Recent Immigration Has Been Good for Native Employment

May 3, 2018

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The authors are grateful to the Bipartisan Policy Center for providing financial support for this research via BPC contract 17-IMM-102. The authors would like to thank Theresa Brown, Dennis Feehan, Joshua Goldstein, Hunter Hallman, Carl Mason, Kenneth Megan, Jose Perales, and Cristobal Ramon for providing helpful comments and advice during the project. All errors and opinions are our own.

Introduction

Groups in favor of reducing immigration often voice the concern that immigrants compete with natives for jobs, and that competition reduces the rates that native U.S. workers are employed. This perspective stems from basic economic laws of supply and demand, in which an increase in the supply of immigrant workers should push down wages or produce unemployment when other things are held constant.

It is true that the laws of supply and demand apply to all participants in the U.S. economy: all residents, all businesses, all workers, and all owners of capital must reckon with the market conditions where they operate. But U.S. workers are not a monolithic group, nor are U.S. businesses or consumers, and nor are U.S. immigrants. While many immigrants have low levels of education compared to natives, some possess advanced degrees. Similarly, U.S. workers are a diverse group. Not all U.S. workers compete with immigrant labor; some are coworkers or supervisors who benefit from their presence. The impact of immigration on U.S. jobs is only guaranteed to be negative in simple economic theory without combinations or adjustments. In reality, the impact could be zero, or it could even be positive if immigration expands new business opportunities by stimulating the demand for labor. We need to examine data in order to reveal the true story.

When we examined trends in employment rates of native U.S. workers compared to trends in foreign-born shares of the local labor force between 2005 and 2016, we found that employment rates for native workers actually rose by a small amount when more immigrants arrived. This pattern held true across a diverse set of U.S. regions and did not reflect any exodus of native workers from the labor force. The data show that the presence of immigrant labor coincided with enhanced employment opportunities for native workers during this period, meaning that the arrival of these individuals does not reduce native employment rates.

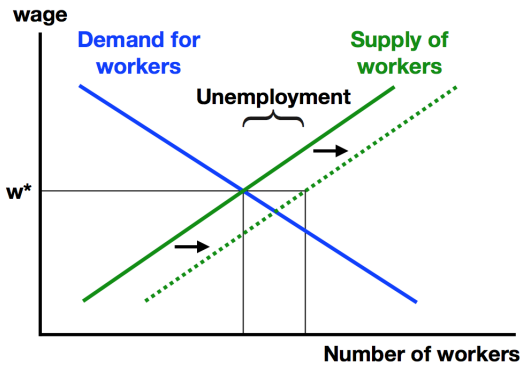
These results have significant implications for the policy debate around immigration. While economic vulnerability among U.S. workers and families is a real phenomenon, our findings – especially the fact that immigration does not coincide with lower native employment rates – should prompt a reassessment of policies that seek to restrict immigration because of an assumption that immigrants take jobs from native workers. We believe that policymakers should approach reforms to immigration policy with a modern perspective of the evidence, which does not show significant job effects of immigration.

Basic Economic Theory

Sometimes policymakers and interest groups who are opposed to immigration voice the concern that immigrant workers will cost Americans jobs, as if there is a fixed and unchanging number of available jobs. In this view, immigrant workers by their very presence must be taking jobs away from native workers. This popular misconception, often called the "Lump of Labor Fallacy," is implicitly held in many spheres of public policy, but is uniformly rejected by economists across the political spectrum.[1] A compelling counterexample in the U.S. is the monumental rise of female labor force participation from 32% to 60% between 1950 and 2000, which did not reduce male employment by 28% over this same period.[2]

Economic theory begins with the reality that workers supply labor in markets, where competing and complementary factors like other similar workers, managers, subordinates, and technology all play important roles. Simple economic theory suggests that without any shift in the demand for workers, an increase in the supply of workers should either reduce wages or raise unemployment, for example if workers cannot afford to earn less. This dynamic is illustrated in Figure 1A below, where w* indicates the original equilibrium wage at which all workers looking for work could find a job, and the labor supply curve has shifted outward to the right because of the arrival of immigrant workers. The new intersection of supply and demand implies that wages should fall, but if workers cannot afford to work for less than the original wage, unemployment will increase instead.

