

# *the* CATO JOURNAL

AN INTERDISCIPLINARY JOURNAL OF PUBLIC POLICY ANALYSIS

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# INTRODUCTION

## THE ECONOMICS OF IMMIGRATION

*Alex Nowrasteh*

Immigration was the most distinctive policy issue debated in the 2016 presidential election. The issue dominated the election in sharp contrast to every other election in U.S. history, where it was generally a minor concern. In his first speech announcing his candidacy for president, then-candidate Donald J. Trump argued that immigration, legal and illegal, posed a serious problem for the United States. He said, Mexico is “sending people that have lots of problems. . . . They’re bringing drugs. They’re bringing crime. They’re rapists. And some, I assume, are good people.”

Trump’s criticism hinges on the economic impact of immigrants. His unexpected victory put immigration at the front and center of the national debate and forced us to take his policy recommendations seriously. Candidate Trump emphasized border security and a border wall to stop illegal immigration, but he also spoke about his desire to restrict legal immigration. His statement of principles on immigration, if turned into law, would cut legal immigration by about two-thirds and potentially halt illegal immigration.

This edition of *Cato Journal* brings together leading scholars who have written widely on the economics of immigration. They presented their research at a Cato Institute conference on “The Economics of Immigration” on September 2, 2016, funded by the generous support of the Searle Freedom Trust and the Ewing

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Marion Kauffman Foundation. This volume is based on their conference papers, which summarize some of their most relevant and interesting findings related to the economics of immigration. As President Trump finishes his first year without significant new immigration legislation, this volume is published at just the right time to add to the public debate.

In the language of economics, Trump's criticism of immigrants is that the costs they impose on American society exceed the benefits they produce. Although he focuses on their supposed criminal behavior, the low rate of immigrant incarceration and falling crime rates in areas with more immigrants indicate that this is not a serious argument against immigration.

The human capital component of his complaint is more subtle but also more serious. Immigrants do tend to be less educated than natives although the gap is narrowing. Their lower levels of human capital mean that they are generally less productive and thus earn lower wages, potentially competing with many lower-skilled Americans.

Immigration could have an overall positive effect on American economic growth but lower wages for Americans at the low end of the labor market. The articles by *Giovanni Peri*, *Ethan Lewis*, and *Alan de Brauw*, show that is not the case. They find immigration has had only a small effect on the wages of native-born Americans.

Although the impact of immigrants on the labor market gets the most attention in public policy debates, the impact on the housing market is also important. The next three articles discuss that aspect of immigration. *Gary Painter* examines how immigrants make housing decisions and how those decisions affect local housing markets. *Susan Wachter* explains how natives and immigrants sort themselves after settling here and how they impact neighborhoods, and *Jacob Vigdor* explores how immigrants affect county-level economic indicators such as housing prices and finds that they add trillions of dollars in value to the national housing stock.

Immigrant entrepreneurship is an important driver of innovation and firm creation in the United States. *Magnus Lofstrom* shows that immigrant self-employment has grown dramatically over time and exceeds that of native-born Americans, especially for those with lower education. *Benjamin Powell* and *Ryan Murphy* both show how immigration affects political and economic institutions and thus future economic growth.

In the final two articles, *Douglas Massey* and *Bryan Roberts* present different explanations for the flow of illegal immigrants. Massey argues that immigration enforcement has virtually no effect on the flow of illegal immigrants to the United States while Roberts contends that it can explain a significant amount of the decline since about 2010. The answer to this debate could determine whether the federal government should continue to spend tens of billions of dollars a year on immigration enforcement. Resolving the issue of what drives flows of unlawful immigration is essential to moving forward with other, more positive immigration reforms.

President Harry Truman famously quipped that he wanted a one-handed economist so they would actually reach agreement and form firm policy recommendations. Many of these articles do not make specific policy recommendations but they do reach firm conclusions that are consistent with the broad findings of the rest of the academic literature that even a one-handed economist could firmly grasp: the economic benefits of immigration outweigh the costs.

Policymakers who are interested in increasing economic growth, entrepreneurship, and other positive economic indicators would get a few messages from these essays. First, a liberalized immigration policy that includes legalization for illegal immigrants and boosts legal numbers of immigrants will have a net-positive impact on native-born Americans. Second, many of the economic problems facing America today that are often blamed on immigrants are not worsened by them. Rather, immigrants have either a tiny effect on those problems or actually help alleviate them. Third, the downside risks of immigration liberalization such as wage competition and the possibility of negative institutional changes that could undermine future growth are at most very small or turn out to be correlated with improvements, respectively.

Immigration is an emotional subject for many Americans. About a quarter of us are immigrants or their children. Virtually all of us can point to relatively recent ancestors who came here from a foreign land. Similarly, many Americans are outraged that so many illegal immigrants have violated American laws. Our hope is that this issue of *Cato Journal* will help cool some of those emotions and instead shed light on this important policy debate.



# THE IMPACT OF IMMIGRATION ON WAGES OF UNSKILLED WORKERS

*Giovanni Peri*

Immigrants did not contribute to the national decline in wages at the national level for native-born workers without a college education. This article reviews how the timing of their immigration and skill sets of immigrants between 1970 and 2014 could not have been responsible for wage declines. This article then reviews other evidence at the local level that implies immigration is not associated with wage declines for noncollege workers, even if they are high school dropouts. Higher immigration is associated with higher average wages. Causality is difficult to tease out but numerous factors could explain the positive association between the quantity of immigrants and native wages.

## Wage Stagnation in the American Workforce

Wages for noncollege graduates, which this article refers to as “unskilled,” have been stagnant since 1980 (Autor, Katz, and Kearney 2008). The Census data confirm that the average national real weekly wage of college-educated workers who are natives, employed for at least one week of the previous year, and aged between 18 and 65 grew by about 20 percent from 1980 to 2014. In contrast, the average real weekly wage of noncollege graduates decreased by 8 percent

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during the same period, while dropouts lost about 18 percent of their real weekly wages. Trends in wage inequality between college and noncollege workers highlight this trend but with significant variation over the period. For instance, the 1990s were the only decade in which college and noncollege workers both saw positive wage gains of 10 and 14 percent, respectively.

## Immigration's Contribution to Wage Stagnation on the National Level

Immigration could affect wages by changing the relative supply of different types of workers. For instance, if immigration increased the supply of noncollege graduates substantially relative to workers in other education levels then it could contribute to a pure "relative supply" explanation whereby an increase in one type of worker reduces their wages relative to other types of workers. This section uses the estimates of the elasticity of complementarity between college and noncollege workers and between high school graduates and dropouts to see how relative changes in the quantity of immigrants by education affects wages.

### *Wage Gap for College and Noncollege Workers*

This article calculates the effect of the relative worker-supply shift produced by immigrants with a constant elasticity of substitution (CES) in a production function (Katz and Murphy 1992). The size of this effect depends inversely on the elasticity of relative wages to relative supply. Table 1 uses the elasticity of 1.75, the proper elasticity according to the current state of the peer-reviewed literature, to show that immigration cannot account for the observed increase in wage inequality in the considered period by decade; thus it cannot account for relative wage stagnation. The relative supply effect of immigration actually attenuates wage inequality in the periods of largest increase in the gap between college and noncollege workers from 1980 to 1990 and 2000 to 2010. Immigrants were disproportionately college educated in those two decades, but these periods also experienced the largest increase in the college and noncollege wage differentials. Immigration can explain 14 percent of the increase in the wage gap in the 1990s. Too many immigrants are college educated to explain any of the relative wage decline of noncollege graduates especially in the decades when this relative wage

TABLE 1  
COLLEGE-NONCOLLEGE RELATIVE WAGES AND EFFECTS OF IMMIGRANTS

	1	2	3	4	5	6	7	8
	Change of Immigrants as % of High School or Less	Change of Immigrants as % of Some College and More	Relative % Change	Potential % Effect on Wage of Noncollege Relative to College (elasticity 1.75)	Actual National Change in Wage of Noncollege Relative to College	What Share of Noncollege Underperformance Can Be Due to Immigrants?	Increase in Share of College Educated Due to Immigrants	Potential Externality Range on Average Wages
1970-80	4.6	8.7	4.2	+2.4	2.6	91% (reducing inequality)	+1.1	+0.3/1.1
1980-90	3.3	5.2	1.8	+1.0	-13.7	wrong sign	+1	+0.3/1
1990-00	6.7	5.8	-0.9	-0.5	-3.7	14%	+1.7	+0.4/1.7
2000-10	3.9	4.8	0.9	+0.5	-6.6	wrong sign	+1.6	+0.4/1.6
2010-14	0.1	1.3	1.2	+0.7	0.8	91% (reducing inequality)	+0.6	+0.1/0.6

SOURCES: U.S. Census, American Community Survey, and author's calculations.

decline was the greatest. Only in the 1990s was immigration moderately noncollege intensive. The 1980 to 2010 relative supply change due to immigrants could account only for 0.1 percent of the *increase* in wage inequality when there was a 24 percent *decrease* in the relative college to noncollege wage ratio.

### *The Wage Gap for High School Dropouts and High School Graduates*

There is some disagreement among economists, but there is substantial evidence that workers who are high school dropouts and those with only a high school degree are substitutable, which means that changes in their relative supplies do not significantly affect their relative wages (Goldin and Katz 2008, Ottaviano and Peri 2012, Card 2009). If that characteristic holds for the period that this article examines then it would negate a significant argument for how immigration affects the relative and absolute wage declines of dropouts.

Nevertheless, using a nested-CES approach, we consider noncollege workers as a combination of imperfectly substitutable dropouts and high school only graduates. The elasticity of substitution between dropouts and high school graduates is set to be equal to 1.75, the same elasticity as used above to describe the elasticity of relative wages to relative supply of college educated (Borjas 2003; Borjas, Grogger, and Hanson 2012). Even in this case, the theory that an increase in relative immigrant supply decreases wages and boosts inequality does not hold up (Table 2). Immigration can explain 75 percent of the increased inequality in the 1990 to 2000 period but actually attenuates or has no significant effect on inequality in any other period. Immigration can only account for approximately one-fifth, or 3.9 percentage points of the 18.2 percent, of the relative wage decline of dropouts to high school graduates from 1980 to 2010.

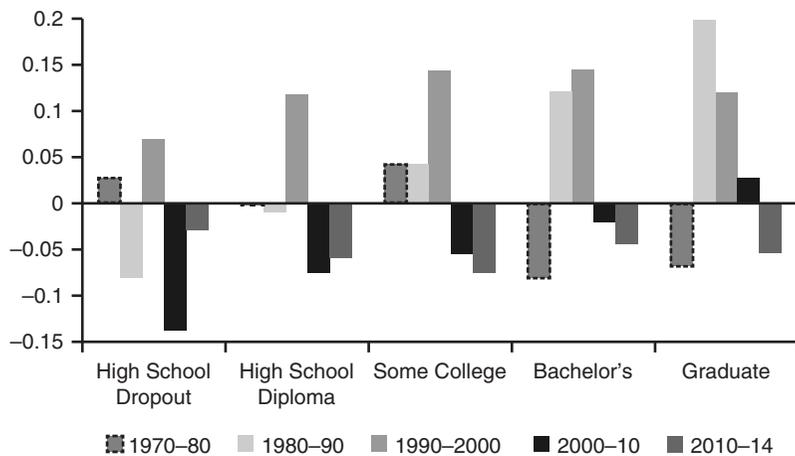
Similar analysis for more detailed education groups confirms that immigration cannot explain changes in the wage gap. Immigration increased the supply of highly educated workers more than that of less educated ones in most decades except for the 1990s when the supply of high school dropouts increased at an unusually high rate. Figure 1 shows the observed percentage growth in weekly wages for the five education groups of natives by period. If increased immigration were associated with a lower relative growth of real wages across groups, the distribution of wage changes should be inversely related to the change in immigrants. This happens only in the 1990 to

TABLE 2  
HIGH SCHOOL GRADUATES-DROPOUTS RELATIVE WAGES AND EFFECTS OF IMMIGRANTS

	Change of Immigrants as % of Dropouts Employed	Change of Immigrants as % of High School Graduates	Relative Change	Potential Effect on Wage of Dropouts Relative to Diploma (elasticity 1.75)	Actual National Change in Relative Wages	What Share of Dropouts' Underperformance Can Be Due to Immigrants?
1970-80	4.9	4.2	-0.7	-0.4	2.9	wrong sign
1980-90	3.2	3.4	0.2	0.1	-7.2	wrong sign
1990-00	10.9	4.7	-6.2	-3.5	-4.7	75%
2000-10	4.4	3.6	-0.8	-0.5	-6.3	7%, very small impact
2010-14	-1.4	0.7	0.2	0.12	3.1	39% reducing inequality

SOURCES: U.S. Census, American Community Survey, and author's calculations.

FIGURE 1  
 REAL WAGE CHANGE FOR NATIVES BY EDUCATION,  
 1970–2014



SOURCES: U.S. Census, American Community Survey, and author's calculations.

2000 period. During all other decades, the immigrant supply and native wage growth are *positively* associated. Immigration's effect on the relative supply of differently educated workers is either irrelevant to explaining wage inequality or actually attenuated it.

The flow of immigrants by decade had a greater relative impact on the supply of college-educated workers than noncollege-educated workers, especially in the 1980–90 and 2000–10 decades when inequality rose and wage stagnation for noncollege and dropouts increased. Immigration was only dropout intensive, relative to the native education distribution, during the 1990–2000 decade. However, this was a period when inequality did not grow much and the real wage of noncollege workers increased more than in any other period. The aggregate numbers simply make it impossible for the relative supply of immigrants to explain any significant change in inequality or wage loss for unskilled workers.

### Immigration and Wage Decline on the Local Level

The inflow of immigrants across the decades rules out any significant effect on noncollege wage losses on the national level.

However, concentrated and highly localized immigration might be able to affect wage gaps, especially for noncollege or dropout workers at the local level.

Current research already shows very little local wage effects. Card (2001, 2009) found that immigration may change the relative supply of dropouts to high school graduates across metro areas but that such a shift does not seem to have a significant effect on their relative wages. Lewis (2011) explains the lack of a relative wage effects at the local level by showing that immigration may increase the intensity of dropout workers and thus induce the choice of dropout-efficient production techniques that demand more dropout workers that then offsets the increased supply of such workers. Peri (2012) further shows that firms in states with many immigrants choose techniques more efficient in the use of noncollege workers that offsets the anticipated negative wage impacts with productivity gains. In other words, firms change their production techniques to take account of immigrant labor that can then attenuate immigration's potential negative impact on wages.

Rather than firms changing in response to immigrants, native workers could also change their behavior by specializing in other specific tasks that are different than those undertaken by immigrants. Recent research looks at the skills distribution of workers across productive tasks rather than by education group (Autor 2015). Peri and Sparber (2009) show that immigrants increased the relative supply of manual tasks in some U.S. states among noncollege-educated workers but that native decisions to shift to nonmanual tasks over time attenuated the potentially negative wage effects. This may also explain the imperfect substitution between immigrants and natives who are both noncollege workers (Ottaviano and Peri 2012).

Immigrants do not cause much of a local negative wage effect. Empirical studies do not find that local immigrant inflows depress wages of noncollege- or college-educated workers by location. Basso and Peri (2016) look at all 722 continental U.S. commuting zones that are local labor markets. They show a correlation between changes in immigrants as a share of the workforce and the percentage change of wages for noncollege- and college-educated workers for the 1970 to 2010 period. The correlation is positive and significant in both cases, which demonstrates that larger inflows of immigrants are somewhat associated with higher wages. The positive association is stronger for college-educated workers and is small, but positive, for noncollege

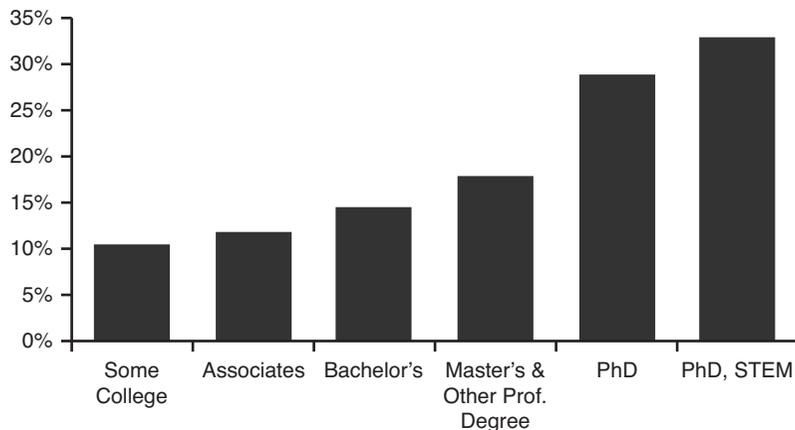
workers. Further statistical analysis reveals an insignificant correlation of immigration and native noncollege wages and a positive correlation with average wages.

The fact that commuting zones with large immigration rates are not associated with lower wages of noncollege workers rules out the possibility that immigration can explain geographic wage differentials for noncollege-educated workers. The positive association of immigrants with changes in college-educated worker wages at the local level may be due to omitted productivity shocks on college wages which also attract immigrants or to other positive economic spillovers.

### Why Immigrants Have Not Lowered Native Wages

One reason why local wages did not decline due to immigration is an increase in local productivity generated by immigrants (Peri, Shih, and Sparber 2015). Foreign-born workers are concentrated among very highly educated workers in science, technology, engineering, and mathematics (STEM) occupations. Figure 2 illustrates the presence of foreign-born among workers with some tertiary education in 2014. STEM immigrant workers enhance local firms' productivity

FIGURE 2  
PERCENTAGE OF IMMIGRANTS IN EACH  
EDUCATIONAL GROUP, 2014

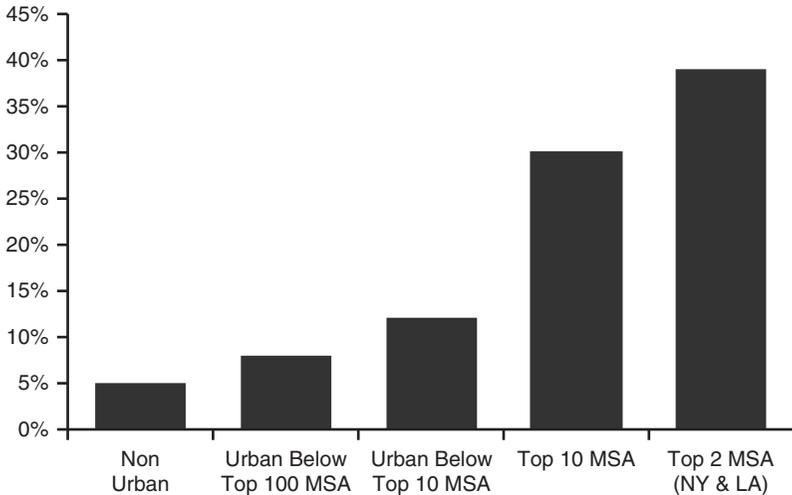


SOURCES: U.S. Census, American Community Survey, and author's calculations.

and may generate positive local effects on growth and wages. On the national level, foreign college-educated STEM workers may have produced a 2 percent increase in noncollege wages and a 5 percent increase in college wages through local technological growth and adoption from 1990 to 2010 (Peri, Shih, and Sparber 2015). Those findings are supported by evidence that immigrant workers are also more likely to patent and, thus, innovate than natives in ways that could produce positive productivity spillovers (Iranzo and Peri 2009, Hunt and Gauthier-Loiselle 2010, Kerr and Lincoln 2010).

Three other potential channels are worth mentioning, and they suggest that immigrants may actually have had a role in stimulating average local wage growth. First, immigrants are highly concentrated in denser metropolitan areas (Figure 3). Density reduces transportation costs, increases labor market interactions and efficiency, increases knowledge spillovers, reduces information asymmetries, and has positive effects on productivity known as “agglomeration economies” (Ciccone and Hall 1996, Greenstone, Hornbeck, and Moretti 2010). Without immigrants, several of the largest U.S. metropolitan areas would be from 10 to 30 percent

FIGURE 3  
PERCENTAGE OF IMMIGRANTS BY URBAN AREA, 2014



SOURCES: U.S. Census, American Community Survey, and author’s calculations.

smaller, and hence would benefit to a lesser extent from these local effects of density. Thus, immigrant inflows contributed positively to all of these effects by increasing the density of productive workers in American cities.

The second positive channel is through entrepreneurs at small firms and startups. Immigrants have a higher self-employment rate than natives and they have started several high-tech companies (Fairlie 2013). Their inflow therefore implies a larger share of entrepreneurs in the labor force. In this role, immigrants may generate local employment opportunities for natives, further increasing demand for native workers that would offset any increase in labor supply. More academic research is necessary to explore how immigrant entrepreneurs increase labor demand.

The third potential explanation is that immigrants are actually competing with the new immigrants rather than with natives. Immigrants comprised almost 40 percent of dropouts in 2014, up from less than 20 percent in 1970, and their wages overall are somewhat lower than those of corresponding natives by 4 to 10 percent after controlling for demographics. However, there is not much evidence that the relative wage disadvantage of this group has worsened in the last 14 years. One interesting difference in labor market outcomes is that, while having relatively low wages, immigrant dropouts have a much higher employment rate than natives. Hence, including all high school dropouts in working age, immigrants have higher average earnings than natives due to their higher probability of working. A significant share of this group (about 80 percent) are Hispanic, and many of them are undocumented. Policies that allow regularization and full access of these workers to the labor market may raise their wages and narrow the pay gap.

## Conclusion

Simple modeling and regression analysis applied to the last four decades of U.S. labor market history show that immigrants are not responsible for the stagnating or declining wages of noncollege workers, either nationally or in regions with high immigration. In fact, immigrants may be responsible for preventing an even further relative decline in wages by education group. While we need more evidence that these factors have helped the wages of noncollege workers, there is no evidence that immigrants have lowered their wages. A policy of

larger and more education-balanced immigration inflows combined with a legalization of many existing unskilled immigrant workers could boost U.S. productivity and wages. Immigration did not contribute to wage stagnation, growing wage-inequality, or absolute declines. More appropriate immigration policies, however, may help boost wages and jobs at the local level.

