\$-4,675,168,593
Induced	-295,180	\$-17,182,232,625	\$-29,545,503,178	\$-6,544,098,012
Total	-804,470	\$-51,932,138,460	\$-82,704,182,710	\$-18,099,296,965

Note: Totals were rounded.

Table 3. Economic Impacts of Not Issuing Temporary Worker Visas, 2021

	Employment	Labor Income	Value Added	Total Taxes
Direct	-320,234	\$-21,626,603,464	\$-30,895,429,039	\$-6,832,807,774
Indirect	-179,220	\$-12,932,580,181	\$-21,964,432,588	\$-4,643,067,937
Induced	-289,479	\$-17,074,245,912	\$-29,354,650,459	\$-6,499,173,990
Total	-788,934	\$-51,633,429,556	\$-82,214,512,086	\$-17,975,049,701

Note: Totals were rounded.

Scenario 2

Given travel and immigration restrictions related to COVID-19, there were about 2 million fewer working-age immigrants in the United States between 2020 and 2021, according to Peri and Zaiour.⁴² This figure was obtained by comparing the trend of the foreign-born population of working age (18 to 65) before the pandemic with the current number of this group between 2020 and 2021. Thus, in this case, the shortfall of about 2 million immigrants includes not only those who did not obtain a temporary worker visa, but also those who could not enter the country despite having a permit. Here, the central question is: What is the economic impact of this labor shortage of immigrants in the United States in 2020 and 2021?

The shortfall of about 2 million immigrants should have a negative impact on the U.S. economy, as in the previous scenario. Assuming that the 2 million immigrants are distributed equally each year, and by distributing and adjusting these figures according to the distribution of foreign-born workers by occupation for the last few years in the United States (obtained by the BLS), it is evident that there was a labor shortage of 2 million foreign-born workers in 2020 and 2021, resulting in a total loss of about 4.8 million jobs in the United States (Table 4). The impacts on labor income derived from this scenario are also negative. In terms of GDP, the total cost of this shortfall represents around 1.1%. Finally, the loss of taxes collected from all governments under this scenario is about 1.45% of the total revenue collected from the government from 2020 to 2021.

Table 4. Economic Impacts of a Shortage of 2 Million Immigrants from 2020 to 2021

	Employment	Labor Income	Value Added	Total Taxes
Direct	-2,000,000	\$-134,688,969,541	\$-190,804,887,574	\$-43,012,742,061
Indirect	-1,053,032	\$-75,903,275,924	\$-128,764,018,369	\$-27,009,822,253
Induced	-1,765,599	\$-104,140,592,650	\$-179,045,681,890	\$-39,641,217,686
Total	-4,818,632	\$-314,732,838,115	\$-498,614,587,832	\$-109,663,782,000

Note: Totals were rounded.

Scenario 3

In this scenario, the total labor shortage by 2030 in the United States is approximated based on Deloitte's estimate of 2.1 million unfilled jobs in U.S. manufacturing by 2030.⁴³ This figure was obtained by adding the new jobs in this sector (due to its expected growth) to the number of open jobs due to retirements. Then, the jobs likely to be filled in this sector were subtracted to obtain the 2.1 million unfilled jobs by 2030. With that figure, we can calculate the number of unfilled jobs for the other economic sectors using the distribution of workers in those sectors provided by BLS data. Based on this, the total number of unfilled jobs in the United States is estimated to be approximately 4.09 million. Here, the key question is: What is the economic impact of this labor shortage in the United States by 2030?

The shortfall of about 4.09 million unfilled jobs would have a negative impact on the U.S. economy, as in the previous scenarios. Assuming that this figure is distributed equally each year until 2030 and that these vacancies can only be filled by immigrants, and by distributing and adjusting these figures according to the distribution of foreign-born workers by occupation for the last few years in the United States (obtained by the BLS), it is estimated that the labor shortage of 4.09 million foreign-born workers by 2030 results in a total loss of about 9.8 million jobs in the United States. (Table 5). The impacts on labor income derived from this scenario are also negative. In terms of GDP, the total cost of this shortfall represents around an average of 4.3% each year until 2030. Finally, the loss of taxes collected from all governments under this scenario is about 4.5% of the total revenue collected from the government by 2030.

Table 5. Economic Impacts of a Shortage of 4.09 Million by 2030

	Employment	Labor Income	Value Added	Total Taxes
Direct	-4,089,692	\$-310,060,898,669	\$-438,693,054,376	\$-98,528,132,439
Indirect	-2,153,286	\$-174,122,954,519	\$-295,097,236,349	\$-61,870,679,822
Induced	-3,610,374	\$-238,906,783,135	\$-410,182,337,604	\$-90,805,071,088
Total	-9,853,352	\$-723,090,636,324	\$-1,143,972,628,329	\$-251,203,883,348

Note: Totals were rounded.

Conclusion

The problem of labor shortages in the U.S. economy has worsened in recent years. Labor shortages will persist in the United States due to many factors, including a low level of labor force participation that is partly due to an aging workforce and changing demographics as well as a reduction in immigration. These trends will negatively affect economic growth and, with that, the well-being of all Americans. The first two trends are hard to reverse, but immigration can play an important role in correcting labor force problems. Indeed, immigrants have been a major driver of the U.S. economy for many years, even though they are a small share of the U.S. workforce. Migrants are here to work and have already proven both valuable and essential to the U.S. economy. In addition, immigration has secondary macroeconomic benefits, such as stimulating investment and bolstering labor market efficiency.⁴⁴

To solve the immediate problems of the labor shortage, that is, to close the labor gap between jobs available and workers willing to work, we have to increase the labor supply through higher levels of immigration. Immigrants should be allowed to work in the United States legally, either permanently or temporarily. Doing so is beneficial for the U.S. economy and immigrants themselves. The United States should begin by finding a solution for the approximately 10.4 to 11 million undocumented immigrants currently residing in the United States—many of whom already work in essential U.S. industries. The government should also expand some of the current temporary visa programs and design different programs for additional temporary workers. For example, the NAFTA or TN visas could be expanded to include not only high-skilled workers, but other types of workers as well. They could also be expanded to encompass workers from Central America instead of only from Mexico and Canada.

In the end, this paper shows the importance of immigrants in the U.S. economy and how they can help solve a growing labor shortage. The lack of immigrants in its labor force in the three aforementioned scenarios has caused and will continue to cause profound economic losses. Immigrants are a potential solution for this problem. American companies need workers, and foreign-born people need jobs. It is an ideal match. Taking advantage of it only makes sense.

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