Figure 1A. An Increase in the Supply of U.S. Workers



This reasoning is sound but potentially incomplete. First, the arrival of immigrant workers could prompt U.S. businesses to invest in new capital: acquiring more equipment, structures, and machinery to complement the additional labor. Second, the arrival of immigrant workers could make native U.S. workers more productive, if immigrants' skills and talents are more complementary with those of natives rather than being direct copies. For example, the availability of immigrant labor could enhance the productivity of natives through more efficient division of tasks and responsibilities between them, playing to the unique strengths of each.[3]

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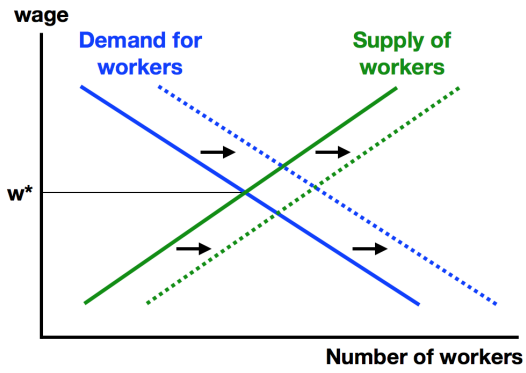
[1] For a view from the right, see John F. Cochrane (2016) "Trade and Immigration," Chapter 9 in George P. Shultz, ed., *Blueprint for America*, Palo Alto: Hoover Institution, pp 109-125. For a view from the left, see Paul Krugman (2003) "Lumps of Labor," *The New York Times* October 7, 2003.

[2] Cochrane, p. 115.

[3] For a discussion of capital investment behavior by firms and worker complementarity, see Ryan Edwards and Francesc Ortega (2016) "The Economic Impacts of Removing Unauthorized Immigrant Workers An Industry- and State-Level Analysis," *Center for American Progress Report.* And Ryan

Both of these stories suggest that immigration might increase the demand for U.S. workers by making them more productive. Figure 1B shows the two dynamics together, which could either raise or lower native employment and wages, depending on the size of these two effects.

Figure 1B. Increases in the Supply and Demand for U.S. Workers



There are many examples of economic phenomena where simple theory is equivocal. The earlier example of the sea-change in women's work during the second half of the 20th century is one. If only large increases in female labor supply were occurring, the simple model would predict large reductions in wages for men and for subsequent, younger cohorts of women. History has shown the reverse to be the case. The demand for labor must have shifted strongly outward due to advancing technology and ostensibly to new complementarities in production between male and female workers.

Another famous example is the case of the college wage premium, which is a persistently large bonus in the earnings of U.S. workers who hold a 4-year college degree compared to other workers.[4] Despite sustained increases both in the absolute number and relative share of workers with a college degree over the past several decades, the college premium remains large. This pattern implies that a significant increase in the demand for college-educated workers must have coincided with the expansion in their supply, and it must be continuing.[5]

Simple economic theory alone cannot reveal or model these nuances of realities. Rather, it is the application and testing of a variety of theoretical perspectives with observed patterns in the data that reveal the truth.

Because basic economic theory is ambiguous about the full effects of immigration, we must turn to an empirical examination in order to assess the effect of immigration on native employment. Before we describe our analytical framework and our results, we discuss the data that we examine and the broad contours of recent patterns in U.S. immigration that they reveal.

Edwards and Francesc Ortega (2017) "The economic contribution of unauthorized workers: An industry analysis," *Regional Science and Urban Economics* 67(2017): 119–134.

[4] For background and a discussion of recent trends, see: Robert G. Valletta (2018) "Recent Flattening in the Higher Education Wage Premium: Polarization, Skill Downgrading, or Both?" In *Education, Skills, and Technical Change: Implications for Future US GDP Growth*, Charles R. Hulten and Valerie A. Ramey, editors. Chicago: University of Chicago Press. Forthcoming.

[5] Charles I. Jones (2016) *Macroeconomics, 4th ed.* Chapter 7. New York: Norton.

Recent Trends in Immigration

The U.S. is a nation of immigrants, both figuratively speaking with regards to its historical origins, and literally because of trends in the share of the population who are immigrants. In 2016, nearly 44 million U.S. residents were foreign-born, representing 13.5% of the population. This is near the historical peaks of the late 19th and early 20th centuries, as shown in Figure 2A.

Figure 2B spotlights trends in recent data, especially the annual waves of the American Community Survey (ACS) which begins in 2005 and continues through 2016, the most recent public release. The ACS was introduced by the U.S. Census Bureau as a replacement for the long form of the decennial census, and it contains detailed characteristics that are measured annually for about 1% of the U.S. population. As Figure 2B depicts, the immigrant share of the population actually plateaued and fell slightly during the Great Recession of 2007-2009 before resuming a more gradual upward climb.