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## HOW IMMIGRATION AFFECTS WORKERS: TWO WRONG MODELS AND A RIGHT ONE

*Ethan Lewis*

Immigration has been in the news a lot recently, along with many strong claims about how it harms workers. This article reviews what research by economists says about how immigration affects workers. This requires first getting past common misconceptions that pervade press accounts and public policy debates about immigration, some of which even claim to come from economics. Unfortunately, these misconceptions usually lead to exactly the wrong policy conclusions about immigration—policies that tend to make the United States worse off. This is why it is important have the right economic model of immigration. This article first covers two common “wrong” models of immigration, before explaining the “right” model. The right model is confirmed by a large body of empirical evidence, which will be described here as well.

A frequent starting point for concern about immigration in public discussion is the large number of immigrants in the United States. There are currently 42 million immigrants in the country, and they make up almost 17 percent of workers, a historic high. This is often compared to another large number—the number of unemployed. It is not hard to find policy briefs and news articles with titles like “All Employment Growth Since 2000 Went to Immigrants” (Zeigler and

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Ethan Lewis is an Associate Professor of Economics at Dartmouth College. A technical appendix, which provides details of the mathematical theory underlying the claims made in this article, is available at [www.dartmouth.edu/~ethang/TechnicalAppendix-v5.pdf](http://www.dartmouth.edu/~ethang/TechnicalAppendix-v5.pdf).

Camerota 2014) and “Illegal Immigrants Outnumber Unemployed Americans” (Meyer 2015).

What is the point of such comparisons? Such articles usually do not lay out an explicit reason, but the desired implication is nevertheless clear: If we got rid of immigrants, jobs would open up for native-born workers. But why would that be? Implicitly, the authors of such articles assume—or want the reader to presume—that there are a fixed number of jobs available. That brings me to Wrong Model 1.

## Wrong Model 1: Fixed Number of Jobs

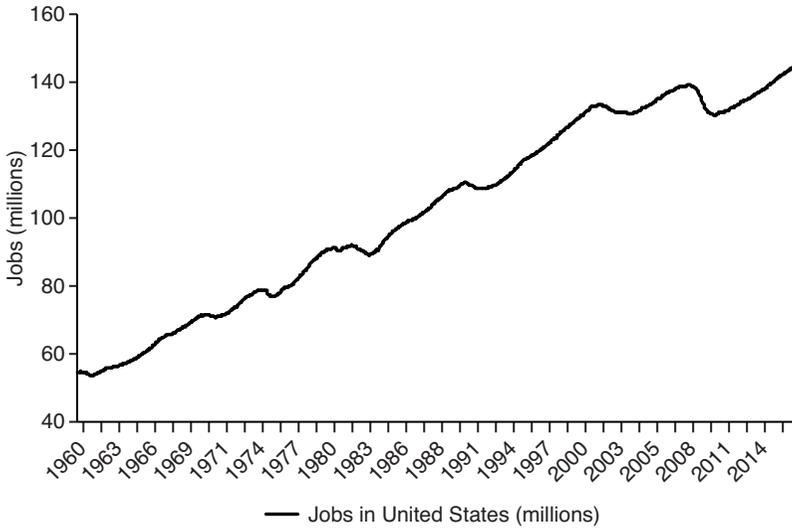
The reasoning behind comparing the number of immigrants to the number of unemployed is that there is a supposedly fixed pool of jobs, so that every immigrant who has a job is taking a job away from a native-born worker. This is patently false. This faulty reasoning may originate from a kind of small-scale thinking: people might imagine an immigrant beating out a native-born worker for a specific job opening. However, this reasoning does not scale up to the level of a whole economy. Indeed, economists have argued against this idea for a very long time—though apparently not very successfully. Economist David Schloss termed it the “lump of labor fallacy” and thoroughly refuted it in 1892. It is a wrongheaded idea that just refuses to die.

At a basic level, the number of jobs in the United States is far from fixed. In fact, the number of jobs in the United States has more than doubled in the past 50 years, as Figure 1 shows. That is not to say it is going up at every moment. There are ups and downs, as Figure 1 also shows. During recessions job growth may stagnate for a while. Periods of slow growth, like the past decade, are when the economy starts to feel zero sum, and when fallacious lump of labor thinking tends to emerge in public policy discussions.

There is a large body of empirical research that directly examines the extent to which immigrants “take jobs” from natives. These studies ask: “Per immigrant who comes in, how many natives lose their job?” This research finds basically the opposite of the popular conception: not only do immigrants *not* take jobs from the native-born; if anything, they slightly create jobs for natives.<sup>1</sup> To put it differently,

<sup>1</sup>Hong and McLaren (2016) find a strong overall job creation effect of immigration. Most of the literature does not examine immigration’s overall impact, but the impact within a skill category. Nevertheless, it finds insignificant displacement to weak job creation effects. Peri and Sparber (2011) is an informative review.

FIGURE 1  
NUMBER OF JOBS IN THE UNITED STATES



SOURCE: Bureau of Labor Statistics, employment series.

it seems that slightly more than one job is created for each immigrant arrival.

Why would this be? A key reason is that immigrants do not just come to the United States and extract money out of the economy. Rather, by virtue of being here, they generate consumer demand. Immigrants demand and buy all the things they need to live—housing, food, clothing, and so on—and as a result they generate demand for new workers.<sup>2</sup> On top of this, immigrants tend to specialize in jobs that enhance demand for native-born workers by making the latter more productive. They also raise product diversity through both supply and demand channels. For example, you will probably not be too surprised to learn that immigration increases local restaurant diversity (Mazzolari and Neumark 2012). The net effect of the combination of these forces is that immigrants end up creating more jobs than they take.

In sum, the net effect of immigration on jobs is exactly the opposite of common misconceptions. Thus, getting rid of immigrants would not open up jobs for natives; it would most likely destroy them.

<sup>2</sup>This differs from international trade, to which immigration is often compared.

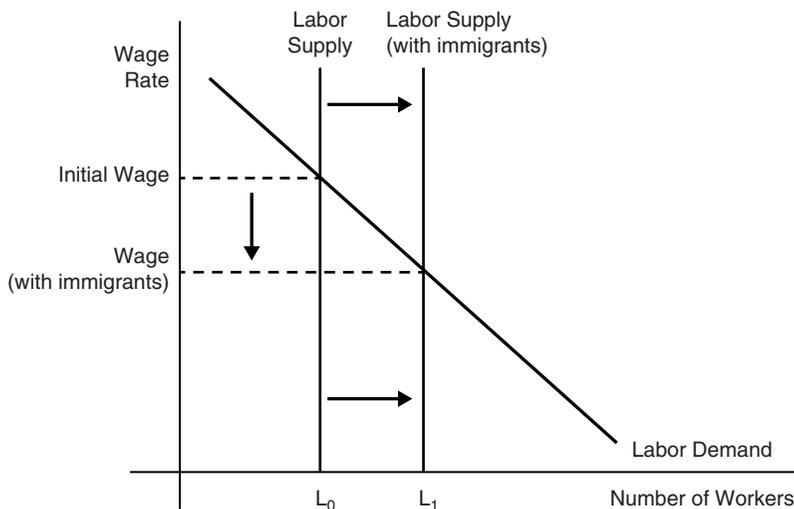
## Wrong Model 2: More Workers by Itself Means Lower Wages (Fixed Capital Stock)

What about wages? If you add more workers, don't wages have to go down? Isn't that the basic economics of supply and demand?

Many of us have seen a picture like Figure 2, in which the y-axis represents the wage, the x-axis represents the number of workers, and there is some downward sloping relationship between them captured by a line called "labor demand." Where this line comes from and why it is downward sloping is not usually explained. I will do so below. It turns out to be based on a very doubtful assumption.

Figure 2 has another line, labor supply, which can be upward sloping, but is simpler to represent as a vertical line that shows the number of workers. The wage in a market economy is the intersection of supply and demand. So when you add workers due to immigration the wage has to fall to equilibrate the economy, right? A prominent economist once pleaded, "The labor demand curve *is* downward sloping," and used this picture to calculate the wage impact of immigration (Borjas 2003). Furthermore, the

FIGURE 2  
NOT THE MODEL OF SUPPLY AND DEMAND ECONOMISTS  
USE FOR IMMIGRATION



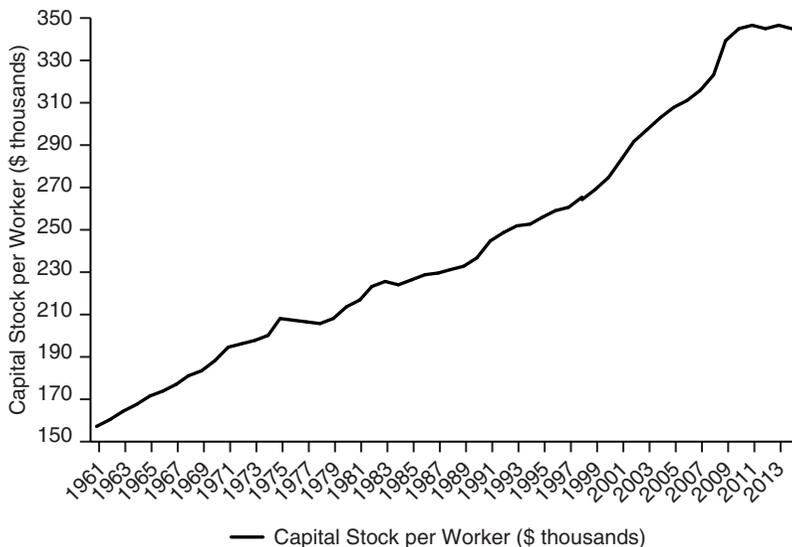
advocacy organization Negative Population Growth Inc.—a name that usefully reveals its ideological bias—took this economist’s numbers further and calculated that immigration lowers all of our incomes by \$2,470 a year, a claim the *Washington Examiner* uncritically reported (Bedard 2016). If true, this would mean that immigration was doing tremendous harm to America. But it is not. At best, Negative Population Growth Inc. misused the economist’s numbers.

The fallacy underlying the prediction that more workers must lead to lower wages is the assumption that the capital stock is fixed. In this context, what economists mean by “capital” is all of the productive inputs in the economy besides workers. That includes, for example, office space and machinery, including the computers that help us increase our output. Capital is very important: economists estimate that it is responsible for about one-third of GDP.

The “downward sloping demand curve,” which supposedly governs the relationship between the number of workers and wages, turns out to derive entirely from the assumption that the stock of capital is fixed. As the story goes, immigration “dilutes” the capital available to each worker, lowering worker productivity and therefore wages. In this counterfactual world, a new immigrant arrival would have to share a computer and an office with an existing worker—since no computers or offices could be added—and as a result, an existing worker would be made less productive by a factor proportional to capital’s share in the economy.

Economists do not use this model for immigration because it is not accurate to model the capital stock as fixed. Figure 3 shows that the capital stock, in per worker terms, more than doubled in the past 50 years. After an immigrant arrives, some enterprising investor (it could be the immigrant himself) will realize the immigrant would be much more productive with his own office and computer, so there is a return on investment available for supplying the capital goods. Immigration generates a very large return to expanding capital and, as a result, investors rush in, and capital dilution doesn’t actually happen. While economists like to describe the labor market in terms of supply and demand, in the long run the overall demand for workers is horizontal because capital freely adjusts (its supply is “elastic”). This implies there is no wage impact from a pure increase in the number of workers.

FIGURE 3  
 U.S. CAPITAL STOCK PER WORKER  
 (THOUSANDS OF 2011 DOLLARS)



SOURCE: Penn World Table 9.0. Available at [www.rug.nl/ggdc/productivity/pwt](http://www.rug.nl/ggdc/productivity/pwt).

I should not gloss over the wiggly words, “in the long run,” which economists often get ridiculed for saying (most famously John Maynard Keynes’s quip, “In the long run, we’re all dead”). It is worth emphasizing that with regard to immigration, the long run is essentially immediate. This is because, on an annual basis, immigrant inflows are very small compared to the size of the U.S. workforce, at less than 0.5 percent. For context, this is no larger than the increase in the workforce that comes from native-born workers. So if U.S. capital stocks adjust to native population growth effectively, as is the prevailing view, then they can also adjust quickly and fully to immigrant arrivals, and so wage impacts are minimal. Remember that \$2,470 calculation? Well, that comes from assuming that all the immigrants in the economy came yesterday and the capital stock did not adjust at all, which is absurd. Immigrants have actually trickled in over the past 50 years or so, which gave the economy plenty of time to adjust.

## The Right Model: Immigration Affects Workers When It Affects the Skill Mix

It is not that immigration can never affect native-born wages. But it has the potential to impact wages not when it just raises the absolute number of workers (which is why the two models presented above are wrong), but rather when it affects the relative numbers of different kinds of workers. Workers only compete with other workers who have similar skills. Immigrants who, say, tend to work as construction laborers do not drive down the wages of lawyers or economists (or pundits at anti-immigration think tanks, for that matter). In fact, workers with different skills often complement, rather than compete with one another; they make each other more productive. For example, adding a secretary to handle paperwork might free a doctor to spend more time with her patients.

More formally, immigration affects the wages of one type of worker when it affects the ratio of the number of that type of worker to other types of workers. To simplify, imagine there are exactly two different kinds of workers, skilled, and unskilled, with  $S$  and  $U$  representing the numbers of each. Although it is an oversimplification, it turns out to do a pretty good job of capturing immigration's impact on the U.S. economy. In particular, the U.S. labor market seems to have roughly two kinds of jobs: jobs for college graduates and jobs for noncollege graduates.

In this simple setup, what matters is how much immigration affects the ratio of unskilled to skilled (or skilled to unskilled). There is a fairly simple formula for that, shown here:

$$\% \Delta \left( \frac{U}{S} \right) \approx \frac{U_{immigrants}}{U_{natives}} - \frac{S_{immigrants}}{S_{natives}}$$

How much immigration proportionately increases the  $U/S$  ratio is given by the ratio of unskilled immigrants to unskilled natives,  $\frac{U_{immigrants}}{U_{natives}}$ , minus the same ratio for skilled immigrants and natives,

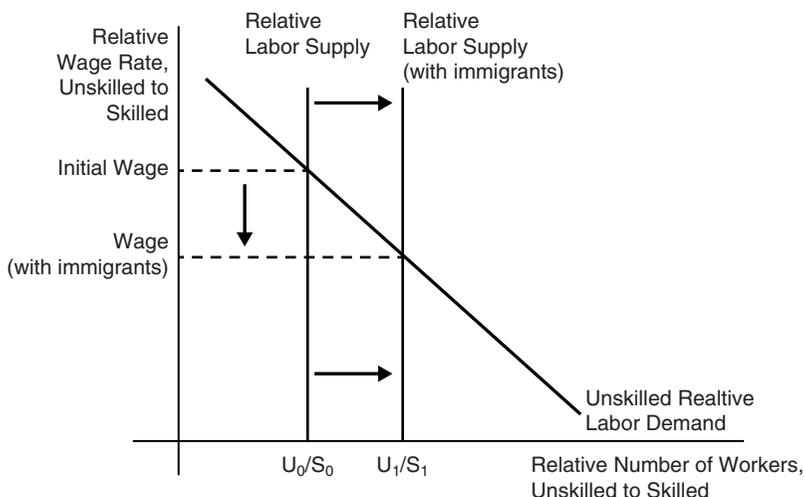
$\frac{S_{immigrants}}{S_{natives}}$ . The way to think of each of these two ratios is how much immigration contributes to the growth in the numbers of that type of worker, for example,  $\frac{U_{immigrants}}{U_{natives}} = \% \Delta U$ . Consider some examples.

Suppose that all immigrants were unskilled. Then the first ratio would be large, the second ratio would be zero, so the formula says that immigration increases the ratio of unskilled to skilled workers. The opposite would be true if all immigrants were skilled.

There is another example that turns out to be highly relevant in practice: if these ratios were each roughly the same, so that immigration grows the unskilled workforce by the roughly same amount as it grows the skilled workforce. Then the difference in ratios would be zero, and there would be no potential for immigration to impact wages. We refer to this as a “skill balanced inflow”—that is, immigration replicates the skills of the existing workforce, and just enlarges the scale of the overall economy. The arguments presented earlier described how the economy can adjust to a pure increase in the scale of the workforce without any loss of wages or jobs for natives.

More generally, if we multiply this difference in ratios by the slope of a so-called *relative* demand curve, as shown in Figure 4, then we get the relative wage impact of immigration. Figure 4 looks exactly the same as Figure 2, except that the x-axis now represents the ratio

FIGURE 4  
A SUPPLY AND DEMAND MODEL ECONOMISTS  
DO USE TO STUDY IMMIGRATION



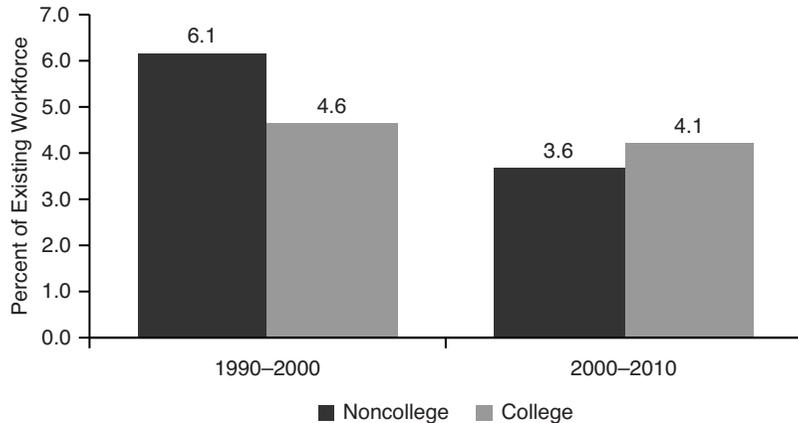
*Case shown: Immigrants are more unskilled than native-born workers.*

of unskilled to skilled workers, rather than the absolute number of workers, and the y-axis shows the relative wage. The rightward shift in the labor supply depicted comes from the difference in ratios formula shown earlier, so the graph displayed is for immigrants who are disproportionately unskilled.

Figure 4 reveals that calling Figure 2 the “wrong” model is not at all a rejection of the supply and demand framework in the study of immigration; Figure 4 is also a supply and demand framework. To study immigration, however, we need a richer model than the one presented in Figure 2. We need a model with more than one kind of worker, and which does not impose the erroneous assumption that the capital stock is fixed.

So how much does U.S. immigration actually affect wages? To find out, let us look at these two skill ratios,  $\frac{U_{immigrants}}{U_{natives}}$  and  $\frac{S_{immigrants}}{S_{natives}}$ . Figure 5 presents the ratios for unskilled (noncollege) and skilled (college) separately for two different decades. It shows that immigration increased the size of the unskilled workforce by around 6 percent in the 1990s and 4 percent in the 2000s. By itself, this would have the potential to push down unskilled wages a lot.

FIGURE 5  
NET IMMIGRANT ARRIVALS AS A PERCENTAGE OF  
EXISTING WORK FORCE BY EDUCATION



SOURCES: 1990–2000: Docquier, Ozden, and Peri (2014); 2000–10: author’s calculations based on Ruggles et al. (2015) and 2000 Census of Population.

However, that is not the end of the story, because not all immigrants are unskilled; many are highly educated. Indeed, immigration increased the size of the skilled workforce by almost the same amount—around 5 percent in the 1990s and 4 percent in the 2000s, which roughly balances out the unskilled arrivals. Another way to put it: the wrong models of immigration tend to focus on the absolute height of the bars in Figure 5. The right model focuses instead on the *difference* in the height of the bars. This difference is small, around 1 percent per decade. In terms of Figure 4, the shift in the relative labor supply generated by immigration is too small to have much of an impact on wages.<sup>3</sup>

Furthermore, even this model is oversimplified. Although college/noncollege is an important dividing line in the U.S. labor market, there are more subtle differences in the skills of immigrants and natives that matter as well. Immigrants tend to be at the extremes of the education distribution—either very highly or very lowly educated. Immigrants tend to be younger, and they tend to specialize in jobs that do not require strong English skills. The net effect of these differences is to push basically all of the negative impacts of immigration onto the immigrants themselves. Ottaviano and Peri (2012) have developed a richer model with many different skill categories, building on Borjas (2003). Adding up the effect of all the different changes in relative skill supplies generated by immigration, Ottaviano and Peri find that almost all native-born workers see wage increases, not decreases, as a result of immigration.

Finally, the economy has other ways of adjusting to immigration that are not modeled here, which have the effect of flattening out the relative demand curve in Figure 4, further mitigating any wage impacts. This includes the development of new technologies (Acemoglu 2007) and, again, the adjustment of the capital stock (Lewis 2011).

## Conclusion

This article describes two commonly used but wrong models and one right model of the impact of immigration on workers. Both wrong models were wrong in the same way—they focus on

<sup>3</sup>Recall that to obtain the relative wage impact, you multiply this number by the slope of the relative demand curve. Estimates are that the slope of the relative demand curve is less than 1, and probably less than one-half.

immigration's impact on the absolute number of workers rather than on the relative numbers of different kinds of workers. Wrong Model 1—perhaps the most commonly cited in public policy discussions of immigration—is based on the fallacy that there is a fixed number of jobs, so that every immigrant who has a job means that one fewer native-born worker has a job. The evidence suggests the opposite may be true: Immigrants add jobs, in part by raising consumer demand. So getting rid of immigrants, such as by deporting unauthorized workers, would most likely destroy jobs and raise native unemployment.

Wrong Model 2 is based on the fallacy that the capital stock is fixed. This is the basis of an overly simplistic supply and demand model that is sometimes incorrectly referred to as a basic economics “prediction” that adding more workers always means lowering wages. In practice, capital adjusts and there is no wage harm just from adding workers.

In the right model, immigration can only affect the labor market—positively or negatively—when it affects the relative numbers of different kinds of workers. In practice, immigration has almost no potential to do harm because U.S. immigration is basically balanced on the most important skill margin. There are also enough differences between the skills of immigrants and natives that most native-born workers' wages end up going up. Almost all Americans workers are better off with immigration than without.

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# DOES IMMIGRATION REDUCE WAGES?

*Alan de Brauw*

One of the most prominent issues in the 2016 presidential election was immigration. All of President Donald Trump's policy proposals—building the border wall, increasing enforcement along the Mexican border, mandating E-Verify for new hires, modifying the structure of the H-1B visa program, and others—are designed to reduce the number of immigrants working in the United States in order to help increase the wages of native workers.

## The Immigration and Wage Debate

A decrease in the supply of immigrants can only increase native wages if immigrants and natives are substitutes for one another; in other words, if they compete for the same jobs. According to the types of his policies, President Trump appears to believe that natives and immigrants compete for both low-skilled and high-skilled jobs. Low-skilled native workers would be helped by the wall as they would face less competition from illegal immigrants. High-skilled workers would face less competition from immigrants who arrive on H-1B visas and who work in high technology jobs.

An alternative view supported by much of the academic literature is that natives and immigrants largely take different types of jobs, potentially because they have different comparative advantages, even

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among less educated workers. If so, then the native wage response to a reduced supply of immigrant workers would not be large if it existed at all. It is not difficult to find examples of occupations that native workers do not enter, such as seasonal farm labor (Clemens 2013). However, those occupations could simply be isolated examples or potentially anecdotal.

Economists typically measure the responsiveness of wages to immigrants using the wage elasticity of immigration—the percentage change in wages one can expect for a given percentage change in the quantity of immigrants. Literature on the U.S. labor market suggests the wage elasticity of immigration is about  $-0.2$ , meaning that if the number of migrants were to increase by 10 percent, then wages would fall by 2 percent, on average. However, this average masks substantial disagreements among economists who study immigration. Some economists have found that wages do not change at all with an increased supply of immigrants (Card 1990, Card and Peri 2016). Others, such as Harvard University economist George Borjas, find a greater wage elasticity of immigration that is between  $-0.3$  and  $-0.4$  (Borjas 2003, Borjas and Katz 2007).

One reason for the substantial disagreement about the effects of immigration on wages is that there are several different empirical methods that economists use to study the wage relationship even though there is a relatively uniform theory (Altonji and Card 1991). Each empirical method uses a different way of measuring variation in the quantity of immigrants to generate wage estimates. Dustmann, Schonberg, and Stuhler (2016) summarize the three major methods as (1) the national skill-cell approach, (2) the pure spatial approach, and (3) a mixed approach. The national skill-cell approach uses variation in the entry of immigrants to different education-experience groups within the national population. The pure spatial approach uses variation in the immigrant flow across cities or regions. The mixed approach uses variation in immigration inflows across both education groups and regions.

Different methodologies produce different elasticities. The skill-cell approach generates large estimates of the wage elasticity of immigration (Borjas 2003, Borjas and Katz 2007, Borjas 2014). Meanwhile, the pure spatial approach leads to estimates that vary substantially (Card 1990, 2009; Boustan, Fishback, and Kantor 2010). Finally, the mixed approach tends to lead to smaller, negative elasticity estimates that are not always significantly different from

zero (Borjas 2006, Card and Lewis 2007, Lewis 2011). The method used to estimate the variation in the immigrant population is vital to producing the wage elasticity of immigration estimate. Dustmann, Schonberg and Stuhler (2016) argue that due to the difference in measuring variation between studies, estimates derived from the spatial approach and the skill-cell approach are fundamentally different models, even if derived from the same underlining theory.

## Testing George Borjas's Results

Immigration restrictionists use Borjas's results, which rely on the national skill-cell method, to justify further diminishing legal immigration. If the wage elasticity of immigration is between  $-0.3$  and  $-0.4$ , as Borjas argues, then a 10 percent increase in the number of immigrants within a specific education-experience cell is associated with a 3 to 4 percent *decline* in wages for workers within that cell. The effect, Borjas further argues, is even larger among workers who have less than a high school education. To the extent that poorly educated immigrants from Latin America compete with native workers, a reduction in the number of immigrants within specific education-experience cells would have a substantial, positive impact on the wages of American workers with the lowest educations.

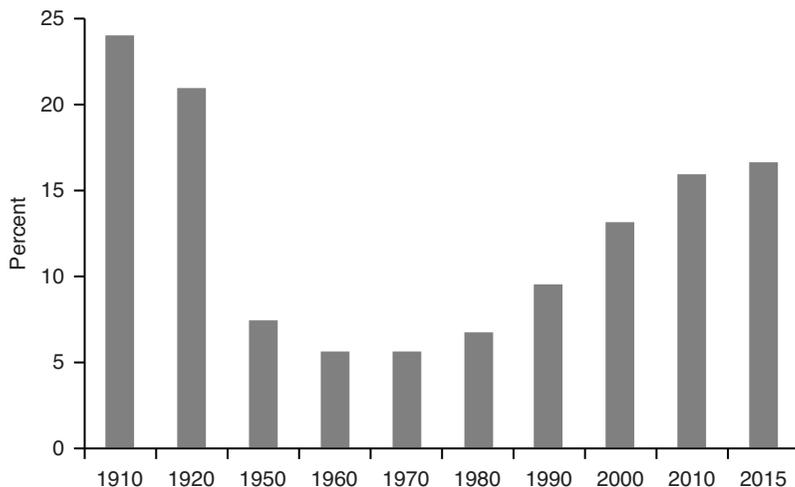
At least two standard critiques of Borjas's estimates are based on the assumptions in his model. The first critique is that his model's skill-cell approach assumes that high school dropouts and those with a high school education are in different skill cells. Card (2009) and Ottaviano and Peri (2012) argue that high school dropouts and graduates are actually perfect substitutes—so migrants who enter skill cells among dropouts actually compete for jobs with a much larger proportion of the workforce. The second critique is that his model assumes that there is perfect substitutability between natives and immigrants within each skill cell. There are many reasons that immigrants and natives might not be perfect substitutes even if they have the same level of skill and education—for example, language ability (Lewis 2013). Card and Peri (2016) find that relaxing Borjas's assumption of perfect substitution shows that an increased supply of immigrant workers actually increases wages.

In a recent paper, my colleague Joe Russell and I set out to test the validity of Borjas's result from a different perspective (de Brauw and Russell 2014). We use a replication method that recreates

Borjas’s results and then tests them in two ways. First, we test whether Borjas’s estimates change when we add more years of data. Borjas’s initial study focused on the years 1960 to 2010. Specifically, we add the 2010 IPUMS data from the U.S. Census and estimate the wage elasticity using data from 1960 to 2010. The period between 1960 and 2000, studied by Borjas, was somewhat special: the share of foreign-born laborers in the United States was at an all-time low of 5.7 percent 1960 (Figure 1). At a result of that historical anomaly, the period between 1960 and 2000 might just reflect additional wage responsiveness as the number of immigrants rapidly climbed. The increase in the immigrant share of the labor force slowed between 2000 and 2010, so additional data could help reconcile Borjas’s results with the rest of the academic literature.

First, when we add the 2010 data, Borjas’s elasticity declines from  $-0.33$  to  $-0.22$ . This result is important because adding one more Census year brings Borjas’s findings squarely in line with the rest of the academic literature. If Borjas’s model was correct on its own,

FIGURE 1  
SHARE OF IMMIGRANTS IN THE UNITED STATES  
LABOR FORCE



SOURCES: For 1910–50 data, Borjas and Katz (2007); for 1960–2000 data, IPUMS USA; for 2015 data, the Bureau of Labor Statistics.

simply adding data from 2010 should not have affected the elasticity estimate in the way that it did.

Second, if Borjas's methodology is proper then it should also work to explain the relationship between the even larger influx of women workers into the labor force and wages that occurred from 1960 to 2010. Acemoglu, Autor, and Lyle (2004) call the climbing female labor force participation in the United States "one of the most profound labor market transformations of the past century." If the assumptions behind Borjas's model are appropriate for immigrants, in this case, implying that within education-experience cells men and women are perfect substitutes and that the national labor market should be considered, then it should also be appropriate for estimating the effect on men's wages of women entering the labor force since 1960. To address the fact that women are more likely than men to move in and out of the labor force, to give birth and to raise children, we adjust the average experience of women of specific ages based on a computation by Regan and Oaxaca (2009), who measured average differences between potential and actual work experience among women.

When we use Borjas's model that estimated the impacts of female labor force entry on men's wages, we find a statistically insignificant relationship when we use weekly wages as the wage measure, but a positive and statistically significant relationship when using annual wages. This result implies that as women enter specific education-experience cells men's wages actually *increased*. These coefficients suggest that Borjas's method cannot be just measuring labor demand. Thus, the perfect substitutability assumption in Borjas's model is violated because it requires a negative coefficient. In fact, our estimates suggest that men and women must complement each other within some skill cells rather than be substitutes.

### Economic Implications of Immigration Restriction

Restricting immigration will not have a substantial positive impact on native wages, at least in real terms. The question then is: What types of alternative impacts might occur if migration was further restricted? There are at least two further potential impacts of further restricted immigration. First, some occupations like tomato harvesters could be automated such as they were in the late 1960s after the end of the *bracero* guest worker visa program (Schmitz and

Seckler 1970; Clemens, Lewis, and Postel 2017). Automation would have a significant knock-on effect, but it would not raise the wages of low-skilled native workers who are substitutable with low-skilled immigrant workers. Second, certain types of laborers might drop out of the labor market altogether. Using spatial variation, Cortes and Tessada (2011) show that low-skilled immigration increases the labor market participation of high-skilled women by allowing families more freedom to hire child care or pay for other domestic tasks. An immigration decline could induce high-skilled women to leave the workforce as the cost of labor for such tasks would potentially rise.

Moreover, new immigration restrictions would likely have negative impacts on the economies of source countries. Personal remittances are 2.3 percent of Mexico's GDP, 10.3 percent in Guatemala, 16.6 percent in El Salvador, and 18 percent in Honduras. Poverty in those countries would increase substantially without those remittances and American exports to that region would also decline. Further restricted immigration is more likely to increase poverty in Latin America and diminish U.S. exports than increase native wages.

## Conclusion

Our research produced two broad results. First, when Borjas's methods are extended a few years, the wage elasticity of immigration is  $-0.2$  rather than  $-0.3$  to  $-0.4$ . Second, Borjas's assumption of perfect worker substitutability within cells cannot be correct as the wages of men and women both increased as women entered the workforce from 1960 to 2010. Empirical methods that relax the two assumptions described above likely lead to estimates that more accurately describe the impacts of immigration on native wages and that are either very small or zero (Ottaviano and Peri 2012, Ortega and Verdugo 2014).

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# IMMIGRANTS AND HOUSING DEMAND

*Gary D. Painter*

It is well recognized that immigrants have settled in communities all across the country and that demographic change has important implications for all segments of society. Further, a recent report from the National Academies of Sciences (NAS 2015) finds that the pace of immigrant integration has accelerated. Researchers, including this author, have studied the factors driving immigrant housing demand for the past two decades. This research (Painter, Gabriel, and Myers 2001) was motivated in part by comparing gaps in native and immigrant housing outcomes, such as homeownership, to assess levels of immigrant integration into communities. My research shows that the higher rates of moves by immigrant households in the 1980s and 1990s accounted for a substantial part of the gap in homeownership rates between immigrants and native households. Further differences in housing outcomes included different rates of headship (Painter and Yu 2010), which is the tendency of a person to form a household, a higher propensity to live in overcrowded conditions (Painter and Yu 2008), and residence in higher cost metropolitan areas (Coulson 1999).

Real estate practitioners and policymakers throughout the country have often ignored immigrant housing demand and local community contributions of immigrants because until the new millennium, most immigrants lived in a limited number of metropolitan areas (“immigrant gateways”) in a handful of states, such as California, Texas,

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New York, and Illinois. Even as immigrants began to move to other metropolitan areas in the South and Midwest (“emerging gateways”) in sizeable numbers, practitioners often viewed these populations as more transient in nature, moving from job to job and never putting down roots in communities. This false assumption led professionals to ignore the influence of the growing number of immigrants in places like emerging gateways. However, the dawn of the new millennium has yielded a number of changes that requires a reassessment of the level and drivers of housing demand among immigrants as immigrant populations have grown substantially in all metropolitan areas across the United States.

Chief among these changes is how the permanence of the immigrant population has changed markedly over the last two decades. Contrary to pervasive stereotypes, the majority of immigrants in the United States are not new arrivals and have lived in the United States for a decade or longer.<sup>1</sup> Moreover, in the places where most immigrants reside (e.g., California, Texas, New York, and Illinois), less than 20 percent of immigrants are new arrivals. Yet, there are many places in the United States where new arrivals still represent the majority of the immigrant population.

There has also been a dramatic shift in immigrants’ mobility rates. In research funded by the Kauffmann Foundation, Liu and Painter (2016) found that mobility rates of immigrants have fallen dramatically and are now lower than the rates of native-born households. Long-distance migration by immigrants within the United States has fallen even more when compared to native-born households. Moves across state boundaries have fallen among all households, and moves by immigrant households have fallen from a peak of 3.5 percent per year in 2000 to 1.5 percent in the most recent period. Moves across county boundaries by immigrants fell from a peak of 7 percent to 3 percent in 2013.

Notably, mobility rates have declined for immigrants and native born households at all skill levels. The mobility rates of immigrants with low levels of education have been similar to those of native-born households over the 20-year period, and have declined from 2 to 1 percent. However, the mobility rates of immigrants with at least a bachelor’s degree have fallen more dramatically. The mobility rates

<sup>1</sup>See, e.g., Zong and Batalova (2017).

of high skilled immigrants peaked at 4.5 percentage points and fell more than 2 percentage points over the period.

One of the reasons for this reduced mobility among immigrants is the fact that many fewer new immigrants have entered the U.S. since the onset of the Great Recession, while the percentage of immigrants in the United States has grown slightly since 2000 (from 13.7 percent to 16.2 percent). The important change in the immigrant population is that there are many fewer recent immigrants. Since 2000, the percentage of the immigrant population that has recently arrived fell from 41.8 percent to 28.5 percent. Of particular note, the percentage of new immigrants in the metropolitan areas with fewer immigrants has fallen much closer to the national average.

Part of the overall decline in mobility can be linked to the lack of new immigrant arrivals into the United States. Recent immigrants are more mobile than are more settled immigrants. In fact, immigrants who have been in the country more than 10 years move across state borders at a rate of only 1 percent per year. Rates of immigrant mobility have declined across all arrival cohorts, but the shift in the population between new and more settled immigrants accounts for part of this decline in mobility.

## Immigrants in Housing Markets

In addition to accounting for the population shifts described earlier, measuring housing demand requires a focus on two characteristics: (1) homeownership, which describes the housing choice of an independent household; and (2) headship, which tracks the number of independent households among all adults.

### *Homeownership*

Homeownership rates have long been tracked as a measure of success in the housing market. This is partially due to the literature on the benefits of homeownership to children (Green and White 1997) and to communities (Rossi and Weber 1996).

While homeownership rates of both groups peaked in 2006 and have fallen since that time, the homeownership rates of immigrants have not fallen as much as the rates for native-born households. Immigrant homeownership rates remain above the rates in 2000, while the rates of native-born households are much lower than in 2000. Immigrant homeownership rates in the United States remain below

the rate of native born households (46.5 percent vs. 62.9 percent), but the gap has fallen from 22.2 percentage points to 16.4 percentage points. The homeownership rate gap between native-born households and that of immigrant households in smaller metropolitan areas was only 13.4 percentage points in 2014.

The literature on homeownership among immigrants (Painter, Gabriel, and Myers 2001; Painter and Yu 2014) has demonstrated that the gap in homeownership between native and foreign-born households can largely be explained by the differences in income between the two groups. The remainder of the gap can be explained by the years since an immigrant has arrived in the United States. After five to ten years in the United States, immigrant homeownership rates are the same as that for native households with similar socioeconomic characteristics. The metropolitan areas with more settled immigrants are likely to have smaller gaps between natives and immigrants.

### *Headship*

Changes in the headship rate enable us to determine how a broader delineation of the demand for housing has fallen among both the immigrant and native populations. There are two remarkable facts. Immigrant headship is similar to the peak of housing demand in 2006 (40 vs. 40.2 percent nationally). However, the headship rates of U.S.-born households have fallen dramatically. The decline in headship began in 2000, and continued through the Great Recession. Around the nation, the headship rate for U.S.-born households fell from 46.3 percent to 44.2 percent. The decline in the largest immigrant gateway cities was even larger, so that rates of headship are now only 42.7 percent. What was once a 10 percentage point difference between U.S.-born and foreign-born households is now only 3 percentage points in much of the United States and about 4 percentage points in the smaller metropolitan areas.

### *Implications*

A number of conclusions from the literature can help us understand the implications of these trends. Immigrants' rates of homeownership rise to similar levels as those of native-born households within five to ten years of entering the country. However, they remain more likely to live in households of larger

size, with more adults and children than comparable native-born households.

The gap between natives and immigrants on both metrics of housing demand has fallen tremendously as a result of many factors. Arguably, a chief factor is the reduction in new arrivals over the last decade. As the housing literature suggests that immigrant integration in housing markets is fairly rapid, the housing demand of immigrants has converged with that of U.S.-born households. A second factor is that even the new arrivals are moving to much less expensive housing markets than did past waves of immigrants during the 1980s and 1990s.

Finally, housing outcomes for U.S.-born households were disproportionately worse throughout the Great Recession, which helped narrow the gap. The reasons why these outcomes were disproportionately worse for natives than immigrants remain a subject for future research.

## Conclusion

The contribution of immigrants to housing demand has always been important, and can now be observed to be very much like U.S.-born housing demand. In addition to participating in the revitalization of neighborhoods that suffered during the recent economic downturn, evidence from the National Academy of Sciences suggests that neighborhoods with greater numbers of immigrants experience reductions in crime. Further, research by the Kaufmann Foundation highlights the role of immigrants in driving entrepreneurship among both high- and low-skilled immigrants.

A final point of emphasis is warranted. When immigrants move to a community, they are more likely to stay than are existing residents of that community, even as the economy changes. Therefore, immigrants, and their children, will continue to contribute socially and economically to the fortunes of communities and the future of our country, and share the benefits.

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# IMMIGRATION, HOUSING MARKETS, AND COMMUNITY VITALITY

*Jacob L. Vigdor*

Nearly every American community, past and present, has sought to preserve or expand its population. The histories of most cities and towns are replete with stories of real estate developers who went to great lengths to portray the inevitability of their communities' growth and success, in the hope of generating a self-fulfilling prophecy. American communities, as a rule, see population growth as an economic engine. New families require homes, automobiles, groceries, furnishings, entertainment, and everything else that makes modern life possible.

When communities lose population, the consequences can be dire. Vacant and abandoned houses are an eyesore at best and magnets for dysfunctional behaviors at worst. Shrinking tax bases leave cities with a dwindling ability to maintain infrastructure, make good on pension obligations, and pay the bills incurred in headier times. And as local economies shrink, the job prospects for those left behind dwindle.

These facts are worth bearing in mind when contemplating the path forward for American immigration policy. Some 40 million foreign-born persons now reside in the United States, with around a million obtaining legal permission to enter every year. Between a

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quarter and a third of these immigrants do not have legal permission to live and work in this country. The debate over their fate, which focuses largely on the argument of whether immigrants “take jobs” from Americans, is incongruous with the desire of every community to maintain or expand its population base.

Should American communities worry every time a newcomer, foreign or domestic, buys a home and moves in? The obvious answer—no—arises not only by common sense but also from a rigorous analysis of U.S. Census data between 1970 and 2010. Over that 40-year span, the nation’s immigrant population quadrupled, to the point where one in every eight American residents was born abroad.<sup>1</sup> As these immigrants did not spread themselves evenly across the country, it is possible to infer their impact on American communities by comparing trends across areas that received varying numbers. This analytical approach has been employed by numerous prior studies of immigrants’ impact on labor and housing markets (see, e.g., Altonji and Card 1991, Ottaviano and Peri 2012, and Saiz 2007).

### Economic Perspectives on the Impact of Immigration

Basic economic theory argues that the entry of new families into a community will boost the housing market in one of two ways. First, new homes built to accommodate new families provide a temporary boost to the local labor market, in construction and related sectors. Second, if the housing market is unable to expand sufficiently, because of zoning laws or other restrictions, home values will increase to the point where the new family finds an existing one willing to depart—or at least to accept smaller quarters. Either way, local governments gain from the expansion of the property tax base. When property values rise, homeowners enjoy an increase in equity.

The theoretical impact of population expansion on local labor markets is more complicated. The fear that new migrants to a region will “take” jobs from natives might make sense in a world where the amount of work to be done is finite—as if a community’s only source of gainful employment were to manufacture a good for export. In reality, most jobs in any community are directly tied to the local population. Ours is a service-dominated economy, and most services are provided by community members to their neighbors.

<sup>1</sup>For an extensive discussion of the data used in this article, see Vigdor (2013).

## The Challenge to Discerning Impact in Data

Empirically assessing the impact of immigration on housing and labor markets would be straightforward if immigrants sorted into communities randomly. The impact of migration could be assessed much the way a new pharmaceutical might be evaluated: by comparing communities that randomly received large numbers of migrants with those that received few.

In reality, migrants choose their destinations purposefully, gravitating toward regions offering greater employment opportunities. It is no coincidence that the migration wave of the late 20th century tilted toward the Sun Belt, whereas the preceding wave of the early 20th century focused on cities that would become the Rust Belt. As immigration scholars have recognized for more than two decades, a simple comparison of the economic fortunes of communities receiving immigrants with those that do not risks confusing the impact of immigration with the prosperity that attracted immigrants in the first place.<sup>2</sup>

To distinguish factors drawing immigrants from the impact of immigration, social scientists focus on a factor known to draw immigrants that has nothing to do with the degree of preexisting prosperity in a local region. Migrants gravitate toward communities where they can find friends and relatives of the same nationality. Living in proximity to migrants from the same nation offers many benefits beyond reuniting families and neighbors. Established migrants can help newcomers find housing, work, and other necessities of life.