Figure 2A. The foreign-born share of the U.S. population since 1850

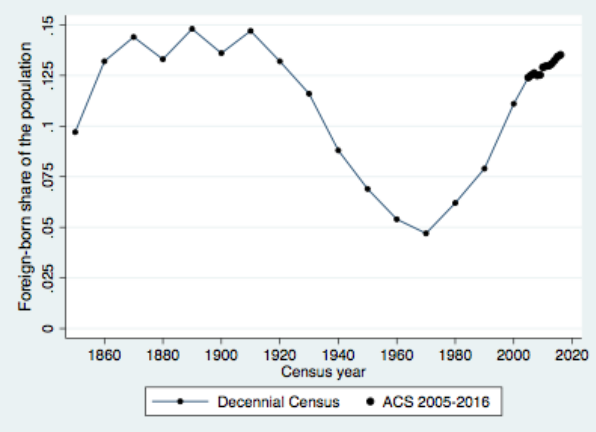
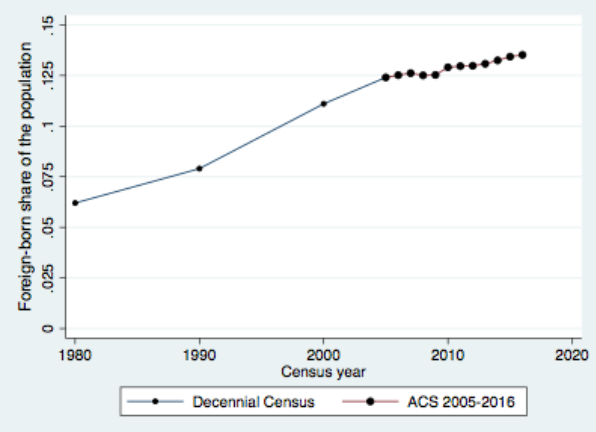


Figure 2B. The foreign-born share of the U.S. population since 1980



Notes: Statistics are drawn from the decennial Census up to 2000 and the American Community Survey from 2005 onward.[6]

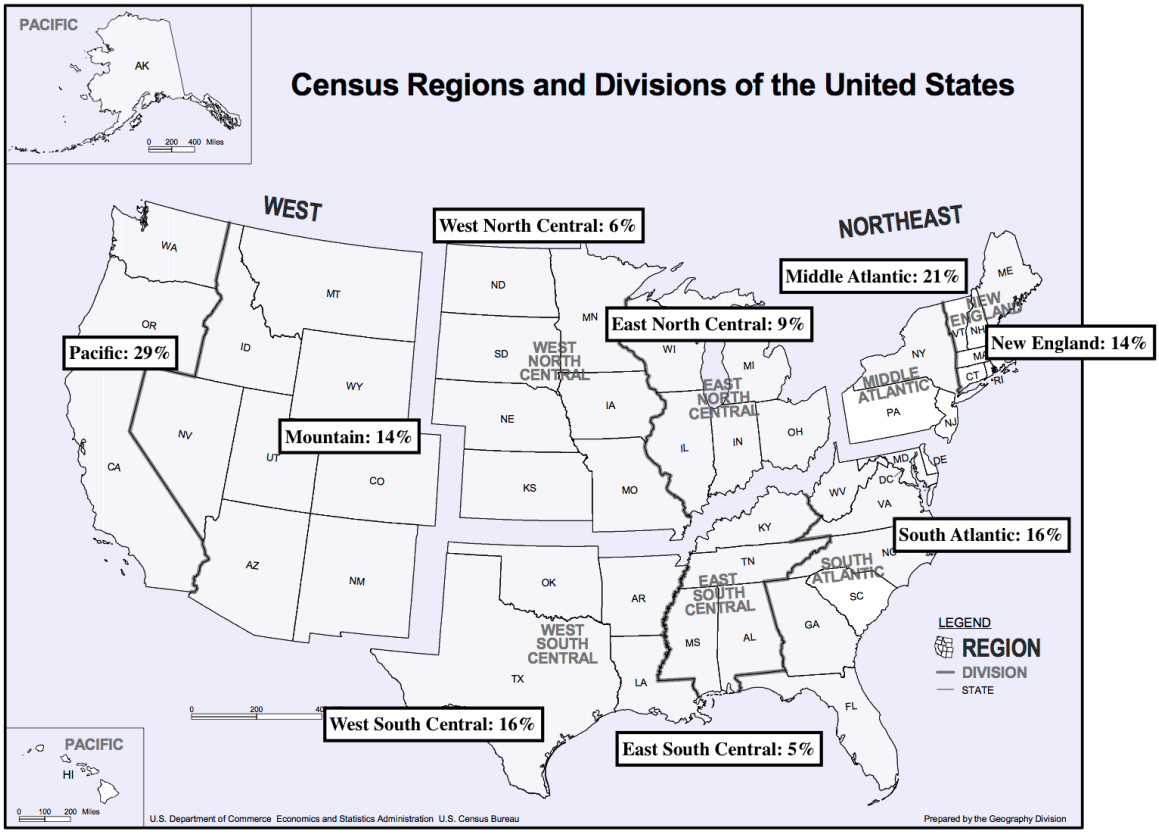
Underneath these national trends are strikingly different levels and trends in the immigrant share across U.S. geographic regions. We can most easily visualize these when we focus on the nine geographic divisions defined by the U.S. Census Bureau.[7] Figure 3 displays the foreign-born shares of the labor force, consisting of all employed workers plus the unemployed,