The pull of fellow countrymen can be strong enough to entice migrants to settle in regions with bleak economic prospects. For example, Wayne County, Michigan, which is home to Detroit, has struggled economically in recent decades, losing more than 13 percent of its population between 2000 and 2015. The local unemployment rate peaked at 18.7 percent in 2009, almost double the national average.

For more than a century, Wayne County has been home to a significant cluster of immigrants from the Middle East (Hassoun 2005). For new migrants from that region, the Detroit area remains a

<sup>2</sup>Each of the studies cited earlier uses the strategy outlined below to circumvent this fundamental problem. The insight underlying this strategy is generally credited to Bartel (1989).

destination of interest. Even as the county lost one in eight residents over 15 years, Census Bureau estimates show an increase in the number of immigrants from Lebanon, Yemen, and other Middle Eastern countries.

Rather than study how the number of migrants relates to local prosperity—a correlation where the causality could run in either direction—the analysis presented here relies on a forecast of how many migrants would have entered a U.S. county on the basis of two factors: first, the total number of migrants to the United States from a single origin country since 1970, and second, how migrants from that country were distributed across the nation in 1970. Because the forecast number is not itself a function of local economic prosperity, it breaks the chicken-and-egg relationship between the two.

These forecasts are not perfect. Many immigrants have moved to parts of the country where few foreign-born persons lived in 1970, but this imperfection is key to the methodological strategy. Counties that were forecast to gain an extra 1,000 immigrants between 1970 and 2010 according to the number living there in 1970 averaged an extra 168 in reality.<sup>3</sup>

## What the Data Show: Immigration Raises Home Prices and Creates Opportunities for Natives

Using the method outlined earlier, analysis shows a significant statistical relationship between the number of immigrants *forecast* to move to a county and median housing values in that county. The magnitude of the effect appears small: one additional immigrant in a county predicts an 11.6-cent boost to median housing values, in 2010 dollars.

Simple arithmetic indicates that this modest effect translates into a massive impact on the wealth of American property owners. The typical immigrant resides in a county with 800,000 housing units, which means that the 11.6-cent impact per unit adds up to over

<sup>3</sup>This statistic comes from a regression analysis of actual foreign born population on forecast foreign born population, controlling for (lagged) median housing value, median age, housing stock size, vacancy rate, and proportion single-family detached homes, as well as year and county fixed effects. Forecasts for years earlier than 2010 (1980, 1990, and 2000) have stronger correlations with actual foreign-born population.

\$90,000 across the entire community. Added up across the 40 million foreign-born residents in the United States, this impact expands to a \$3.7 trillion boost to home values. For the typical American family that owns a home but few other financial assets, the impact of immigration translates into a tangible increase in wealth. To put this number in perspective, the U.S. Federal Reserve attributed \$23 trillion in housing wealth to American households as of the fourth calendar quarter of 2016 (Board of Governors 2017: 138).

While the positive impact of immigration on home values generates a windfall for most American families, the impact on renters is more complicated. Higher home prices translate into higher out-of-pocket housing expenses for renters. This is a particular concern in the nation's most expensive housing markets—particularly the San Francisco Bay area, the urban Northeast, and similar regions. However, an analysis of migration patterns in these regions shows that immigration is not the dominant factor in driving up housing costs in the most desirable neighborhoods, for the simple reason that high costs drive migrants to other parts of the city.

Table 1 compares the five boroughs of New York City. Manhattan, by far the most expensive borough, with a 2015 estimated median home value of \$867,000, had the smallest increase in immigrant population between 2000 and 2015. For every two immigrants moving to Manhattan, 11 moved to the Bronx, the borough with the lowest housing prices.

By seeking out neighborhoods with the lowest home prices, immigrants have helped stabilize the most vulnerable segments of some metropolitan areas, making them more viable choices for a broader

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**TABLE 1**  
**IMMIGRANTS IN THE FIVE BOROUGHS OF NEW YORK CITY**

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Borough	Change in Foreign-Born Population, 2000–15
Bronx	105,588
Brooklyn	40,525
Manhattan	19,144
Queens	72,412
Staten Island	29,468

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SOURCE: U.S. Census Bureau.

segment of the population. The population of the Bronx, according to the most recent Census Bureau estimates, is now approaching the all-time peak reached in 1970.

If immigration truly resulted in a net loss of employment opportunities for natives, we might expect to see the native population decline when a wave of immigrants enters a community. To study the impact of immigration on native population flows, we need to be wary of the same concern that affected analysis of housing—that immigrants and natives will tend to flow toward the same locations: those that offer better job opportunities.

Fortunately, the same basic statistical technique outlined above can be applied to the study of native population flows as well as housing prices. Thus, relating the forecast inflow of immigrants to the size of the native population in a county reveals a *positive* impact. When 1,000 immigrants enter a county, the native population increases by an average of 423. Some of these new native residents may be the U.S.-born children of immigrants. Census Bureau data indicate that on average, for every 1,000 foreign-born immigrants in a county, there are 150 native-born children of immigrants. Subtracting this 150 from the impact described earlier implies that about 270 Americans born outside immigrant families migrate to a county for every 1,000 immigrants.

Many of the job opportunities created when immigrants enter a county relate to goods or services provided to the immigrants themselves. These families require food, shelter, and the other necessities of life. They will occasionally require health care, and their children will attend schools funded largely by the property taxes paid on their residences.

Beyond purchasing goods and services in the local community, however, immigrants can create or preserve job opportunities for natives by forestalling the exit of businesses in export-oriented industries such as manufacturing. Although manufacturing employment has generally declined over the past several decades, the decline was less rapid in counties receiving a larger number of immigrants between 1970 and 2010. For every 1,000 immigrants entering over this time period, counties retained an additional 46 manufacturing jobs.<sup>4</sup>

<sup>4</sup>Like earlier analyses, this one utilizes a forecast number of new immigrants rather than the actual number.

## Conclusion

To summarize: over the last 40 years, the arrival of 1,000 immigrants into an American county has led to an average home value increase of \$116 and created economic opportunities sufficient to draw in 270 native-born residents, some of whom might take one of the estimated 46 manufacturing jobs created or preserved.

From a different perspective, the deportation of some 10 million undocumented migrants currently residing in America would have significant negative impacts on their communities. The loss in housing wealth would approach \$1 trillion, nearly half a million manufacturing jobs would be at risk, and opportunities for millions of native-born workers would be threatened.

Should these results seem counterintuitive, recall the basic truism that no American community wishes to see its population decline. Immigrants, in the final analysis, are consumers, and their dollars circulate throughout local economies just as those spent by any other family.

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# IMMIGRATION AND SEGREGATION

*Susan M. Wachter*

What impact does immigration have on patterns of neighborhood segregation? Immigrants prefer immigrant-dense neighborhoods, due to the proximity they afford to people of the same national, ethnic, or linguistic group (Borjas 1992). This clustering does not imply higher house prices or rents in such neighborhoods, however, since native-born residents tend to respond by moving to less expensive neighborhoods themselves.

But are those natives neutral about where they live? Or do they prefer to live in mostly native neighborhoods? In the latter case, the resulting outcome may be native-born citizens' flight and a degree of segregation that does not reflect immigrant choice. As in the major migration of African-Americans from the South to the North in the first half of the 20th century, the preferences of previous settlers are central to determining neighborhood segregation outcomes and social capital consequences—including those arising from labor market networks, native language proficiency, and educational achievement (Jargowsky 2016, Kneebone 2016).

## Immigration and the Neighborhood Revisited

In our *American Economic Review* article titled “Immigration and Neighborhood,” Albert Saiz and I (Saiz and Wachter 2011) provide

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evidence on the segregation of immigrants and native-born populations, and the consequent neighborhood sorting by income and ethnicity. As we wrote, housing markets reveal natives' preferences and likely segregation outcomes:

Following conventional racial segregation models . . . we are interested in knowing whether changes in a neighborhood's immigrant share are related to local changes in home values. In a theoretical model with perfect mobility, immigration need not have any impact on the relative housing values of the neighborhoods where immigrants concentrate. However, if immigrant enclaves are perceived as less desirable places to live by natives, then we should expect a relative negative association between immigration density and housing values. A negative association (controlling for other location and housing quality attributes) provides an unequivocal sign of native preferences for segregation. Intuitively, a non-arbitrage condition ensures that prices cannot be lower in a location unless there is a perceived negative compensating differential: otherwise opportunistic natives move in until the price gap is bridged [Saiz and Wachter 2011: 173].

We establish an empirical methodology to test for immigrant concentration and native and white flight. We find that neighborhoods with a growing immigrant presence do experience an exit of native-born residents and lower housing values after adjusting for changes in housing quality and accounting for other neighborhood characteristics. This dynamic, of the native born exiting neighborhoods with increased numbers of immigrant residents, is consistent with the results of a historical study by Shertzer and Walsh (2016), who find that white departure in response to the arrival of African-Americans in the first half of the 20th century led to increases in urban segregation.

These negative impacts of immigrants at the neighborhood level on the native-born population and house values may seem contrary to the literature that shows that immigrants are a contributing factor to the growth of cities and the rise of house prices and rents over time. For example, Saiz (2007) finds that an immigration inflow of 1 percent of a city's population is associated with an increase in average rents and housing values of about 1 percent. However, these findings are in fact consistent, because the positive effects on house prices and rents are found at the metropolitan level, while the

negative effects are found at the neighborhood level. As the native born leave immigrant-dense neighborhoods, they move to other parts of the metropolitan area; overall, house prices in the metropolitan area increase as a result.

There are alternatives to this “native flight” hypothesis, which suggest that the native born find immigrant neighborhoods relatively less attractive and that this attitude is responsible for the association between immigrants and relatively lower neighborhood house prices. Other potential explanations include

- Changes in housing quality,
- Reverse causality (that is, immigrants moving to neighborhoods with falling prices), and
- Omitted variables.

A reverse causation explanation for relatively lower housing values in immigrant-dense neighborhoods is highly plausible, since immigrants may be looking for more affordable housing. That possibility means that in some areas home values will grow more slowly, since prices reflect future rent and price growth.

It is possible to test for native-born preferences as a separate hypothesis, by focusing on quality-adjusted housing prices and constructing an instrumental variable in lieu of the infeasible random assignment of immigration shocks to selected neighborhoods. In Saiz and Wachter (2011), my co-author and I use data from the American Housing Survey to control for differences in housing quality attributes between native-owned and immigrant-owned houses (including age, number of detached housing units, number of rooms, presence of kitchen facilities, plumbing, and other criteria), to identify the quality-adjusted housing price impacts only.

We then devise an instrumental variable approach to deal with reverse causality and omitted variables. We use a geographic diffusion model to produce forecasts about future immigrant settlement patterns, which are related to proximity to neighborhoods that are already immigrant-dense. Then we assess the interactions of these predictions with other variables as instruments for the actual changes in immigrant density in a neighborhood.

The evidence supports a causal link between growing immigrant density, native flight, and a slowdown in housing value appreciation. The impact of immigration is found to be stronger in high-income areas with a high initial density of white residents.

In order to carry out this study, we use decennial data from those metropolitan areas of the United States at the census tract (4,000 inhabitants or more) level in the 1990 and 2000 censuses for which the change in number of foreign-born residents amounted to 5 percent or more of the metropolitan statistical area's population in the previous census (using 1980 as the baseline). We include the neighborhoods' socioeconomic characteristics in our model as controls. Among these are income, population, employment, education, age structure, ethnic composition, number of foreign-born individuals, distributions of marital and family status, housing price data, ownership rates, vacancy rates, latitude and longitude, state, metropolitan area, county, minor civil division, and school district identifiers.

We also directly measure the impact of immigration shocks on white and native flight. We find that these shocks are associated with absolute decreases in the level of native-born and white population, except in the top 5 percent of tracts (where the population more than doubled between 1990 and 2000).

We further attempt to determine why immigrant enclaves are perceived as less desirable places to live by natives. Possible reasons include expected (negative) changes in the quality of local public goods (such as education) and changes in ethnic composition (as opposed to the number of foreign-born residents). To do this, we examine the effects of ethnicity and socioeconomic status of immigrants using census microdata from 1990 and 2000. We calculate the average share of high-school dropouts, as well as demographic characteristics by immigrant national group, and then use these variables as a proxy to measure immigrant-driven shocks based on population shares by nationality. We use four different ethnic group designations (non-Hispanic white, black, Asian, Hispanic) and characteristics of an immigrant-driven supply shock to the local share of individuals who are high school dropouts.<sup>1</sup> It turns out that ethnicity and education both affect housing prices. These effects are most pronounced in neighborhoods where new immigrants are less educated and tend to be minorities. The effects no longer hold

<sup>1</sup>These variables are used because other socioeconomic attributes (e.g., income) were found to be collinear to and therefore well explained by these two main factors across national groups.

in the absence of these characteristics. Therefore, the results of our research indicate that the negative association between prices and immigrant density may be driven by the fact that immigrants tend to be of lower socioeconomic status and belong to minority groups, rather than by their “foreignness” per se. This segregating outcome of socioeconomic status concentrations is consistent with the broader societal sorting by income and ethnicity observed over time (Acolin and Wachter 2016). Furthermore, this sorting outcome appears to be driven by housing affordability factors (in addition to native preferences) that affect immigrant populations as well as affordability-constrained households more generally.<sup>2</sup>

### Looking to the Future

As noted, these results are obtained using data from the 1990 and 2000 censuses. There are three factors that might change these relationships if we were to study more recent and future data, so that higher immigrant population is no longer causally associated with declining (relative) housing prices. These factors are socioeconomic convergence between natives and immigrants, changes in attitudes among natives, and changes in preference for living in suburbs or center cities by immigrants and natives.

First, as immigrants’ socioeconomic status converges with that of the native-born, it is expected that immigrants’ location preference and ability to become homeowners will become more like that of natives, as found by Painter, Gabriel, and Myers (2001) for Hispanic and Asian immigrants. This could potentially reduce the segregation and concentration of immigrant populations.

Second, it is possible that the attitude of natives toward immigrants might change. For instance, Card, Mas, and Rothstein (2008) find higher “tipping points” in certain geographical areas and evidence of changing “tipping points” over time—meaning that after some critical point the change in attitudes is significant.

Finally, changes in the perceived value of living in central locations as opposed to suburban ones on the part of young, educated native households (Couture and Handbury 2017), as well as the increased

<sup>2</sup>This is consistent with the higher coefficient found on regression results using ordinary least squares that include reverse causation and do not adjust for quality.

dispersion of immigrants (Painter and Yu 2008), might alter the local relationship between immigrants and housing costs, since suburbs would no longer represent as good a substitute for natives desiring to move away from immigrants. The consequence may be higher housing prices in immigrant-dense neighborhoods that are centrally located.

There is evidence that all three of these factors are occurring. Hence, the classical price impact studies that show either a rise in neighborhood prices with greater in-migration of minorities due to discrimination (Kain and Quigley 1975; Cutler, Glaeser, and Vigdor 1999) or a lower price due to majority flight (Schelling 1972) may soon be upended, with a rise in housing prices driven by the in-migration of minorities being associated with increasingly desirable urban neighborhoods.

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## IMMIGRANT ENTREPRENEURSHIP: TRENDS AND CONTRIBUTIONS

*Magnus Lofstrom*

Edward Lazear, Stanford economics professor and former chairman of the President’s Council of Economic Advisers, has said, “The entrepreneur is the single most important player in a modern economy” (Lazear 2002: 1; see also Holcombe 1998). The emphasis on entrepreneurship and small and startup businesses as key engines in job creation, innovation, and economic growth has a long history, going back to Adam Smith. Not surprisingly, governments around the world view promoting entrepreneurship as a national and local priority. The interest is driven primarily by evidence that small and young businesses create a disproportionate share of new jobs in the economy, represent an important source of innovation, increase national productivity, and alleviate poverty (Reynolds 2005, OECD 2005, U.S. Small Business Administration 2011, Decker et al. 2014).

A frequently held view, often supported by research, is that immigrants are especially entrepreneurial, a sentiment commonly shared by policymakers and reflected in immigration policies. Many developed countries, including the United States, have created special visas and entry requirements in an attempt to attract immigrant entrepreneurs (Fairlie and Lofstrom 2015). In addition to possible contributions to economic growth, employment, and innovation, immigrant business ownership may also act as a tool to enhance immigrant labor market integration and success

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(Cummings 1980). For example, self-employment may alleviate informational gaps regarding education, skills, and experience gained by immigrants in their home countries, where U.S. employers are uncertain about how foreign-obtained human capital relates to productivity in the United States. Labor market discrimination and limited English proficiency are other possibly relevant hurdles faced more by immigrants than by U.S.-born workers. Although relevant across all levels of skills, this arguably may be most relevant to low-skilled immigrants, who face the highest hurdles to hiring in an increasingly skill-intensive economy.

This article analyzes recent U.S. data to examine how immigrants during the last 15 years have contributed to entrepreneurship through self-employment and earnings. It aims to address the questions of how do immigrants contribute to recent U.S. self-employment trends, in what industries are immigrant entrepreneurs concentrated, and how do their earnings compare to those of U.S.-born entrepreneurs? Before turning to the analysis, aimed to provide a broader understanding of contributions of immigrants to entrepreneurship, I begin with a brief overview of the relevant literature.<sup>1</sup>

## Literature Review of Immigrant Entrepreneurship

There are a number of relevant ways to measure entrepreneurship and immigrant contributions to it. One is by measuring business ownership and startups. A body of research has consistently found that business ownership is higher among the foreign-born than the native-born in many developed countries such as the United States, United Kingdom, Canada, and Australia (Borjas 1986; Lofstrom 2002; Clark and Drinkwater 2000, 2010; Schuetze and Antecol 2007; Fairlie et al. 2010). Immigrants in the United States are also found to be more likely to start businesses than the native born (Fairlie 2008).

Other measures of entrepreneurship also point toward significant immigrant contributions. For example, as a recent review of the relevant literature shows, immigrants are greatly over-represented among U.S.-based Nobel Prize winners, high-impact companies, patent applications, and members of the National Academy of Sciences and the National Academy of Engineering (Fairlie and

<sup>1</sup>For more details, see Fairlie and Lofstrom (2015).

Lofstrom 2015). They are also over-represented among founders of high-tech companies, biotech firms, biotech companies undergoing initial public offerings, and public venture-backed U.S. companies. Nonetheless, some researchers urge caution about interpreting immigrant contributions to the high-tech sector of the economy. Hart and Acs (2011: 116) conclude that “most previous studies have overstated the role of immigrants in high-tech entrepreneurship.”

There is evidence of broader contributions by skilled immigrants to innovation. For example, Hunt and Gauthier-Loiselle (2010) find that the increase in the share of the U.S. immigrant population with at least a college degree increased the country’s patents per capita by about 21 percent. Importantly, they point out that their analysis does not suggest that immigrants are innately more able than the native-born but that the higher rate of patenting among college graduate immigrants is entirely explained by the greater share of immigrants with science and engineering education compared to the native-born. Another influential study, by Kerr and Lincoln (2010), assesses the impact of high-skilled immigration on technology formation as measured by science and engineering employment and patenting. They find that high-skilled temporary workers from India and China on H-1B visas in the United States account for a significant share of the growth in U.S. immigrant science and engineering employment. A key takeaway is that the growth is accomplished without crowding out native-born scientists and engineers.

However, not all evidence points toward such positive and beneficial effects of immigrant entrepreneurship. Specifically, there is some evidence that immigrant entrepreneurs may crowd out native-born entrepreneurs (Fairlie and Meyer 2003). This limited evidence is mixed, and even within the same study, the findings also indicate that immigration increases earnings among the native-born self-employed. In light of the less than clear picture of the role of immigration on native business owners, Fairlie and Meyer (2003: 647) suggest that the results “may be due to immigrants primarily displacing marginal or low-income self-employed natives, but our analyses do not provide clear evidence supporting this hypothesis.”

The notion and relevance of self-employment as an economic stepping stone, as well as a tool in immigrants’ economic assimilation process in the host country, has been explored by a number of researchers. Most researchers have focused on examining whether business ownership tends to rise with time in the new country,

and generally find a positive relationship (Borjas 1986, Clark and Drinkwater 2010, Lofstrom 2002, Schuetze 2009, and Andersson and Wadensjö 2005). Fewer studies have analyzed assimilation earnings patterns among immigrant self-employed business owners.

Lofstrom (2002) analyzes both self-employment probabilities and earnings and finds that both increase along with time spent in the United States. Specifically, he finds that self-employed immigrants are relatively successful and may even reach earnings parity with observationally similar U.S.-born entrepreneurs after about 25 years in the country. For wage-earning immigrants, however, he does not find evidence of earnings convergence relative to their native-born wage-earning counterparts. In an analysis that also includes immigrants in Canada and Australia, Antecol and Schuetze (2007) find that in all three countries self-employment increases with the time in the country but that in terms of earnings outcomes relative to natives, self-employed immigrants in the United States outperformed immigrants in those two countries. This finding is interesting and policy relevant because, unlike immigrants to Canada and Australia, U.S. immigrants are not extensively selected and admitted based on skills. This feature may be due to the self-selection of immigrant entrepreneurs, with the most promising foreign-born entrepreneurs favoring the United States because of potentially higher returns to their capital compared with countries with more equal income distributions.<sup>2</sup>

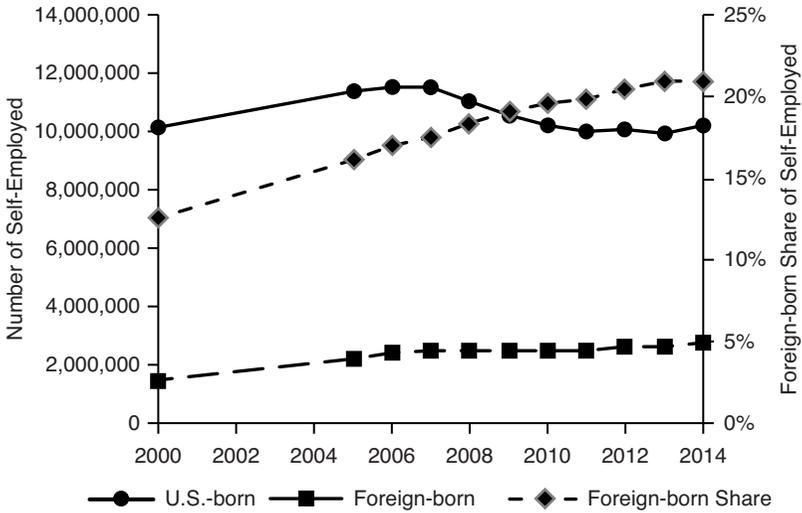
## Recent Trends in Immigrant Entrepreneurship

To examine trends in immigrant self-employment, as well as success as measured by earnings, I use the 2000 U.S. Census and 2005–14 American Community Survey (ACS). I classify those individuals who report being self-employed in both unincorporated and incorporated businesses and working at least 15 hours per week.

The data reveal some striking immigrant contribution to entrepreneurship. While the share of immigrants in the U.S. labor force has grown from about 12.5 percent in 2000 to 16.7 percent in 2014, as Figure 1 shows, immigrants' share of the self-employed

<sup>2</sup>It may also be due to more secure property rights in the United States and greater freedom.

FIGURE 1  
STEADY AND CONTINUED GROWTH IN  
IMMIGRANT SELF-EMPLOYMENT



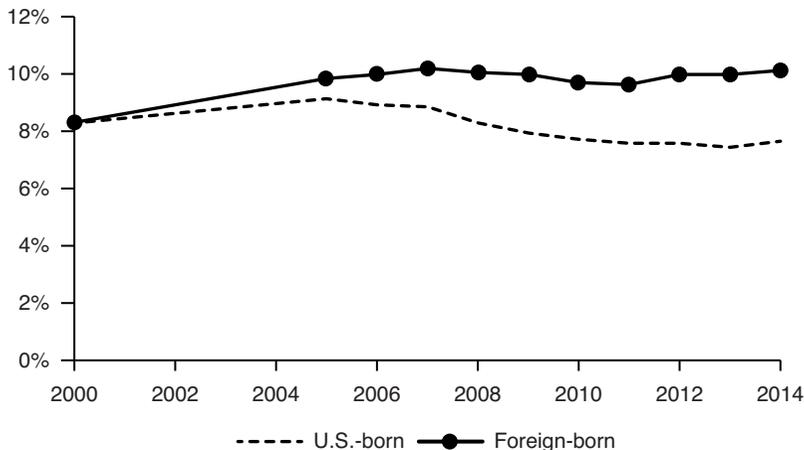
SOURCE: Author’s calculations based on 2000 U.S. Census and 2005–14 American Community Survey (ACS) data.

over the same period grew from 12.5 percent to 21 percent. In other words, about one in five self-employed workers in the United States are now foreign born.

Although growth in the immigrant population partly accounts for the increase in the foreign-born share of self-employed, a divergence in the likelihood of choosing self-employment between immigrants and natives has also contributed to the trend. Figure 2 shows that in 2000, the self-employment rate among both U.S.-born and foreign-born workers was 8.3 percent. However, in subsequent years, the immigrant self-employment rate has been increasingly higher than the U.S.-born rate, and by 2014 the immigrant self-employment rate was 2.5 percentage points higher (7.6 percent and 10.1 percent respectively for U.S.- and foreign-born individuals).

Arguably more striking is the immigrant contribution to the growth in the number of workers who report being self-employed. Between 2000 and 2014, the total number of self-employed in the

FIGURE 2  
 SELF-EMPLOYMENT RATE GAP BETWEEN  
 IMMIGRANTS AND U.S.-BORN



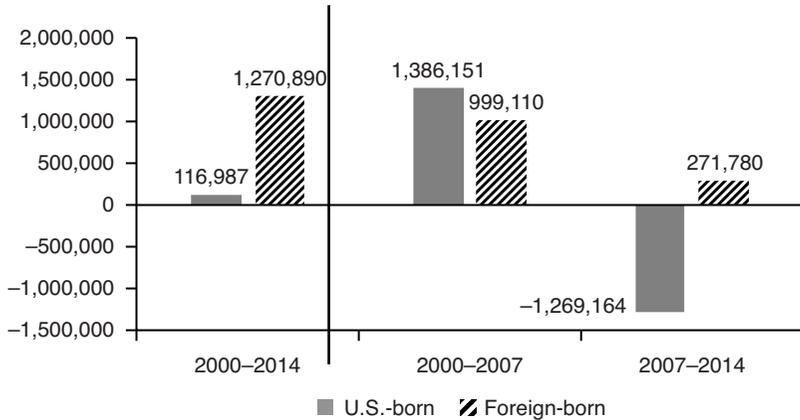
SOURCE: Author’s calculations based on 2000 U.S. Census and 2005–14 American Community Survey (ACS) data.

United States grew by about 1.4 million, a growth of about 12 percent. Most noticeable is that immigrants accounted for about 1.3 million of the added number of self-employed individuals in the United States, as Figure 3 shows. In other words, more than 90 percent of the total growth in self-employment between 2000 and 2014 can be attributed to immigrants.

This change played out differently before and after the Great Recession. As Figure 3 also shows, between 2000 and 2007, U.S.-born self-employment grew by about 1.4 million, a growth of almost 14 percent. Immigrant self-employment increased over the same period by almost 1 million, or almost 70 percent. During this boom period, immigrants accounted for about 42 percent of the self-employment growth in the United States.

The data also show that immigrants have played an even more important role in self-employment growth since the Great Recession. While the absolute growth rate in immigrant self-employment decreased dramatically between 2007 and 2014, increasing by only about 272,000, this sharply contrasted to the

FIGURE 3  
CHANGES IN THE NUMBER OF  
SELF-EMPLOYED



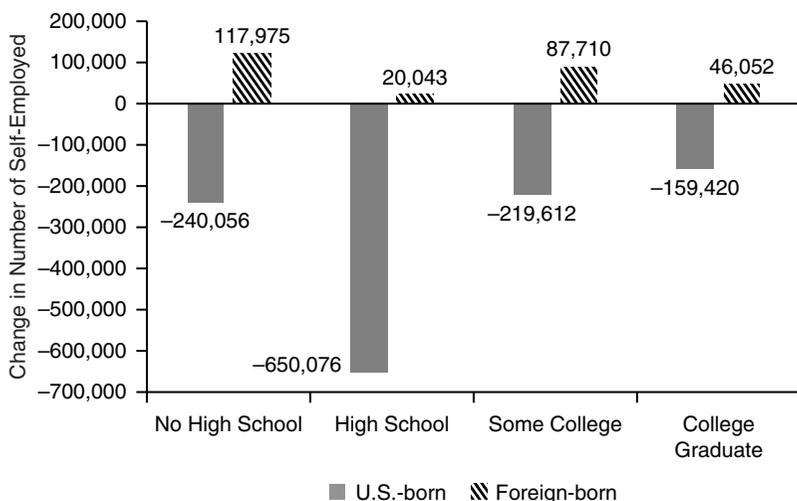
SOURCE: Author's calculations based on 2000 U.S. Census and 2005-14 American Community Survey (ACS) data.

dramatic drop in U.S.-born self-employment of 1.3 million. The data quite strongly suggest that immigrants contribute significantly to entrepreneurship, as measured by self-employment, in boom times but may play an even more important role during recessions.

The post-recession increase in immigrant self-employment can be seen across skill groups, as measured by educational attainment, but as Figure 4 shows, immigrants with less than a high school diploma account for much of that growth—118,000 of the total increase of roughly 272,000. The data also show that the decline in self-employment among U.S.-born workers is across the board but slightly more than half the drop, about 650,000, was among those with a high school diploma. Roughly half the increase in immigrant self-employment, roughly 134,000, was among those with at least some college education.

The data show quite clearly that self-employment is an increasingly important labor market alternative for immigrants and therefore immigrants contribute increasingly to business ownership in the United States. The next section examines the industries where the contributions are concentrated.

FIGURE 4  
POST-RECESSION CHANGES IN SELF-EMPLOYMENT



SOURCE: Author’s calculations based on 2000 U.S. Census and 2005–14 American Community Survey (ACS) data.

## What Are the Key Immigrant Self-Employment Industries?

Since entry into self-employment and business ownership varies across skill groups, this section disaggregates the descriptive industry analysis by highest level of educational attainment—less than high school, high school credential, some college and college graduate. To do so, I use the four-digit industry variable available in the ACS to determine the share of self-employed individuals in each of the 256 industries and focus on the 10 industries, separately for each skill group, with the highest concentration of immigrant business owners. Furthermore, to get a more up-to-date snapshot, I focus on the most recent years in the ACS data, 2013–14.

Both immigrant and U.S.-born business owners with less than a high school diploma are highly concentrated in a relatively few industries. As Table 1 shows, about 79 percent of low-skilled self-employed immigrants are in the 10 industries where immigrants are most concentrated (close to 59 percent of low-skilled U.S.-born business

TABLE 1  
TOP TEN IMMIGRANT SELF-EMPLOYMENT INDUSTRIES, BY  
EDUCATIONAL ATTAINMENT, POOLED 2013-14

	Less than High School		High School	
	U.S.- born	Immigrant Share	U.S.- born	Immigrant Share
Construction	27.6%	52.1%	23.9%	17.5%
Private Households	4.3%	81.1%	2.3%	50.1%
Landscaping Services	5.2%	73.4%	2.4%	41.5%
Building Services	3.9%	64.9%	3.2%	29.0%
Restaurant/Food Services	2.2%	75.4%	3.2%	27.9%
Child Day Care Services	3.5%	55.8%	3.9%	21.4%
Auto Repair/Maintenance	5.8%	41.4%	6.2%	12.5%
Truck Transportation	5.5%	39.7%	3.1%	21.8%
Nail Salons & Personal Care	0.5%	80.6%	3.9%	17.7%
Taxi & Limousine Service	0.3%	82.4%	0.3%	69.9%
Total Share in Top 10	58.8%	79.0%	52.4%	64.4%

(Continued)

TABLE 1 (Continued)  
TOP TEN IMMIGRANT SELF-EMPLOYMENT INDUSTRIES, BY  
EDUCATIONAL ATTAINMENT, POOLED 2013–14

	Some College			College		
	U.S.- born	Immigrant Share	Immigrant Share	U.S.- born	Immigrant Share	Immigrant Share
Construction	16.6%	13.0%	12.3%	3.7%	6.6%	26.6%
Restaurant/Food Services	2.7%	6.2%	29.3%	5.8%	5.6%	16.2%
Private Households	1.7%	5.3%	36.2%	6.7%	5.0%	13.1%
Real Estate	6.3%	4.8%	12.0%	6.8%	4.9%	12.7%
Child Day Care Services	3.5%	4.2%	17.8%	2.7%	4.5%	25.2%
Building Services	2.6%	3.9%	21.5%	1.6%	4.0%	33.6%
Beauty Salons	5.1%	3.7%	11.5%	2.5%	3.2%	20.6%
Taxi & Limousine Service	0.3%	3.6%	68.1%	8.5%	2.8%	6.3%
Truck Transportation	1.9%	3.0%	21.7%	2.6%	2.4%	15.9%
Auto Repair/Maintenance	2.3%	2.7%	17.1%	3.4%	2.4%	12.3%
Total Share in Top 10	42.9%	50.4%		44.3%	41.4%	

SOURCE: Author's calculations based on pooled 2013–14 American Community Survey (ACS) data.

owners are in these 10 industries). The most common self-employment industry for both U.S.- and foreign-born individuals lacking a high school credential is construction, at 27.6 percent and 25.6 percent, respectively. Among low-skilled immigrants, construction is followed by private household work (15.6 percent) and landscaping services (12.4 percent). In other words, slightly more than half of all low-skilled self-employed immigrants, 53.6 percent, can be found in just these three industries. More than one in three, or 37.1 percent, low-skilled natives own businesses in these three industries. Other common industries among immigrants in this skill group are in services, including building services, restaurants, and child care.

While less concentrated in relatively few industries, more than half of self-employed immigrants with a high school degree or some college own businesses in one of the skill group-defined top 10 immigrant industries, 64.4 percent and 50.4 percent respectively. Construction, private household, and restaurant industries are the three most common for both of these intermediate skill groups. In fact, the most common immigrant industries are identical, with the exception that landscaping is among the top 10 for high school graduates but not among immigrants with some college. Instead, real estate makes the list as the fourth most common industry for the latter group. Overall, the most common industries are not strikingly different between immigrants with no high school diploma and immigrants with a high school diploma or some college.

Table 1 also shows that high-skilled immigrants, defined as college graduates or higher, operate business in many noticeably different industries. The only overlap in the most common immigrant industries between immigrant college graduates and the other skill groups are in construction, real estate, and restaurants. Instead, health care (physicians and dentists), consulting (management, scientific, or technical), computer systems design, legal services, architectural and engineering, and accounting services make up the most common immigrant industries.

A look at the industrial composition of self-employed immigrants points to important contributions in a number of key industries. Not surprisingly, these include some industries often perceived to be immigrant industries. For example, regardless of educational attainment, immigrant businesses are more greatly concentrated in services like restaurants, child care, private household, and personal transportation (taxi and limousines) than are U.S.-born businesses.

Especially striking, more than two thirds of all personal transportation businesses are immigrant-owned. Self-employed immigrants also contribute significantly to many high-skilled industries, especially health care and computer system design.

## How Well Do Self-Employed Immigrants Do in the United States?

Earnings are another relevant measure of economic contributions and can be used as a gauge of how well self-employed immigrants do in the U.S. labor market, especially when compared to similar U.S.-born business owners. As such, comparisons of differences in earnings between self-employed immigrants and the native-born shed light on contributions, relative success, and labor market integration. To make such a comparison, I estimate separate earnings regressions, by skill group, while controlling for plausible earnings determinants such as age, level of English proficiency, gender, race/ethnicity, household composition, geographic location, and industry. I use the log of annual earnings as the dependent variable and include controls for weeks worked. To focus the analysis on those most actively engaged in self-employment, I exclude those who report working less than 40 weeks the previous year in their reported owned business.

The summary statistics for the analytical samples are shown in Table 2. Some interesting observations include these:

- There is a high prevalence of limited English proficiency among both self-employed immigrants lacking a high school credential and those with no education beyond high school.
- The share of the self-employed who are Asian increases with educational attainment among both foreign- and U.S.-born, but is especially noticeable among immigrants.
- The vast majority of self-employed immigrants reside in just four states—California, Florida, New York, and Texas.
- A very small share of U.S.-born business owners are minorities.
- Only high-skilled immigrant business owners work more hours per week than U.S.-born entrepreneurs with the same level of educational attainment.

Finally, but very interestingly, Table 2 also shows that while on average, the U.S.-born self-employed business owners have higher annual earnings than do the self-employed immigrants, the gap decreases with

TABLE 2  
SUMMARY STATISTICS, SELF-EMPLOYED, BY  
EDUCATIONAL ATTAINMENT AND NATIVITY, 2013–14

	Less than High School		High School		Some College		College Graduate	
	Immigrants	U.S.-born	Immigrants	U.S.-born	Immigrants	U.S.-born	Immigrants	U.S.-born
Years in the United States	21.6		22.1		24.0		24.7	
Recent	4.5%		5.4%		4.6%		5.2%	
Noncitizen	71.2%		50.2%		38.5%		28.9%	
Limited English Fluency	55.1%		27.4%		14.0%		7.4%	
Mexico	59.2%		26.0%		14.6%		5.5%	
Central America	17.7%		9.6%		6.4%		2.5%	
China	2.2%		4.0%		4.6%		7.5%	
Korea	0.5%		4.3%		5.6%		7.8%	
Vietnam	3.0%		4.7%		4.6%		2.8%	
India	1.5%		3.5%		5.2%		13.6%	
California	33.0%	7.7%	24.1%	8.1%	26.8%	12.2%	26.8%	13.2%
Texas	20.9%	10.0%	10.6%	6.9%	8.5%	7.8%	8.4%	7.3%
Florida	7.9%	4.3%	10.6%	4.4%	9.6%	4.3%	11.0%	7.0%
New York	6.9%	6.5%	14.3%	6.4%	13.6%	6.4%	11.1%	5.7%
Age	44.8	48.0	45.9	49.2	47.0	48.1	49.3	50.7
Married	61.5%	61.5%	68.0%	66.4%	67.0%	64.9%	75.2%	71.5%

(Continued)

TABLE 2 (Continued)  
 SUMMARY STATISTICS, SELF-EMPLOYED, BY  
 EDUCATIONAL ATTAINMENT AND NATIVITY, 2013–14

	Less than High School		High School		Some College		College Graduate	
	Immigrants	U.S.-born	Immigrants	U.S.-born	Immigrants	U.S.-born	Immigrants	U.S.-born
Number of Children	1.4	1.0	1.2	0.8	1.1	0.8	1.0	0.8
Child Younger than 5	13.1%	10.9%	12.4%	7.7%	12.2%	9.7%	11.9%	10.0%
Female	35.1%	22.7%	36.0%	31.4%	37.5%	36.7%	34.6%	34.4%
White	6.4%	76.8%	23.1%	85.7%	29.0%	84.1%	34.6%	89.3%
Hispanic	82.6%	13.8%	50.0%	6.3%	35.9%	6.3%	19.1%	3.6%
Black	1.9%	7.0%	5.1%	5.9%	7.1%	6.9%	5.4%	3.7%
Asian	8.3%	0.5%	19.8%	0.5%	25.8%	0.9%	38.7%	1.7%
Annual Earnings	\$27,855	\$41,644	\$36,631	\$46,131	\$43,928	\$51,363	\$90,179	\$98,710
Usual Hours	39.7	42.8	42.6	43.4	43.2	43.7	44.2	43.4
Worked/week								
Worked 40–47 Weeks	8.3%	9.0%	7.5%	7.5%	7.8%	6.3%	7.4%	7.2%
Worked 48–49 Weeks	2.2%	2.7%	3.0%	2.9%	3.8%	3.0%	4.2%	4.2%
Worked 50–52 Weeks	89.5%	88.4%	89.6%	89.6%	88.4%	90.7%	88.4%	88.6%
Number of Observations	6,614	7,874	12,104	65,162	6,781	46,166	13,133	76,470

SOURCE: Author's calculations based on pooled 2013–14 American Community Survey (ACS) data.

educational attainment. As annual earnings increase more with educational attainment among self-employed immigrants than among their U.S.-born counterparts, the data also suggest that the returns to education among the self-employed are greater among immigrants than among the native born.

Of course, many factors may contribute to differences in earnings between self-employed immigrants and natives. For example, the fact that more than half of self-employed immigrants with no high school credential report limited English proficiency surely contributes to their relatively lower earnings. Conversely, the substantially greater concentration of low-skilled self-employed immigrants in relatively high-paying states like California and New York, all else equal, inflates the earnings of self-employed immigrants. For a better apples-to-apples comparison, I estimate earnings regressions accounting for observational differences between immigrant and native-born business owners. Although the earnings regression includes many interesting and informative estimates (shown in Table 3), I focus on the estimated log annual earnings gap between U.S.-born and immigrant self-employed—that is, the estimated immigrant indicator variable coefficient.

Figure 5 shows both unadjusted and adjusted earnings gaps between immigrant and native-born self-employed. The unadjusted gaps are statistically significant across all educational attainment groups. The largest gap is among the least-educated self-employed, where immigrants earn roughly 21 percent less on average than the low-skilled self-employed born in the U.S. The unadjusted difference is about 16 percent among high school graduates and less than 10 percent for those with some college or college graduates.

However, once we compare otherwise observationally similar immigrant and native self-employed individuals, there is no evidence of statistically significant lower earnings among self-employed immigrants, except among college graduates. In fact, the estimates suggest higher immigrant earnings among the least-educated self-employed. However, among college graduates a statistically significant immigrant-native gap of about 6 percent remains even after all controls are included. In additional model specifications where indicator variables for years in the United States were added, the gap is reduced with time spent in the United States. Annual earnings are not statistically significantly lower for high-skilled immigrants who have been in the United States for at least 15 years.<sup>3</sup>

<sup>3</sup>Results not shown but available upon request.