[6] Historical statistics are provided by Mary C. Waters and Marisa Gerstein Pineau, eds. (2015) *The Integration of Immigrants into American Society*. Panel on the Integration of Immigrants into American Society, Committee on Population, Division of Behavioral and Social Sciences and Education, National Academies of Sciences, Engineering, and Medicine. Washington: National Academies Press.
Annual data from 2005-2016 are derived by the authors from the American Community Survey extracts provided by Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek (2018) *Integrated Public Use Microdata Series: Version 7.0* [dataset]. Minneapolis: University of Minnesota. https://doi.org/10.18128/D010.V7.0.

[7] The Census Bureau graphically depicts regions and divisions in a map of the 50 states here: https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

for each U.S. division in 2010. Although immigrants as a group differ from natives in terms of their age structure and are more likely to be of working age, regional patterns in the percent foreign-born are similar whether we examine the total population or the labor force. Because we are concerned with labor market impacts in this study, we focus on the labor force.

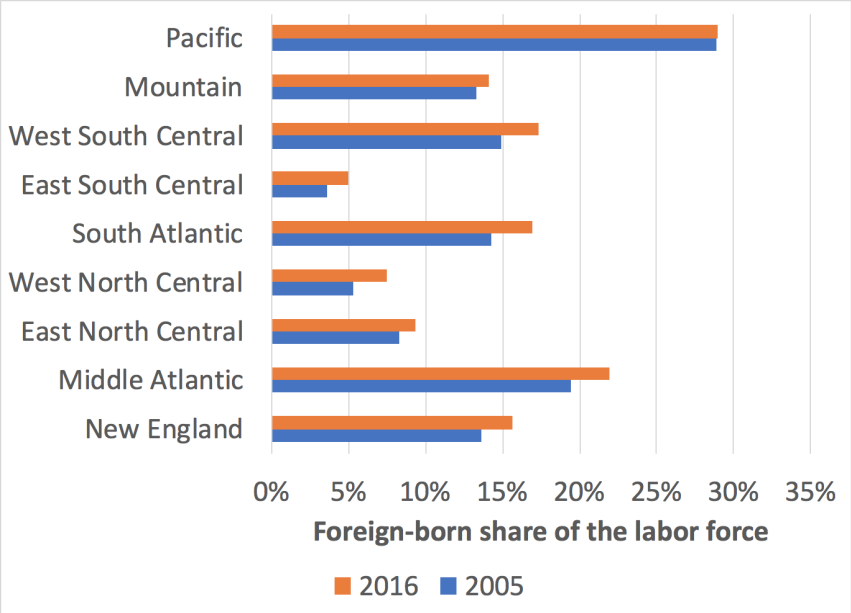
Figure 3. Foreign-born shares of the labor force across U.S. regions, 2010



Notes: Statistics are drawn from the American Community Survey and displayed over original map produced by the U.S. Census Bureau.

The lowest immigrant share of the labor force across U.S. regions in 2010 was 5% in the East South Central region, which consists of Alabama, Kentucky, Mississippi, and Tennessee. The highest share was 29%, or almost six times larger, in the Pacific region, which includes Alaska, California, Hawaii, Oregon, and Washington state. Between these extremes, the immigrant share in the other seven regions still varied broadly, ranging from 6% in the West North Central region, which includes Iowa, Kansas, Minnesota, Missouri, Nebraska, and North and South Dakota; to 21% in the Middle Atlantic region, consisting of New Jersey, New York, and Pennsylvania.

Figure 4. Foreign-born shares of the labor force across U.S. regions, 2005 and 2016



Notes: Statistics are drawn from the American Community Survey.

In addition to these large differences in the immigrant share across geographic regions at one point in time, there also are large differences across regions in how those shares are changing over time. As shown in Figure 4, the Pacific division maintained the largest share of immigrants in its labor force over the period, which was virtually unchanged at 29%. But other divisions with lower immigrant shares experienced large increases. Absolute percentage-point increases, visible in the differences between the two bars for each region, were largest for the Middle Atlantic region, consisting of New Jersey, New York, and Pennsylvania, and also for the West South Central region, which includes Arkansas, Louisiana, Oklahoma, and Texas. Those regions began the period at 19% and 15% respectively and ended at 22% and 17%.

For regions less historically accustomed to immigration like the West North Central and East South Central regions, which are described above, increases were smaller in absolute terms but very large on a proportional basis. The percent foreign-born in the West North Central region rose 40% from 5% to 7%. The East South Central region began from a smaller base share of 3.6% and experienced a similarly large percentage increase. In summary, Figure 4 reveals there are great asymmetries across regions in recent levels and changes in immigration.

These recent patterns of immigration have sometimes been called the "new geography of immigration."[8] This dynamic is often thought to be associated with an increase in economic production in suburban as opposed to dense urban areas. Whatever the cause or correlates might be, this new geography of U.S. immigration implies that regions which currently receive the most immigrants do not benefit from the historical experiences of traditional immigrant-

[8] Audrey Singer (2004) "The Rise of New Immigrant Gateways" Brookings Institution, Living Cities Census Series, February. Audrey Singer (2009) "The New Geography of United States Immigration," *Brookings Immigration Series*, No. 3, July. Douglas S. Massey (ed.). (2008). *New faces in new places: The changing geography of American immigration*. Russell Sage Foundation.

receiving areas. And if the new geography of immigration is indeed driven by the growth of employment opportunities in suburban areas, one may expect that native workers, employers, and industries in the new receiving regions are keenly aware of the presence of new immigrants and may be interested in assessing their role in the changing economy.

As we have discussed, simple economic theory is equivocal on this question, and providing a full answer requires examining the data. In the next section, we explain our analytical framework and estimation approach and discuss how it mirrors the state-of-the-art in the relevant scholarly research.

Analytical Approach

If it were possible, the ideal way to assess the effect of immigration on native employment would be to examine a labor market before and after an influx of immigrant workers, and then compare what happened to a *counterfactual* case where the very same labor market was observed during the same period but without the new immigrant workers. Because this ideal comparison cannot be observed, social scientists usually seek instead to compare changes over time they can observe among labor markets that fit the characteristics of *control* and *treatment* groups, just like in a randomized medical trial.

The most famous example of a study comparing control and treatment groups in the field of immigration research is the comparison of the Miami labor market around 1980, which received a large number of Cuban "Marielitos" as refugees from the Castro regime, to a set of reasonable "control" cities during the same period.[9] By failing to recover evidence of any reduction in local wages or employment in Miami relative to other cities, the original study turned conventional wisdom on its head. Academic controversy about this result continues, with much focus on narrowly defined groups of vulnerable native workers and whether the underlying data are rich enough to accurately measure their conditions.[10] Although disagreements remain, the consensus in academic thinking about the economic impacts of immigration on natives is that effects are usually small or zero and tend to vary across native characteristics.[11]

In a new study, we revisit this question by comparing a broad array of geographic labor markets "treated" with increased immigration to another broad array of labor markets that are not.[12] We use a standard statistical estimation technique and we apply it to a relatively new and rich dataset, the 12 publicly available annual waves of the American Community Survey (ACS).[13] Our technique, which is commonly used in applied social science literatures, is a generalization of the method that compares changes over time among treatment and control groups to estimate the effect of the treatment, which in this case is higher immigration.

Each annual wave of the ACS provides roughly 3 million observations of residents in households. Our unit of analysis is the Public Use Microdata Area (PUMA), of which there are roughly 1,000 that do not cross state or regional boundaries. PUMAs are similar to counties

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[9] David Card (1990) "The Impact of the Mariel Boatlift on the Miami Labor Market," *Industrial and Labor Relations Review* 43(2): 245-257. George J. Borjas (2017) "The Wage Impact of the Marielitos: A Reappraisal," ILR Review, vol 70(5), pages 1077-1110. Giovanni Peri and Vasil Yasenov (2015) "The Labor Market Effects of a Refugee Wave: Applying the Synthetic Control Method to the Mariel Boatlift," *NBER Working Paper* 21801. Michael A. Clemens and Jennifer Hunt (2017) "The Labor Market Effects of Refugee Waves: Reconciling Conflicting Results," *NBER Working Paper* 23433.