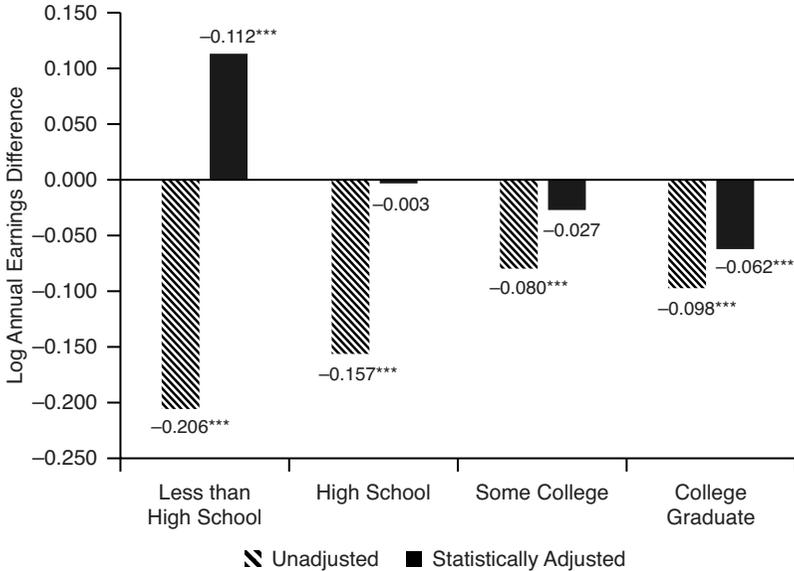
TABLE 3  
OLS REGRESSIONS, LOG ANNUAL EARNINGS,  
SELF-EMPLOYED, BY EDUCATIONAL ATTAINMENT

Variables	Less than High School	High School	Some College	College Graduate
Immigrant	0.112*** (0.035)	-0.003 (0.024)	-0.027 (0.024)	-0.062*** (0.021)
Limited English Fluency	-0.178*** (0.028)	-0.152*** (0.022)	-0.165*** (0.035)	-0.314*** (0.037)
Age	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.003*** (0.000)
Married	0.125*** (0.025)	0.112*** (0.011)	0.104*** (0.016)	0.141*** (0.013)
Number of Children	0.048*** (0.011)	0.030*** (0.005)	0.043*** (0.006)	0.066*** (0.005)
Child Younger than 5	-0.067* (0.034)	0.020 (0.019)	-0.019 (0.024)	-0.008 (0.020)
Female	-0.274*** (0.043)	-0.240*** (0.016)	-0.285*** (0.020)	-0.307*** (0.010)
Hispanic	-0.192*** (0.056)	-0.202*** (0.021)	-0.104*** (0.024)	-0.167*** (0.021)
African American	-0.335*** (0.071)	-0.162*** (0.025)	-0.195*** (0.030)	-0.217*** (0.026)
Asian	-0.038 (0.106)	-0.045 (0.028)	-0.035 (0.025)	-0.054 (0.037)
Usually Works 30–39 Hours	0.367*** (0.033)	0.395*** (0.017)	0.401*** (0.022)	0.459*** (0.016)
Usually Works 40 Hours	0.641*** (0.029)	0.682*** (0.017)	0.695*** (0.020)	0.748*** (0.017)
Usually Works More than 40 Hours	0.864*** (0.034)	0.857*** (0.018)	0.851*** (0.020)	0.973*** (0.016)
Worked 48–49 Weeks	0.075 (0.070)	0.144*** (0.043)	0.166*** (0.041)	0.153*** (0.020)
Worked 50–52 Weeks	0.056 (0.043)	0.195*** (0.023)	0.211*** (0.028)	0.162*** (0.015)
Constant	8.989*** (0.162)	9.214*** (0.061)	9.266*** (0.068)	9.243*** (0.068)
Observations	14,412	76,600	52,463	88,891
R-squared	0.216	0.145	0.158	0.248

NOTES. All regression specifications shown include state and industry fixed effects. Robust standard errors in parentheses

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

FIGURE 5  
ESTIMATED LOG ANNUAL EARNINGS GAP BETWEEN  
U.S.-BORN AND IMMIGRANT SELF-EMPLOYED



NOTE: Estimated log annual earnings gap between U.S.-born and immigrant self-employed based on immigrant indicator variable using pooled 2013–14 American Community Survey (ACS) data. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , based on robust standard errors. Estimates are shown in Table 3.

Overall, the earnings results indicate that self-employed immigrants mostly have annual earnings as high as the U.S.-born self-employed, controlling for relevant factors such as demographic characteristics, skill levels, geographic location, and industry.

## Conclusion

A broad body of research shows that entrepreneurs and small and young businesses are key engines of job creation, innovation, and economic growth. Not surprisingly, governments around the world view promoting entrepreneurship as a national and local priority. A frequently held view, often supported by research, is that immigrants are especially entrepreneurial, a sentiment commonly shared by policymakers and reflected in immigration policies.

Many developed countries have created special visas and entry requirements in an attempt to attract immigrant entrepreneurs (Fairlie and Lofstrom 2015).

In the United States, immigrants increasingly contribute to entrepreneurship. Those contributions may be especially significant during economic downturns. While the share of immigrants in the U.S. labor force has grown from about 12.5 percent in 2000 to 16.7 percent in 2014, immigrants' share of the self-employed over the same period grew from 12.5 percent to 21 percent. Immigrants account for more than 90 percent of the growth in self-employment since 2000, with particularly significant contributions since the Great Recession. Between 2000 and 2007, U.S.-born self-employment grew by about 1.39 million, a growth of almost 14 percent. Immigrant self-employment increased over the same period by almost 1 million, or almost 70 percent. During this boom period, immigrants accounted for about 42 percent of the self-employment growth in the United States. While there was a loss of almost 1.3 million U.S.-born self-employed since 2007, immigrants added about 272,000. There were increases across all education groups but growth in low-skilled immigrant self-employment is especially notable.

Self-employed immigrants in the United States are found in a wide range of industries, but they play especially important roles in a number of relatively low-skilled service industries and important high-skilled sectors such as health care and computer design. For example, more than two-thirds of the self-employed who report owning a business in personal transportation are immigrants. Immigrants, regardless of educational attainment, also play a significant role in service industries like restaurants, child care, and private households. Among the high-skilled self-employed, one in four who report owning a physicians' office or a computer design business are foreign-born. Other industries where high-skilled self-employed immigrants are concentrated are legal services, architectural and engineering, and accounting services.

Earnings are another relevant measure of economic contributions and can be used as a gauge for how well self-employed immigrants do in the U.S. labor market. Although unadjusted average annual earnings are lower among self-employed immigrants, once earnings relevant factors are accounted for, the immigrant-native earnings gap is no longer statistically significant. There are two exceptions. First, low-skilled self-employed immigrants have about 11 percent

higher earnings than observationally similar U.S.-born low-skilled business owner. Second, high-skilled immigrant business owners who have been in the United States for 15 or fewer years have statistically lower earnings than their U.S.-born counterparts. Although the estimates suggest a substantial earnings penalty for limited English proficiency, especially among the least educated immigrant business owners, the results point toward success on par with their U.S.-born counterparts.

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# ECONOMIC FREEDOM AND MASS MIGRATION: EVIDENCE FROM ISRAEL

*Benjamin Powell*

The economic case for free immigration is nearly identical to the case for free trade. They both rely on a greater division of labor based on comparative advantage to ensure that allowing the free movement of goods and services or the free movement of people results in greater global wealth. Estimates of the global gains that could be achieved by the global adoption of an open immigration policy are massive, ranging from 50 to 150 percent of world GDP (Clemens 2011). Even a migration of just 5 percent of the world's poor to wealthier countries would boost world GDP by more than could be gained by completely eliminating all remaining trade barriers to goods, services, and capital flows (Clemens 2011).

## How Free Immigration Could Impact Institutions and Culture

The case for free immigration is more complicated than the basic economic case for free trade because immigrants, unlike goods, can impact host countries' institutions and culture. Immigrants can protest, agitate for political change, promote ideas that can change native-born citizens' thinking, and, in some cases, participate directly

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in the political process, in ways that ultimately might change the institutional environment in their destination country.

Classical liberals have long recognized the benefits of free immigration but have also been concerned with how immigrants might impact institutional evolution. Ludwig von Mises (1927: 137) noted:

The liberal demands that every person have the right to live wherever he wants. This is not a “negative” demand. It belongs to the very essence of a society based on private ownership of the means of production that every man may work and dispose of his earnings where he thinks best.

However, Mises recognized that immigrants might turn the machinery of the state against the natives. Thus, he concluded: “Only the adoption of the liberal program could make the problem of immigration, which today seems insoluble, completely disappear” (p. 142).

Fredrich Hayek shared similar concerns that a more open borders policy could result in political blowback that might lead to less free societies, but for him the worry was the potential backlash from the native-born population.

While I look forward, as an ultimate ideal, to a state of affairs in which national boundaries have ceased to be obstacles to the free movement of men, I believe that within any period with which we can now be concerned, any attempt to realize it would lead to a revival of strong nationalist sentiments and a retreat from positions already achieved [Hayek 1998: 58].

These fears have been rekindled in the latest debate among economists about the economic impact of immigration. George Borjas (2015: 961) asked: “What would happen to the institutions and social norms that govern economic exchanges in specific countries after the entry/exit of perhaps hundreds of millions of people?” He says, “We know little . . . about how host societies would adapt to the entry of perhaps billions of new persons” (p. 967). He then discusses how varying degrees of importation of bad institutions could impact the projected global gain from unrestricted immigration. He concludes that “general equilibrium effects can easily turn a receiving country’s expected (static) windfall from unrestricted migration into an economic debacle” (Borjas 2015: 972). In short, if immigrants bring their institutional values with them to destination countries,

the expected gains from a global open borders policy would disappear or even turn negative.

## Measuring How Immigrants Impact Institutions

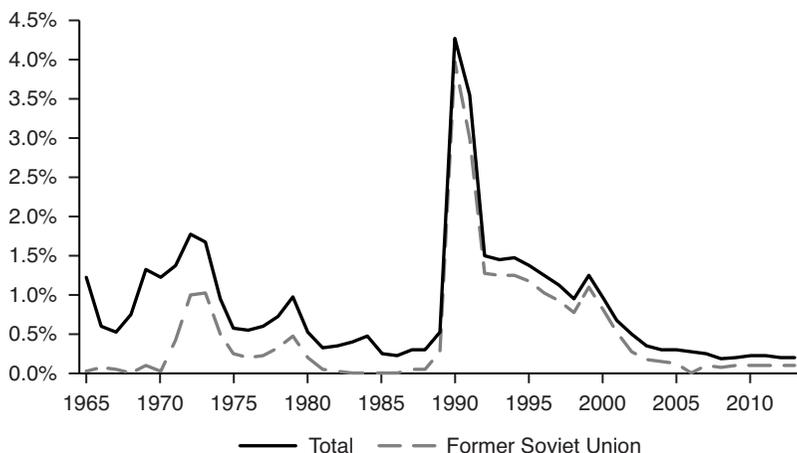
Though dressed up in a mathematical model, Borjas's (2015) argument is nothing more than a conjecture. He offers no empirical evidence that immigrants actually destroy institutional quality in destination countries. But his conjecture has led to a new stream of research attempting to measure whether immigrants harm destination country institutions in a way that decreases productivity. However, each empirical estimation has its limitations, since we do not live in a world with open borders.

Clark et al. (2015) examined how existing stocks and flows of immigrants impacted economic institutions over a 20-year period, finding that greater immigration was associated with a larger improvement in a measure of economic institutions associated with better economic outcomes. Clemens and Pritchett (2016) use data on immigrant productivity, economic assimilation, and how both of these factors change at higher levels of migrant population, to project that current global migration levels are far below optimal even when resulting institutional and cultural changes are included. Both of these studies are important advances beyond Borjas's conjectures, but Clark et al. are limited by the fact that they are studying the impact of stocks and flows that arose from a system of restricted migration. Clemens and Pritchett are limited by the fact that the transmission and assimilation parameters are measured by gaps and changes in immigrants' income earnings. Thus, income gaps and changes in those gaps may tell us little about external effects of immigrants on the productivity of natives if deterioration in institutional quality is the primary channel through which immigrants impact the productivity of others.

## Mass Immigration in Israel: A Natural Experiment

This article summarizes a new attempt by Powell, Clark, and Nowrasteh (forthcoming) to measure the institutional impact of mass migration using the case study of Israel in the 1990s. The first part of that decade saw a 20 percent increase in Israel's population due to an influx of Jews from the former Soviet Union (FSU) (Figure 1). In 1990 alone, Russian immigration increased the

FIGURE 1  
ANNUAL IMMIGRATION AS A PERCENTAGE  
OF THE POPULATION



SOURCE: Powell, Clark, Nowrasteh (forthcoming).

population by 4 percent. For comparison, immigration to the United States at the turn of the 20th century averaged 1 percent annually (Friedberg 2001: 1375). This mass migration occurred because the Soviet Union relaxed emigration restrictions and subsequently collapsed, while Israel has long had the Law of Return, which allows all Jews worldwide to immigrate regardless of their country of origin.

This mass migration has two features that make it particularly well suited to analyze the negative importation of social capital that could undermine institutions. First, all of these immigrants were coming from the FSU, a country with a more than 70-year history of socialism and associated anti-capitalist propaganda. If the immigrants were to agitate politically based on their origin country's ideology, it would clearly have the potential to undermine Israel's democratic and relatively capitalistic institutions. Second, Israel provides the easiest situation for immigrants to directly impact the political process. The Law of Return allows Jewish immigrants to have full citizenship, including the right to vote and to run for office, from the day they arrive in Israel.

There are also two drawbacks for using Israel as a case study. First, and most obviously, Israel's open borders policy applies only to Jews. Second, these migrants probably possess a different mix of human capital from what normally could be expected of mass migrations from

developing countries. However, there is good reason to believe that despite the Jewish makeup of these immigrants, they represent a case of normal immigration that could serve to undermine institutions.

The Law of Return stipulates that all Jews, as well as any gentile spouses of Jews, non-Jewish children and grandchildren of Jews, and their spouses, are eligible to migrate to Israel. Thus, under the Law of Return, the right of migration and citizenship applies to many people who are not Jewish according to *halakhah* (Jewish religious law). As a result, the majority of the immigrants from the FSU were non-religious Jews. Among the former Soviet migrants, 74 percent identified as secular, and only 1.4 percent identified as strongly religious (Al-Haj 2004: 102). The immigrants were also linguistically and culturally distinct. In the 1979 Soviet census, only 14.2 percent of the Soviet Jewish population claimed a Jewish language as their mother tongue, and another 5.4 percent claimed it as a second language, while 97 percent of Soviet Jews spoke Russian (Al-Haj 2004: 74). Much like migration from developing countries today, this wave of immigration was motivated not by Zionist ideology but by pragmatic cost-benefit considerations. Like other typical migration flows, the members of this group were motivated mainly by “push factors” in their home countries (Al-Haj 2004: 100).

The immigrants immediately began to participate in Israeli institutional evolution. They influenced electoral outcomes through the creation of their own immigrant parties, while not being adverse to switching loyalties between the main preexisting parties in order to increase their political leverage. By 1996 an immigrant political party was part of the ruling coalition government. Overall, as one scholar assessed the situation, “FSU immigrants in Israel have successfully penetrated the political system at the group level and become a legitimate part of the national power center within a few years of their arrival” (Al-Haj 2004: 209). However, rather than import their origin country’s institutions to Israel, the immigrants’ political participation coincides with a large move in Israeli institutions toward free-market policies and away from socialism.

### *Economic Freedom in Israel*

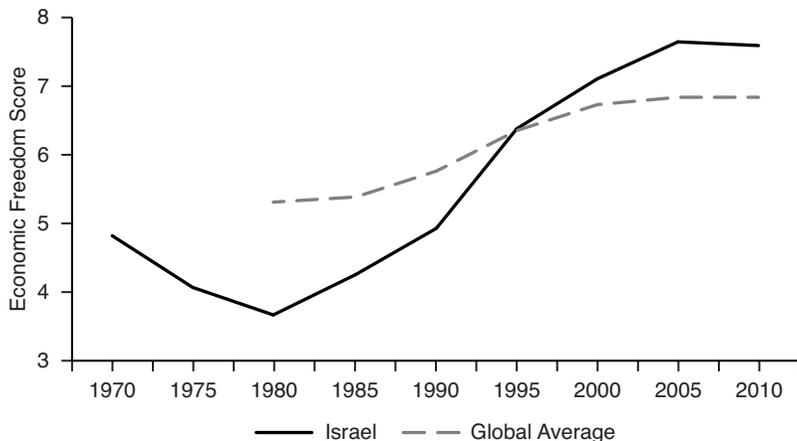
According to the 2014 *Economic Freedom of the World* (EFW) report (Gwartney, Lawson, and Hall 2014), Israel made major improvements in its economic freedom while the mass migration from the FSU was occurring. The EFW index is a reasonable proxy

for economic institutions that could impact a country’s production function. It has been used in more than 100 articles finding that higher levels of, or improvement in, economic freedom are associated with higher income levels, greater economic growth, and a host of other improved economic outcomes (De Haan, Lundström, and Sturm 2006; Hall and Lawson 2013).

The EFW index incorporates 43 variables across 5 broad areas: the size of government; legal structure and property rights; sound money; freedom to trade internationally; and regulation of credit, labor, and business. At its most basic level, the EFW index measures the extent to which individuals and private groups are free to buy, sell, trade, invest, and take economic risks without interference by the government. To score high on the EFW index, a nation must keep taxes and spending low, protect private property rights, maintain stable money, keep the borders open to trade and investment, and exercise regulatory restraint in the marketplace. The EFW index has a lowest possible score of 0 and a highest possible score of 10.

Prior to the mass migration from the former Soviet Union, Israel scored a 4.92 out of a possible 10 on the EFW Index. That was below the world average of 5.77, resulting in a rank of only 92nd freest. As Figure 2 illustrates, Israel had always scored below the world average

FIGURE 2  
ECONOMIC FREEDOM IN ISRAEL AND THE WORLD



SOURCE: Gwartney, Lawson, and Hall (2014), *Economic Freedom of the World: 2014 Annual Report*.

in economic freedom until the mid-1990s. But during the decade of mass migration, Israel improved its economic freedom score by 45 percent (more than two full points). By 1995 it had surpassed the global average in economic freedom, and by 2000 it had climbed 38 spots to rank 54th freest. Economic freedom continued to improve by another half a point, as immigration waned in the early 2000s, reaching a peak of 7.6 in 2005, ranking 45th in the world. The reforms have held, and Israel's economic freedom score has remained largely unchanged over the last decade. The overall increase of economic freedom in Israel during the period of mass migration and the five years immediately following it resulted in Israel catapulting from 15 percent below the global average to 12 percent above it and improving its ranking among countries by 47 places.

## Conclusion

Any example from an individual country must be interpreted with caution. This study finds that unrestricted mass migration from an origin country with inferior political and economic institutions coincided with an enhancement of economic institutions in the destination country. Correlation is not causation. However, the Israeli political campaigns attempting to get the immigrant vote clearly used anti-socialist propaganda in the belief that the immigrants would rebel against the institutions of their origin country. The preexisting political equilibrium was also a deadlock between the main left and right parties at the time of the migration, so the immigrants clearly impacted the position of the median voter. At a minimum, Israel presents a case where mass migration failed to harm institutions in a way that many prominent social scientists fear such a migration would.

This finding in no way proves that in every case unrestricted migration would not harm destination country institutions. However, as a complement to Clark et al. (2015), which, in a cross-country empirical analysis, found that existing stocks and flows of immigrants were associated with improvements in economic institutions, it should increase our skepticism of claims that unrestricted migration would necessarily lead to institutional deterioration. Indeed, there may be "trillion dollar bills" that the global economy could gain through much greater migration flows.

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# IMMIGRATION AND ITS EFFECT ON ECONOMIC FREEDOM: AN EMPIRICAL APPROACH

*Ryan H. Murphy*

Many concerns regarding immigration have arisen over time. The typical worry is that immigrants will displace native workers and fail to create new demand and jobs. That concern and other economic concerns about immigrants, however, have failed to hold up when assessed empirically. But a new argument has arisen: many commentators, pundits, and respected economists have suggested that immigrants today differ critically with respect to how they think about economic policy. In particular, immigration to countries like the United States could undermine economic institutions and diminish economic growth (Collier 2013, Borjas 2015, Jones 2016).

## Immigrants and Economic Freedom

This article focuses on two potential channels through which immigration could affect a country's institutions. First, there is the idea that the opinions held by immigrants are representative of the average opinions held by people in the societies that they come from and that their opinions may not be consistent with the institutions of their adopted country. Collier (2013), Borjas (2015), and Jones (2016) have made this argument with regard to immigrants

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coming into the United States, but they do not present any actual direct empirical evidence supporting their specific claims about immigrants. There is a straightforward rebuttal of their argument, however. Immigrants self-select for their destination countries and they normally choose countries whose institutions they admire and wish to support. In other words, there is no good reason for researchers to assume that the opinions held by immigrants are representative of the average opinions held by people in the societies that they come from.

The second argument is that immigrants may cause the welfare state to swell in size. Milton Friedman, in an often-repeated quotation, argued that immigration and the welfare state are fundamentally incompatible, and that huge influxes of immigrants would cause the welfare state to spiral out of control. Friedman's case is actually much more ambiguous than it may appear (Nowrasteh 2015, *The Economist* 2016).<sup>1</sup>

Setting aside the intricacies of immigrants' lifetime impact on various welfare and entitlement programs, there is a parallel argument as to why immigrants may *reduce* the size of the welfare state (Nowrasteh 2015). Ironically, the underlying reason for this is made clear by the rhetoric of those making the former argument. There is a significant amount of academic literature on "fractionalization"—that is, formal measures of diversity along ethnic, racial, and even linguistic dimensions. Voting populations are much less willing to use governments to transfer money to other residents when there are clearly demarcated lines, such as ethnicity, that differentiate individuals within a society. This unwillingness of voters can help explain differences in the size of welfare states when comparing the United States and Europe (Alesina and Glaeser 2004), as well as differences in spending on public goods, both between nations (Easterly and Levine 1997) and among U.S. states (Alesina, Baqir, and Easterly 1999).

In sum, immigrants could import ideas contrary to those of their destination countries, or they could self-select for their desire to strengthen those institutions. They could increase per capita usage of welfare and entitlement programs, or they could change voter

<sup>1</sup>For a discussion of Friedman's views on immigration, see <https://openborders.info/friedman-immigration-welfare-state>.

sociology in such a way that reduces the willingness to engage in social spending. These channels each present falsifiable hypotheses that should be tested empirically, rather than relying on rhetoric or armchair theorizing.

## The Impact of Immigrants on Institutions

In an earlier article (Clark et al. 2015), my co-authors and I use data from the *Economic Freedom of the World* (EFW) report, published by the Fraser Institute in collaboration with the Cato Institute (Gwartney, Lawson, and Hall 2013), to analyze the impact of immigrants on institutions. The EFW index has been used extensively in the scholarly literature to study a wide array of questions with academic rigor (Hall and Lawson 2014) and has been shown to relate robustly to economic growth (De Haan, Lundstrum, and Strum 2006). The EFW index is composed of five components (“areas”):

- *Area 1*, Size of Government;
- *Area 2*, Legal System and Property Rights;
- *Area 3*, Sound Money;
- *Area 4*, Freedom to Trade Internationally; and
- *Area 5*, Regulation.