[10] See especially Borjas, ibid. and Clemens and Hunt, ibid.

[11] Two reports of expert panels convened by the National Academies of Sciences on the subject speak with largely the same voice on the state of the scientific literature: James P. Smith and Barry Edmonston, eds. (1997) The New Americans: Economic, Demographic, and Fiscal Effects of Immigration. Panel on the Demographic and Economic Impacts of Immigration, Committee on Population and Committee on National Statistics Commission on Behavioral and Social Sciences and Education, National Research Council. Washington: National Academy Press. And Francine D. Blau and Christopher Mackie, eds. (2017) The Economic and Fiscal Consequences of Immigration. National Academies of Sciences, Engineering, and Medicine. Washington: National Academies Press.

[12] Ryan D. Edwards and Mao-Mei Liu (2018) "A new look at immigration and employment in the U.S. since 2005," research note.

[13] The method is panel fixed effects, which is a generalization of the difference-in-differences estimation used by Card, ibid. and many others. Details are discussed in Edwards and Liu, ibid.

(which number approximately 3,000), but are larger than the smallest counties by population. The Census Bureau designed the PUMAs in order to capture the highest geographic resolution annually, while preserving the anonymity of survey respondents.

For our study, we examine PUMAs rather than counties or other levels of geography in order to examine dynamics at the smallest geographic level possible while preserving critical variation over time and maintaining a national scope to our study. Within each PUMA, we examine how the employment rate among native workers changed with the immigrant share of the labor force. Our standard estimation technique then compares changes in the native employment rate within geographic labor markets that are treated by more immigration to changes in native employment within markets where there are different or no changes in immigration. By holding constant other measured influences on employment, the technique then ascribes the observed difference to immigration.

Box 1: Methodological Details in Brief

We report results based on a standard model in social science that compares changes over time in native employment rates (Y) observed in small geographic areas (PUMAs) with high immigrant labor force shares (X) versus those observed in areas with low immigrant labor force shares. The technical name for this model is a panel regression with PUMA fixed effects, and it is a generalization of the difference-in-differences approach described in the text.

In this approach, we follow the standard procedure of controlling for other PUMA-level variables (Z) that might also affect native employment rates and might also be changing. These include the age structure of the population; percent male; percent in five race/ethnicity categories, including percent Latino or Hispanic; percent in seven educational attainment categories; percent living in a metro area; and indicator variables for each year in the sample (2005-2016).

This method identifies an effect of the immigrant labor force shares (X) associated with the native employment rate (Y) that is analogous to what a researcher would find when comparing two otherwise identical labor markets, one of which received an influx of immigrants while the other did not.

Native Employment Climbs with Immigration

Contrary to what the basic economic theory of immigration predicts, we find that rising foreign-born shares of the local labor force are associated with increases in native employment rates over the 2005-2016 time period. **Our model predicts that with every percentage point increase in the foreign-share of the labor force, native employment rate will *rise* by between 0.055 to 0.075 percentage points**, a small but statistically significant effect on local labor markets that is economically meaningful.

In the average sample area, one percent of a PUMA's labor force is about 1,500 workers, while one percent of native employment is roughly 1,100 jobs (the average PUMA has a ratio of immigrant to native workers of 4 to 21). Using the midpoint of our estimated effects, a coefficient of 0.065, we find that an increase of 20 immigrant workers is associated with about 1 native job created. **This result is noteworthy because it stands in stark contrast to the dire predictions of a simple model in which immigrant workers displace natives.**

It is also remarkable because it implies that labor force responses to immigration consist of more than just a keep-working or stop-working response by natives who are already working. **Our central result suggests that immigrant and native workers combine in the job market in productive ways that can expand the jobs available**. For example, the rapid expansion of hires in a workplace might cause the creation of new management or human resources positions that would not have existed but for the presence of the additional workers. Immigrant workers are diverse, with many varying levels of education and skills, but patterns in the employment of immigrants by occupation reveal that language skills are variable and important in how businesses allocate different types of workers to different tasks.[14] Firms might approach the challenge of heterogeneous skills among workers as an opportunity, by combining the unique services of immigrant workers with the unique skills of new hires of native-born workers.