Each area combines several measures into one score, with “10” corresponding to the highest possible amount of economic freedom (e.g., high index values for Size of Government correspond to smaller governments) and “zero” corresponding to zero economic freedom.

### *Results*

We look at the percent of the population that is foreign-born in 1990 in countries across the world, and measure its effects on EFW in 2011. We control for the value of the EFW index in 1990 when doing so and for all estimates that follow. The choice of the years 1990 and 2011 may seem arbitrary but data constraints, as well as our desire to allow the data on immigrants to have enough time to impact a country, required us to use those particular years. When we run this simple model, we find a small and positive effect of immigration on economic freedom. For each additional percentage point of immigrants in 1990, countries had 0.011 more units of EFW in 2011. That effect borders on statistical significance, meaning the model is unclear whether the effect is truly distinguishable from zero.

By controlling for the EFW index in 1990, we are controlling for many things that would impact the index in 2011. In other words, if there is some characteristic about the country in 1990 that is also present in 2011, and it has not changed all that much, the model already accounts for it. We also account for certain things by comparing the EFW index in 2011 with immigrants in 1990, instead of comparing it with immigrants in 2011. For example, if we had compared EFW in 2011 with immigrants in 2011, a higher index (i.e., more economic freedom) may have meant that it was attracting immigrants instead of more immigrants causing a higher index.

### *Robustness Checks*

Regardless, it makes sense to add additional control variables to get a better idea of how the data behave and to determine whether or not the effect we calculated is reliable. To do this, we added two sets of controls to the model. First, we added real GDP per capita in both 1990 and 2011, since a country's level of prosperity may impact where immigrants choose to immigrate. Second, we included the *Polity IV* index in both 1990 and 2011, a measure of how strongly democratic a country is, to account for the fact that immigrants may react to political institutions as they may react to the economic institutions that underpin economic freedom. To discuss these models concisely, I will refer to the first model we ran as "Baseline," to the model with the first set of controls as "Control 1," and to the model with all five controls (EFW in 1990, RGDP in 1990 and 2011, and *Polity IV* in 1990 and 2011) as "Control 2."

In Control 1, the positive effect increases. One percentage point of more immigrants in 1990 now corresponds to 0.015 units of EFW. This time, the model can more clearly distinguish the effect from zero and it passes the conventional standard of statistical significance. In Control 2, the effect increases again to 0.028 units and it is even more clearly distinguished from zero. None of these effects are large but considering the dire warnings of negative effects feared by many, these positive effects are especially meaningful even if they are not large enough to be a large driver of increases in economic freedom across countries.

We then applied models like Baseline, Control 1, and Control 2 to other ways of thinking about immigration and economic freedom. For instance, it may be the case that immigration is fine when the immigrants come to the United States from other rich countries

(e.g., Canada or Japan), but immigrants from poorer countries may actually lower economic freedom. To account for this, we split the foreign-born populations by country into two different groups, those that come from rich OECD countries and those that come from other, generally less-developed countries. We then allowed them to impact economic freedom separately in Baseline, Control 1, and Control 2. In all three models, the population of immigrants from OECD countries has a positive effect on economic freedom, but the model could not distinguish the effects from zero so they were not statistically significant. The size of the effect also diminished when going from Baseline to Control 1 to Control 2. However, the effects of the immigrants from the poorer countries were positive, larger in magnitude, and statistically significant. In Control 2, the results were strongly significant and corresponded to 0.031 units of EFW, larger than what was found before, when lumping all immigrants together.

Instead of looking at how many immigrants there were in 1990, we also looked at the net inflow from 1990 to 2010 of immigrants as a percentage of the total population, and found that the effect is positive in Baseline, Control 1, and Control 2. However, the size of the effect is smaller than before, and Baseline and Control 1 barely achieve statistical significance. In contrast, Control 2 verifies the effect clearly, and in that model it corresponds to 0.008 units of EFW. Next, we also allowed the number of immigrants in 1990 and their subsequent inflow to impact EFW in the same model. Because the number and the change are pretty closely related, the model has problems figuring out which one is which, making it difficult to distinguish either effect from zero. However, the effects of both in Baseline, Control 1, and Control 2 are positive even if they lack significance in the statistical sense.

Finally, we included an interaction between immigrant population in 1990 and the inflow. A critic might think that a large immigrant population by itself does not have much of an impact, and a large inflow does not do much either, but a lot of both could be detrimental. We ultimately found some very weak evidence in favor of that hypothesis. When we run the model, including both the population and inflow as well as their interaction, the first two have positive effects while the latter has a negative effect. Baseline and Control 1 have difficulty distinguishing anything from zero, but Control 2 is able to distinguish the positive effect in the inflow and the negative effect from the interaction. However, the reason this evidence is

weak is because the size of the effect of the interaction term is actually much smaller than the effects of the other variables. It is unlikely that any country in the world actually experiences an effect of immigration that is, on net, negative and it can best be thought of as a “diminishing return” to economic freedom from immigrants instead of a negative breaking point.

These findings beg for an explanation so we went back and broke down EFW into its component areas. We then re-ran a model mirroring Control 2 for each area of economic freedom for immigrant population in 1990 and inflow. If we focus only on what we can confidently distinguish from zero, it appears that inflows of immigrants have a positive effect on Size of Government (Area 1), meaning that immigrants tend to incentivize smaller government. This result supports the work referenced earlier—namely, that fractionalization reduces the willingness of the voting public to spend. Perhaps surprisingly, more immigrants in 1990 have a positive effect on the legal system and property rights (Area 2) in 2011. It also may have a positive effect on Area 5, meaning it corresponds to fewer regulations, but that is a borderline result.

While we ran several different models, the underlying work here is not highly sophisticated. There are many other ways to measure the impacts of immigrants, and myriad other sets of control variables that can be implemented. But the fact is that ostensibly erudite work by scholars claiming that immigration produces large negative effects on economic freedom and the institutions of capitalism lacks any direct support from the data. I ultimately welcome alternative empirical studies using the EFW index or other measures similar to it for the purpose of assessing the effects of migration on economic freedom. One study published since ours continues down this path, finding that the ease of *emigrating* from a country improves the economic freedom of the potential country of origin as well (Hall 2016).

## Conclusion

The application of relatively straightforward empirics to the question of the effects of immigration on economic freedom, in a variety of models, does not support the position that immigration has a negative effect. The net effects are positive but small. This result holds across a variety of assumptions, with the only caveat being that the

strength of the effect may diminish when very high levels of immigrants (much higher than those found in any large developed economy) are paired with very high inflows. Of the theories and mechanisms discussed at the beginning this article regarding how immigrants may impact institutions, the strongest confirmation is that immigration may act via the channel of fractionalization, reducing the willingness of voters to fund large public sectors. Contrary to the argument that immigrant ideology may hamper economic freedom, it appears immigrants support economic liberty in their new homes.

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# THE COUNTERPRODUCTIVE CONSEQUENCES OF BORDER ENFORCEMENT

*Douglas S. Massey*

From 1986 to 2008 the undocumented population of the United States grew from three million to 12 million persons, despite a five-fold increase in Border Patrol officers, a four-fold increase in hours spent patrolling the border, and a 20-fold increase in the agency's nominal budget. Whether measured in terms of personnel, patrol hours, or budget, studies indicate that the surge in border enforcement has had little effect in reducing unauthorized migration to the United States (Massey, Durand, and Pren 2014). The strategy of enhanced border enforcement was not without consequences, however, for although it did not deter Mexicans from heading northward or prevent them from crossing the border, it did reduce the rate of return migration and redirected migrant flows to new crossing points and destinations, with profound consequences for the size, composition, and geographic distribution of the nation's unauthorized population. Here I draw on results from a recent study (Massey, Durand, and Pren 2016) to explain how and why the unprecedented militarization of the Mexico-U.S. border not only failed to reduce undocumented migration but also actually backfired by turning what had been a circular flow of male workers, going mainly to three states, into a large and growing population of families in 50 states.

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## The Rise of Illegal Migration

The origins of illegal migration go back 1965, when Congress passed amendments to the Immigration and Nationality Act that placed numerical limits on immigration from the Western Hemisphere. At the same time, it canceled a longstanding guest worker agreement with Mexico. Subsequent legislative amendments further tightened restrictions on Mexican entry until by 1976 Mexico was left with an annual quota of just 20,000 legal resident visas per year and no temporary work visas at all.

The conditions of labor supply and demand had not changed, however, and network connections between Mexican workers and U.S. employers were well established by 1965. As a result, once opportunities for legal entry disappeared, migration did not stop but simply continued under undocumented auspices. By 1979 the annual inflow of Mexican workers had returned back to levels that prevailed in the late 1950s, and as before, the migration was overwhelmingly circular (Massey and Pren 2012). In practical terms, then, little had changed between the late 1950s and the late 1970s. Similarly sized flows of migrants were going to the same destinations in the same U.S. states and returning after short periods of work.

However, in symbolic terms, the situation had changed dramatically, for now the vast majority of the migrants were “illegal” and thus by definition “criminals” and “lawbreakers.” The rise of illegal migration created a new opening for political entrepreneurs to cultivate a politics of fear, framing Latino immigration as a grave threat to the nation (Chavez 2008). Fear is a well-established tool for political mobilization, and throughout history humans have found it difficult to resist the temptation to cultivate fear of outsiders in order to achieve self-serving goals. In response to the advent of illegal migration after 1965, three prominent categories of social actors succumbed to this temptation: bureaucrats, politicians, and pundits.

The bureaucratic charge was led by the commissioner of the U.S. Immigration and Naturalization Service, Leonard F. Chapman, who in a 1976 *Reader's Digest* article warned Americans that a new “silent invasion” of “illegal aliens” was threatening the nation, with “8 million” already present and “at least 250,000 to 500,000 more arriving each year. . . . milking the U.S. taxpayer of \$13 billion annually by taking away jobs from legal residents and forcing them into unemployment” (Chapman 1976: 188–89). He went on to advocate

the passage of restrictive immigration legislation, contending that it was “desperately needed to help us bring the illegal alien threat under control.”

Another prominent politician contributing to the Latino Threat Narrative was President Ronald Reagan, who in 1985 declared undocumented migration “a threat to national security” and warned that “terrorists and subversives [are] just two days driving time from [the border crossing at] Harlingen, Texas” and that communist agents were ready “to feed on the anger and frustration of recent Central and South American immigrants who will not realize their own version of the American dream” (Massey, Durand, and Malone 2002: 87).

Pundits made their contributions to the Latino Threat Narrative in order to sell books and boost media ratings. TV personality Lou Dobbs (2006), for example, told Americans that the “invasion of illegal aliens” was part of a broader “war on the middle class.” The political commentator Patrick Buchanan (2006) alleged that illegal migration was part of an “Aztlán Plot” hatched by Mexican elites to recapture lands lost in 1848. Harvard Professor Samuel Huntington (2004: 30), meanwhile, warned that “the persistent inflow of Hispanic immigrants threatens to divide the United States into two peoples, two cultures, and two languages. . . . The United States ignores this challenge at its peril.”

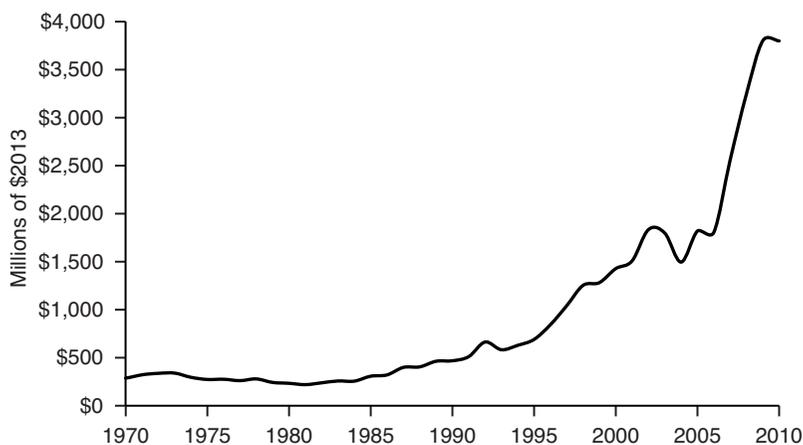
None of these pronouncements was based on any substantive understanding of the realities of undocumented migration or any real evidence. At best, they were distortions designed to cultivate fear among native-born white Americans for political gain. Despite ample research challenging the portrayal of illegal migration as an out-of-control invasion threatening U.S. society, the Latino Threat Narrative proved remarkably resilient and continued to gain traction, leading to rising public demands for more vigorous border enforcement. Over time, as more Border Patrol Officers were hired and given more equipment and matériel, the number of apprehensions rose, an outcome that was then broadcast as self-evident proof of the ongoing “alien invasion,” justifying additional agency requests for still more enforcement resources. The result was a self-feeding cycle of enforcement, apprehensions, greater enforcement, more apprehensions, and still more enforcement that steadily militarized the border.

## The Effect of Militarization on Border Outcomes

The dramatic increase in the intensity of border enforcement is indicated in Figure 1, which shows the size of the Border Patrol’s budget from 1970 through 2010 in constant 2013 dollars. In real terms, the budget remained flat from 1970 through 1986, when the Immigration Reform and Control Act (IRCA) funded a significant increase in the size of the Border Patrol. The curve rises slowly at first but accelerates after the passage of the 1996 Illegal Immigration Reform and Immigrant Responsibility Act and then rises exponentially with the passage of the USA PATRIOT Act in 2001 (a tortured backronym that stood for “Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001”). These accelerations in the enforcement effort occurred despite the fact that the actual inflow of migrants had stabilized around 1979.

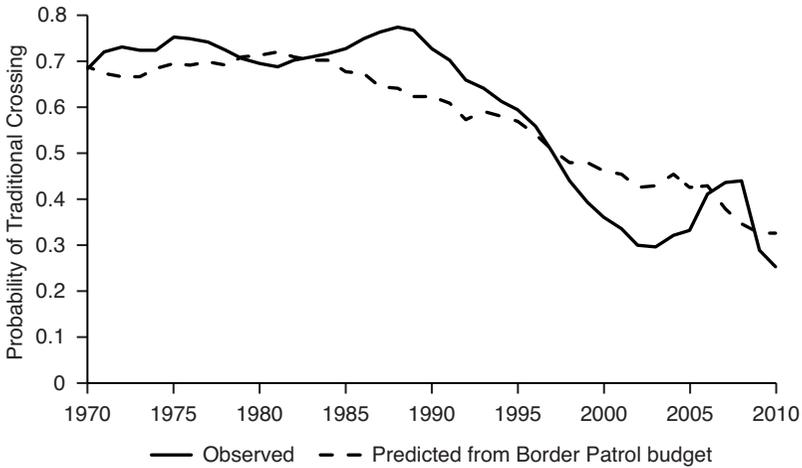
Figure 2 draws upon estimates derived by Massey, Durand, and Pren (2016) to plot trends in the location of unauthorized border crossings between 1970 and 2010. The solid line indicates the relative share of undocumented migrants crossing at traditional locations in California (San Diego and Calexico) and Texas (El Paso and adjacent territory in New Mexico). From 1970 through 1988,

FIGURE 1  
BORDER PATROL BUDGET



SOURCE: Mexican Migration Project Database 143.

FIGURE 2  
OBSERVED PROBABILITY OF CROSSING AT A  
TRADITIONAL LOCATION AND PROBABILITY PREDICTED  
FROM BORDER PATROL BUDGET



SOURCE: Mexican Migration Project Database 143.

70 percent to 80 percent of all undocumented migrants crossed at these locations, with no real trend upward or downward.

Although full-scale militarization did not occur in El Paso until the launching of Operation Blockade in 1993 and not in San Diego until the launching of Operation Gatekeeper in 1994, the enforcement resources authorized by IRCA in 1986 were initially targeted to these border sectors. As a result, the share of crossings at the two traditional sites began to decline as early as 1988, falling from 70 percent that year to 59 percent in 1995. Then in the wake of the two special border operations, the decline accelerated perceptibly and continued over the next several years, reaching a low of 30 percent in 2003 before rebounding to 44 percent in 2008 and then falling to an all-time low of 25 percent in 2010. Rather than crossing into California or Texas, between 1988 and 2003 migrants increasingly moved through the Sonoran Desert toward new crossing points along the border with Arizona.

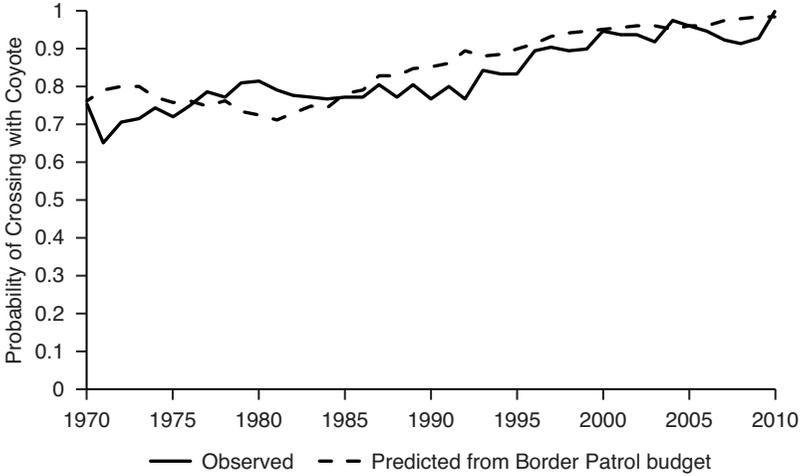
In order to test the extent to which this marked shift in the geography of border crossing stemmed from the rise in border enforcement, Massey, Durand, and Pren (2016) used data from the

Mexican Migration Project to estimate a logistic regression equation predicting whether undocumented migrants crossed at a traditional location (1 if yes, 0 otherwise) from the size of the Border Patrol budget (expressed as an instrumental variable), while controlling for individual, household, and contextual circumstances. In order to illustrate the causal effect of enforcement on the geography of unauthorized border crossings, the authors used the estimated regression using instrumental variable methods, and then inserted logged values of the Border Patrol budget instrument into the equation to generate the predicted probability of a traditional crossing, all other variables constant at their means values. The resulting predicted probabilities are plotted as a dashed line in Figure 2, along with the solid line described above showing the actual share crossing at traditional locations. As can be seen, the predicted probabilities very clearly trace the downward trajectory of traditional border crossings over time, indicating that the militarization of the border was indeed the principal cause of the trend that emerged after the mid-1980s.

As migrants were diverted away from relatively safe and well-trod urban pathways into remote, isolated, and inhospitable sectors along the border, the crossings grew increasingly difficult and hazardous, while the share relying on the services of a guide, which was already high, steadily rose. The solid line in Figure 3 shows the observed trend in the percentage of undocumented migrants crossing with a paid guide, or coyote, from 1970 to 2010 (from Massey, Durand, and Pren 2016). Starting from usage levels around 70 percent in the early 1970s, the utilization of coyotes increased steadily over time to reach 100 percent by 2010. In order to observe the causal effect of rising border enforcement, Massey, Durand, and Pren (2016) inserted logged values of the Border Patrol budget instrument into the prediction equation while holding other factors constant at their means to generate the expected probabilities of crossing with a coyote. These are also plotted as a dashed line. Once more, it is clear that rising border enforcement caused the shift toward greater coyote use. In essence, the militarization of the border transformed what had been a common practice used by most migrants into a universal practice used by all migrants.

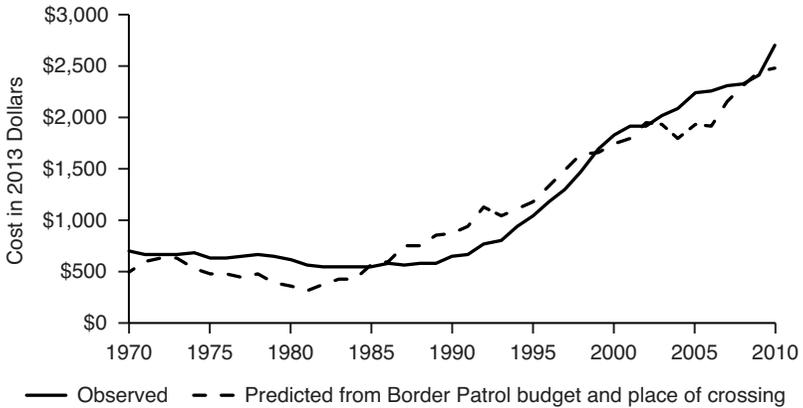
As border crossing increasingly moved into remote locations far from points of employment and settlement, the services provided by coyotes became increasingly complicated, elaborate, and costly. Figure 4 shows the trend in the average cost of a coyote in constant

FIGURE 3  
OBSERVED PROBABILITY OF CROSSING WITH A COYOTE AND  
PROBABILITY PREDICTED FROM BORDER PATROL BUDGET



SOURCE: Mexican Migration Project Database 143.

FIGURE 4  
OBSERVED TREND IN COYOTE COSTS AND COSTS PREDICTED  
FROM BORDER PATROL BUDGET AND PLACE OF CROSSING



SOURCE: Mexican Migration Project Database 143.

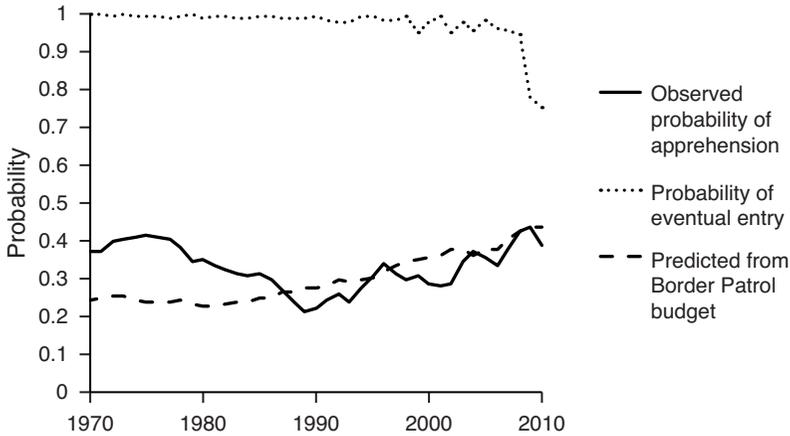
dollars from 1970 through 2010. Crossing costs generally trended slowly downward in real terms during the 1970s and early 1980s, as networks expanded and border crossing became institutionalized, going from \$700 in 1970 to around \$550 in 1982, where it remained through 1989. Thereafter, coyote costs begin a rapid rise to reach \$1,900 in 2000 and \$2,700 in 2010.