Robustness of the Result

We ran our results through a wide range of specification checks to ensure the main findings endured. Overall, our results are robust. **We found that our results were stronger in geographic areas with higher population density than in less dense geographic areas**, but there was a small positive response of native employment to immigration in both types of areas. This implies that our estimate of the national effect of immigration based on trends across geographic areas was a slight underestimate of the true average effect on native U.S. residents as a whole. This is because treating geographic areas as the unit of observation, without accounting for their population differences, weights the experiences of denser urban areas the same as the experiences of less dense rural areas. The unweighted results are certainly still relevant, because our politics are sometimes weighted toward the interests of states and other geographies, irrespective of population density. But because of stronger effects in higher population areas, more Americans overall are seeing these positive employment effects.

A major concern we had was whether our primary outcome measure, the *employment* rate of native workers, sufficiently captured all potential effects of immigration on native workers. As discussed in the accompanying box, the *employment rate* is the share of the labor force with a job. A more familiar measure is the unemployment rate, which is the share of the labor force

[14] Kenneth Megan (2015) "Immigration and the Labor Force, Part II," *Bipartisan Policy Institute Blog Post,* September 21.

without a job and officially unemployed, and those two numbers sum to 100%. A potential problem with using this type of outcome measure is if native workers *become discouraged* and drop out of the labor force because of competition from immigrants. To explore this possibility, we re-estimated models with the employment-to-population ratio, a measure that does not suffer from the same ambiguity related to the effect of worker discouragement. If immigration discouraged native workers from seeking work, the native employment-to-population ratio would fall and thus reveal new information. But our results using the employment-to-population ratio revealed no evidence that immigration was pushing native workers out of the labor force. **More immigrants were associated with more native employment, measured either as a share of the labor force or of the population.**

Box 2: Unemployment and Employment Rates and Employment-to-Population Ratios

The official **unemployment rate**, reported at 4.1% in March 2018, is derived as the ratio of the unemployed to the sum of employed workers plus the unemployed. Individuals are defined to be unemployed if they are not currently working but are actively looking for work. The denominator in this ratio, the sum of all employed workers plus the unemployed, is called the labor force.

In this study, we examine the **employment rate**, which equals 100% minus the unemployment rate and measures the share of the labor force that is employed. Again, the denominator is the labor force.

A similar measure is the **employment-to-population ratio**, which is constructed as the ratio of employed workers to the total population. The denominator in this statistic is much broader and is comprised of the labor force; discouraged workers who are no longer looking for work; and students, retirees, homemakers, and others not engaged in formal labor markets.

Because discouraged workers and other people are excluded from one measure and not the other, the two are often different. During the Great Recession of 2007-2009, both the employment rate and the employment-to-population ratio declined precipitously at first. In the years since, the employment rate has fully returned to pre-recession levels of about 96%, but the employment-to-population ratio has not and currently hovers at 60.4% or roughly the level it was in 1986.

We were also concerned whether the inclusion of the Great Recession in the time period spanned by our data somehow artificially created the results we found or meant that they implied something different than what they appeared to imply. The time period of our analysis, 2005-2016, was tumultuous and eventful, and it included the boom years before the Great Recession, the Great Recession itself, and the prolonged recovery. We were most concerned that the recession may be driving the result "in reverse," namely showing us reductions in immigrant labor and in native employment, and both likely in response to the recession itself and not because of one another. We found this was not the case, **that the main driver of the results was coming from periods of growth in both immigration and in native employment. In particular, it appeared that the era of expansion prior to the Great Recession was a time during which native employment appeared to expand strongly alongside immigration.**

Past theory and evidence propose that the effect of immigration will vary for different groups of native workers, and to explore this we re-estimated our model using labor market outcomes for

different groups of native workers defined by their educational attainment. **We found that the positive effect of immigration was stronger among natives with more education, while the effect was statistically insignificant among natives with less education. The largest positive effect of immigration was on the employment of native workers who had some college education but not a four-year college degree, which we found to be an interesting result.**

We also explored how our result varied across the nine Census regions. What emerged is a snapshot of considerable diversity, which is depicted in Figure 5. We found large and statistically significant influences of immigration on native employment in five of the nine regions, which were a mix of areas with low and high immigrant shares alike. As Figure 5 shows, we found coefficients greater than 0.090 and statistically significant for:

- The Mountain region (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming);
- The West South Central region (Arkansas, Louisiana, Oklahoma and Texas); and
- The East North Central region (Illinois, Indiana, Michigan, Ohio, and Wisconsin).

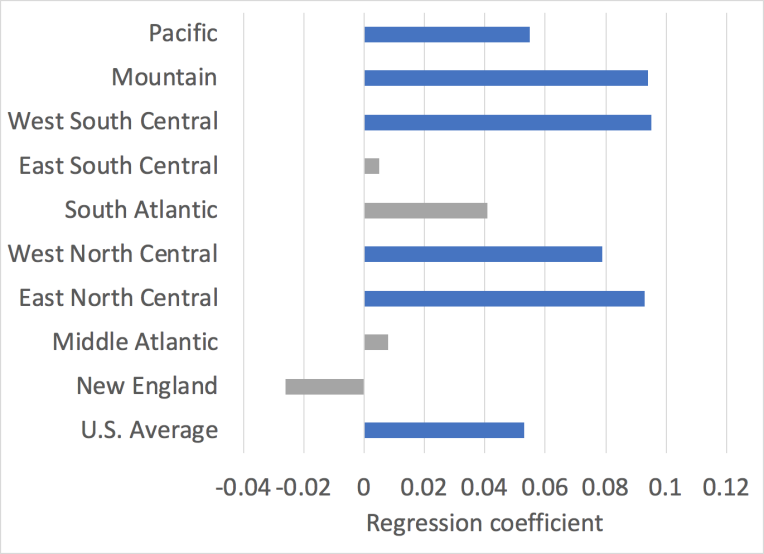
In these three regions, the coefficient hovered around 0.094.
We also found large, positive effects of immigration for:

- The West North Central region (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota); and
- The Pacific region (Arizona, Pacific region (Alaska, California, Hawaii, Oregon and Washington).

The coefficient was 0.079 in the West North Central region, where immigration was very low but grew rapidly during the period; and it was 0.055 in the Pacific region, where immigration was the highest and remained high.

In the four other divisions, the estimated effect of immigration was statistically insignificant, positively signed in three cases and negatively signed in the New England region. A noteworthy result is the null effect of immigration in the Middle Atlantic region, comprising New Jersey, New York, and Pennsylvania and containing the second-highest share of foreign-born workers of all regions.
As we have seen, there is great variation in both the levels and changes in the immigrant share across regions. However, we found that **the size of the positive employment effect was *not* explained by a region's immigrant share, which cNeither was it explained by how fast the immigrant share was changing.** We suspect that differences in the native employment effect across regions may be associated with the geographic variation in industries and the differential changes in the health of those industries over time. But a complete view awaits future investigation.

Figure 5. Diversity of Model Results Across U.S. regions



Notes: Each bar represents a coefficient from a different regression of the native employment rate on the immigrant share of the labor force

The differences across regions in the effect of immigration on native employment is an opportunity for us to expand our understanding of the dynamics of immigrant absorption. It is not a simple story about positive effects on natives in traditional immigrant-receiving areas and negative or zero effects elsewhere, nor is it the reverse. The geography of immigration has changed dramatically over the past several decades and finding that it appears to matter for the labor market impacts on natives is an area ripe for additional research.

Conclusion: U.S. Immigration and Native Employment Have Risen Together

This study reviewed U.S. Census Bureau data to examine how changes over time in immigrant shares of the labor force is or is not related to changes over time in the employment rates of native workers within 1,000 local labor markets defined by geography. Simple economic theory suggests that without any offsetting influences, increases in the foreign-born share of the local labor force that are driven by increases in the supply of immigrant workers might reduce employment rates among native workers.

In stark contrast to this prediction, we find robust evidence that between 2005 and 2016, employment rates among native workers rose when the immigrant share of the local labor force increased. **Immigrant workers did not displace natives from jobs, as might be predicted by a simple model in which all workers were identical and businesses did not shift strategies to employ workers productively.** Rather, our analysis suggests either that native workers combined with new immigrant labor in productive ways that created more employment opportunities for natives, such as leveraging new divisions of labor; or businesses expanded by outfitting their workers with more equipment and machinery; or both may have occurred.

Perhaps most surprising and compelling was the broad-based geographic robustness of this result. **Areas with already high shares of immigrant labor were not the only areas that benefitted from the arrival of new immigrants.** Instead, we found evidence of substantial employment gains enjoyed by native U.S. workers in traditionally immigrant-scarce regions as well as by native workers in immigrant-plentiful regions.

The size of the effect we estimated was substantial but not enormous. Our estimates imply that every increase of 20 immigrant workers was associated with 1 additional job held by a native-born worker during the sample period. Native U.S. workers with some college experience but less than a 4-year college degree appeared to benefit the most in terms of employment from the presence of new immigrants. The 1:20 ratio of new jobs for natives to new immigrant workers seems consistent with a story of complementarities between classes of workers that other studies appear to confirm.

The data suggest that in recent times, the presence of immigrant workers has not been a threat to native-born U.S. workers at all, but instead a source of modest but real employment gains.