To establish a causal connection between border enforcement and the costs of migration analytically, Massey, Durand, and Pren (2016) estimated a Tobit model to predict coyote costs as a function of the Border Patrol budget instrument, place of crossing, and the usual control variables, again inserting the log of the Border Patrol budget instrument into the prediction equation, along with the observed proportion crossing at nontraditional locations and mean values of other controls to generate predicted crossing costs. These are plotted as the dashed line in Figure 4. As can be seen, the observed rise in crossing costs corresponds very closely to the trend predicted from the enforcement budget, clearly pointing to the militarization of the border as the primary cause for the increase in coyote prices.

The ultimate outcome of interest to policymakers is not where or how migrants attempt to cross into the United States, but the likelihood of their being apprehended and whether they are prevented from entering the country. The solid line in Figure 5 shows the observed probability of apprehension during a first undocumented trip to the United States derived by Massey, Durand, and Pren (2016). The exponential increase in border enforcement did not translate into higher apprehension probabilities. For most of the 1970s the probability of apprehension during crossing varied narrowly between 0.37 and 0.42. After 1978 it began to trend downward and reached a nadir of 0.21 in 1989. Thereafter, the probability rose slowly back upward to peak at a value of 0.44 in 2009—a rise incommensurate with the exponential increase in enforcement.

As before, the authors estimated an equation to examine the effect of the Border Patrol budget instrument on the likelihood of apprehension (1 if yes, 0 otherwise) in the presence of controls, and then they inserted the log of the budget instrument into the resulting equation, along with observed coyote costs, to generate the values plotted as a dashed line in Figure 5. Their equations indicated that rising enforcement did increase the probability of apprehension, but that this effect was offset by the rising quality of the services provided

FIGURE 5  
OBSERVED PROBABILITIES OF APPREHENSION ON  
FIRST ATTEMPT AND EVENTUAL ENTRY AND  
APPREHENSION PROBABILITY PREDICTED FROM TREND IN  
BORDER PATROL BUDGET



SOURCE: Mexican Migration Project Database 143.

by coyotes (as proxied by their cost). In the end, the massive increase in border enforcement had a rather modest effect on likelihood of apprehension, increasing the predicted probability from 0.24 to 0.44 over a period of four decades.

Whatever the probability of apprehension might be on any given attempted crossing, apprehended migrants are free to try again once they are returned to Mexico. Until recently, Mexicans caught at the border did not undergo formal deportation proceedings. They simply signed a “voluntary departure order” waiving their right to a hearing and authorizing the Border Patrol to escort them “voluntarily” back across the border. Once in Mexico, they simply tried again and again until success was achieved. The degree to which these repeated crossing attempts were successful is indicated by the dotted line shown at the top of Figure 5, which plots the annual probability of ultimately gaining entry to the United States over multiple attempts on a single trip. A trip constitutes one episode at the border no matter how many attempts were made and no matter what the outcome.

Entry probabilities were virtually constant through 1998, running at or just below 1.0, indicating that eventual entry during this time

was a near certainty. Between 1999 and 2008, the probability of entry varied between 0.95 and 0.98 but remained high. Although the probability dropped to a low of 0.75 in 2010, by then almost no Mexicans were attempting to cross in the first place, rendering the entry probability moot in determining the volume of undocumented migration. In the end, from 1970 to the year 2008, when net undocumented migration from Mexico went negative and stabilized at zero, the likelihood of ultimate entry into the United States never fell below 0.95, despite the massive increase in the budget of the Border Patrol.

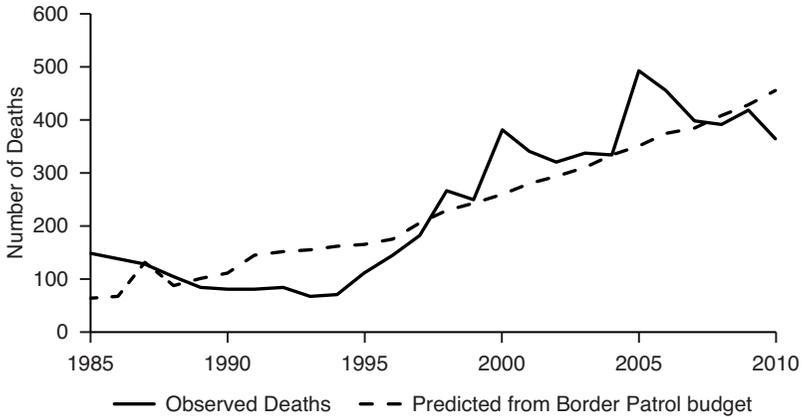
As noted, successful crossings came at an increasing financial cost, and statistics on deaths among undocumented migrants during border crossings also suggest that they came at increasing physical cost as well. Figure 6 plots the number of border deaths as a solid line from 1985 to 2010, with data for 1985–98 coming from Eschbach, Hagan, and Rodriguez (2001) and tallies for 1998–2012 coming from Anderson (2013). As can be seen, the number of border deaths actually *fell* from 1985 to 1993, from 147 to 67. Once Operations Blockade and Gatekeeper were unleashed in 1993 and 1994, however, the figure rose to peak at 482 deaths in 2005 before falling back to 365 in 2010. However, very few Mexicans were attempting an unauthorized border crossing in 2010 and the number of dead was still five times that observed in the early 1990s, when hundreds of thousands of attempts were undertaken each year, implying a much higher death rate.

To assess whether the increase in deaths could be attributed to the increase in enforcement, Massey, Durand, and Pren (2016) regressed the total number of border deaths shown in Figure 6 on the logged Border Patrol budget instrument, obtaining an  $r^2$  of 0.64 with the equation. Plugging annual values of the budget instrument into the equation yielded the dashed trend line shown in Figure 6, again pointing to rising enforcement as the principal cause of the growing toll of death along the Mexico-U.S. border. They estimate that if the Border Patrol budget had remained at its 1986 value through 2010, there would have been a total of 5,119 fewer deaths along the border.

## The Effect of Militarization on Migrant Behavior

The context of migrant decisionmaking was clearly altered by U.S. border policies during the late 1980s and 1990s. During the 1970s

FIGURE 6  
OBSERVED DEATHS AT THE BORDER AND DEATHS  
PREDICTED BY TREND IN BORDER PATROL BUDGET

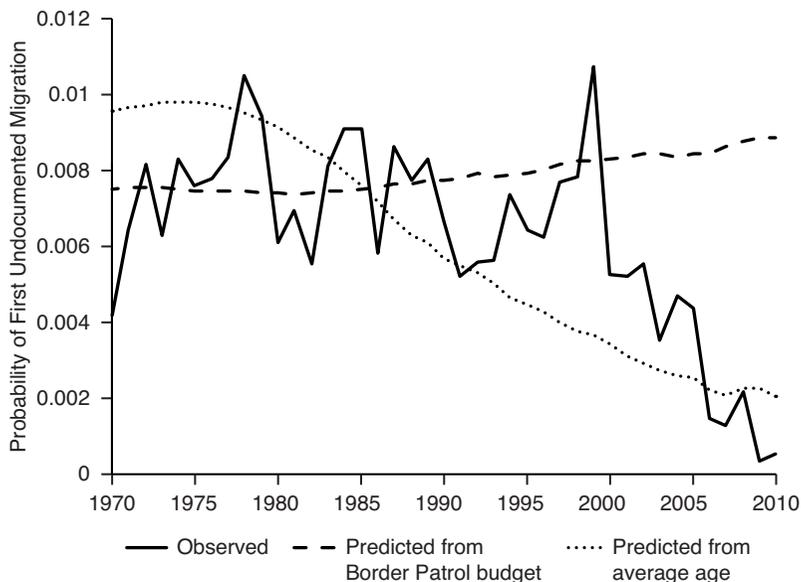


SOURCES: Eschbach, Hagan, and Rodriguez (2001); Anderson (2013).

and early 1980s, migrants knew they could come and go across the border at relatively low cost and risk and easily sustain a circular pattern of migration. However, by the mid-1990s and early 2000s, the likelihood of getting into the United States remained high whereas the costs and risks of border crossing became dramatically higher, rendering circular migration unattractive. Post-IRCA research on the earnings of undocumented migrants also suggests that the wage penalty paid by undocumented migrants increased after IRCA, thereby reducing expected earnings in the United States (Massey and Gentsch 2014), which in turn induced them to remain longer in the United States to render a trip profitable.

Undocumented migration begins when an aspiring migrant decides to head northward without documents and attempt a first entry into the United States. In their analysis, Massey, Durand, and Pren (2016) drew on the migration histories collected from male household heads surveyed by the Mexican Migration Project to compute the probability of departing on a first trip to the United States. The result of this computation is indicated the solid line in Figure 7. As might be expected, given the volatility of political and economic conditions in the United States and Mexico from 1970 to 2010, there is considerable year-to-year fluctuation in the probability of taking a first undocumented trip. From 1971 to 1999, the probability of

FIGURE 7  
OBSERVED PROBABILITY OF FIRST UNDOCUMENTED  
MIGRATION AND PROBABILITIES PREDICTED FROM TRENDS  
IN BORDER PATROL BUDGET AND AVERAGE AGE



SOURCE: Mexican Migration Project 143.

first departure fluctuated between 0.005 and 0.011 with no clear trend, but afterward the likelihood of leaving without documents went into a steady, though jagged decline to levels near zero in 2009 and 2010, a pattern consistent with results from aggregate estimates indicating the end of undocumented migration after 2008 (Passel, Cohn, and Gonzalez-Barrera 2013).

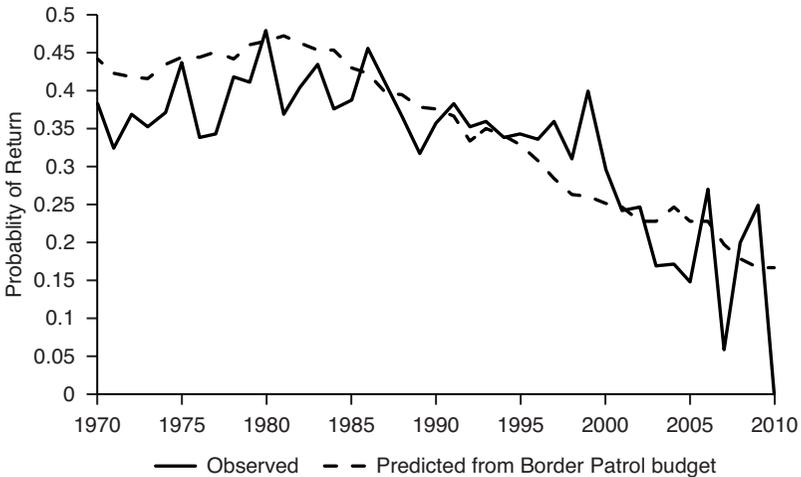
In order to assess the effect of different factors on the likelihood of initiating undocumented migration, Massey, Durand, and Pren (2016) used a logistic model to regress a dummy variable indicating whether a Mexican male departed in year  $t+1$  (1 if yes, 0 otherwise) on independent variables defined in year  $t$ . They found that the Border Patrol budget instrument had no significant effect on the likelihood of initiating undocumented migration, but that the likelihood of departure fell sharply with age. Among contextual factors, the likelihood of taking a first undocumented trip was also strongly predicted by employment growth and wage rates on the U.S. side

and in the opposite direction by GDP growth on the wage rates on the Mexican side.

The dashed line in Figure 7 was derived by inserting the log of the Border Patrol budget instrument into the equation, along with mean values of other variables. The flat line confirms the lack of any effect of border enforcement on the likelihood of leaving for the United States without documents. Instead, as indicated by the dotted line, which was generated by inserting the average age into the equation while holding other variables constant at their means, the declining probability of undocumented migration is accounted for by the rising age of people likely to undertake a first trip. The average age of those in the labor force but lacking prior migratory experience rose steadily from 23.4 in 1972 to 45.9 in 2010. This sharp increase stems from two complementary dynamics: (1) the sharp drop in Mexican child-bearing from a Total Fertility Rate of 7.2 children per woman in 1965 to a value of 2.3 today, and (2) the steady selection of young men out of the population taking a first trip.

The solid line in Figure 8, computed from migration histories gathered from household heads, shows the observed trend in the

FIGURE 8  
OBSERVED PROBABILITY OF RETURN WITHIN 12 MONTHS  
OF FIRST UNDOCUMENTED TRIP AND PROBABILITY  
PREDICTED FROM BORDER PATROL BUDGET



SOURCE: Mexican Migration Project 143.

probability of returning to Mexico within a year of entering on a first undocumented trip. As with departures, the likelihood of return varies jaggedly from year to year, but generally ranges from 0.30 to 0.45 through 1999, when the probability declines sharply to reach zero by 2010, albeit with oscillations in the late 2000s owing to smaller numbers of first-time migrants going to the United States.

In order to assess the degree to which rising border enforcement accounts for this downward trend, Massey, Durand, and Pren (2016) used a logistic regression model to predict whether a migrant returned within 12 months of entry (1 if yes, 0 otherwise). They found that the primary force driving return probabilities down over time was the increasing border enforcement. The dashed line in Figure 8 shows predicted probabilities generated by inserting the logged Border Patrol budget instrument into the equation while holding other variables constant at their means. Whereas the predicted probability fluctuated around 0.45 through 1984, after that date the likelihood of return migration moved steadily downward to reach a value of 0.17 in 2010, a decline of 62 percent.

## Conclusion

The earlier results suggest that border enforcement has not proven to be an effective strategy for controlling Mexican immigration to the United States. Indeed, it has backfired by curtailing a longstanding tradition of circulatory migration and promoting the large-scale settlement of undocumented migrants who otherwise would have continued to move back and forth between countries. Although the militarization of the border had no effect on the likelihood of initiating undocumented migration to the United States, it did have powerful unintended consequences—pushing migrants away from traditional crossing points in El Paso and San Diego into hostile territory in the Sonoran desert, which increased the physical risks of undocumented border crossing. It also increased the need to rely on paid smugglers, which in turn increased the costs of undocumented border crossing. Rising border enforcement had only a modest effect on the likelihood of apprehension during a crossing attempt and no effect at all on the likelihood of gaining entry over a series of attempts.

The combination of increasingly costly and risky trips and the near certainty of getting into the United States created a decision-making context in which it made economic sense to migrate but not

return home, so as to avoid facing the high costs and risks coming back. In response to the changed incentives, the probability of returning from a first trip fell sharply, going from a high of 0.48 in 1980 to zero in 2010. With no effect on the likelihood of departure or entry to the United States but a strong negative effect on the likelihood of returning to Mexico, only one outcome was possible: the net rate of entry increased and the growth of the undocumented population accelerated.

Rather than blocking the preference of Mexican workers to move back and forth across the border, a better strategy would be to implement policies that encourage return migration, such as lowering the costs remitting U.S. earnings, paying tax refunds to returned migrants, making legal immigrants eligible for U.S. entitlements if they return to Mexico, and cooperating with Mexican authorities to create attractive options for savings and investment south of the border. In the end, the billions of dollars wasted on counterproductive border enforcement would be better spent on structural adjustment funds channeled to Mexico to improve its infrastructure for public health, education, transportation, communication, banking, and insurance to build a stronger, more productive, and more prosperous North America.

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# ILLEGAL IMMIGRATION OUTCOMES ON THE U.S. SOUTHERN BORDER

*Bryan W. Roberts*

The state of U.S. border security has been a contentious public issue for many decades. It has not been possible to establish a coherent definition of border security, let alone measure and evaluate it. In recent years, my research colleagues and I have led an effort to define what core border security measures are and to estimate their actual values. This article reviews the key results of that effort with respect to illegal immigration across the U.S. land border with Mexico, which has been perhaps the single most controversial border security issue. Although we now have a set of credible estimates that can inform policy making and public debate, the U.S. government continues to face major challenges in reporting these measures and establishing credibility with the American public. This article concludes by offering some constructive recommendations to the government on how it could do better.

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## What Do Americans Believe about Illegal Immigration and Border Security?

Although many experts and analysts believe that illegal immigration has fallen significantly in recent years, a majority of the American public does not. Table 1 summarizes the results of a 2015 poll that asked if illegal immigration has risen, fallen, or stayed the same over the past few years. Most people believed that it has increased, and this is true regardless of party or political affiliations as well as socio-demographic characteristics. Polls conducted over the last 15 years show that large majorities of Americans believe that U.S. borders are not “secure” and that the government could be doing more to increase border security with respect to illegal immigration.<sup>1</sup>

Given these widespread perceptions, it is not at all surprising that border security has remained an intense focal point of concern and controversy. This has been driven at least in part by a complete failure of the U.S. government to publish credible border security measures that the public trusts and tell them what they really want to know about the state of border security.

### Border Security Measures

American taxpayers pay for border security in order to enforce U.S. laws at the border. With respect to illegal immigration, those laws require preventing entry of those without lawful permission to enter. Therefore, the core strategic measure of border enforcement success is the number of unauthorized migrants who escape detection and successfully enter the United States illegally.<sup>2</sup> I will refer to this measure as the *number of successful illegal entries*.

Measures also should be reported on law enforcement outcomes that play important roles in determining how many migrants attempt illegal entry, and the degree to which they are deterred. One obvious measure is the *probability of apprehension*—the chance (on average) that someone attempting illegal entry is caught. Another measure is the *rate of at-the-border deterrence*—the chance that someone who

<sup>1</sup>Quinnipiac University polling results are available at [www.pollingreport.com/immigration.htm](http://www.pollingreport.com/immigration.htm).

<sup>2</sup>For more extensive discussions of what constitutes a good set of border security measures, see Roberts, Alden, and Whitley (2013), Bipartisan Policy Center (2015), and Institute for Defense Analyses (2016).

TABLE 1  
HAS ILLEGAL IMMIGRATION INCREASED OR DECREASED?

	Party Affiliation				Political Identification		
	Total	Democrat	Independent	Republican	Liberal	Moderate	Conservative
Increased	69%	61%	68%	83%	55%	70%	80%
Stayed about the Same	5	3	7	1	6	6	2
Decreased	25	33	23	15	37	22	17
No Opinion	1	2	1	1	2	1	1

NOTE: ORC International interviewed 1,017 adult Americans in July 2015. The question asked was this, “Just your best guess, do you think the number of immigrants coming to the United States illegally has increased or decreased in the past few years?” The table gives results for party affiliation and political identification, but majorities believe that it has increased regardless of breakdown by gender, age, education, income level, white/nonwhite status, or region.  
SOURCE: CNN/ORC (2015): 13.

has been caught and returned to their home country gives up and goes home rather than tries again to enter illegally. These variables affect a migrant's initial decision to come to the border in the first place in order to attempt illegal entry. People who know there is a very high chance of being caught, and a very high chance of giving up after being caught, will be less likely to make an initial illegal entry attempt.

There is a strong tendency in the border security debate to describe the border as either "secure" or "insecure." This is misguided, because the state of border security is never a black-or-white situation. If a border were perfectly sealed, then the number of successful illegal entries would be zero, and the probability of apprehension would equal 100 percent. If the border was perfectly open, then all entries would by definition be legal, and the probability of apprehension would be irrelevant, because there would be no border enforcement. Because these two states never actually apply in the real world, it makes more sense to estimate the values of the three core measures highlighted above and try to understand what they imply about the state of border security. These estimates are critically important for both informing public debate and helping government agencies understand how their policies and programs have affected outcomes and how they might need to be changed.

## Estimates of Border Security Measures for the U.S. Southern Border

There are three basic approaches that have been used to try to estimate the above border security measures (see Whitley 2012):

- *Known Flow-Based Estimates.* This approach measures successful illegal entries by observations of law enforcement agents. It relies on evidence obtained through cameras and other sensors as well as tracking detections by agents in the field ("sign-cutting"). The Border Patrol refers to this estimate as "gotaways." It also estimates "turnbacks"—those who enter illegally but then decide to return to Mexico before being apprehended. "Known flow" data comprises gotaways, turnbacks, and apprehensions. Using this data, the Border Patrol calculates the interdiction effectiveness rate (IER), which is the ratio of apprehensions plus turnbacks to the sum of apprehensions, turnbacks, and gotaways. The IER is intended to function as a proxy for the probability of apprehension.

- *Survey Based Estimates.* This approach is based on collecting data from migrants about their past illegal trips across the border. The probability of apprehension can be calculated from the number of reported apprehensions. The probability of at-border deterrence can be calculated from the number reporting they were ultimately unsuccessful in entering. The number of successful illegal entries can then be estimated by combining the probability of apprehension estimate with the number of apprehensions in a simple mathematical formula. Data from the Mexican Migration Project survey has been used to make these estimates since the early 1990s.<sup>3</sup>
- *Analytically Based Estimates.* This approach is based upon the repeat trials model (RTM) of the illegal entry process. Under the RTM, a migrant attempts illegal entry, is either caught or not caught, is returned to his or her home country after being subjected to any consequence if caught, and decides after his or her return to either continue attempting illegal entry or give up. If the migrant decides to continue, another round of this process takes place. It can be shown mathematically that under this process, the probability of apprehension is a simple function of the probability of at-border deterrence and the *recidivist ratio*, which is the ratio of apprehensions after the first one to all apprehensions. The first application of the RTM to estimate the probability of apprehension and number of successful illegal entries was published in 1990, and the approach was applied again using better data in a 2006 study.<sup>4</sup>

Until recently, the U.S. government did not publicly report estimates for any key border security measure. In 2012, the U.S. Department of Homeland Security (DHS) permitted publication of known-flow data, and it currently publishes values for the IER in its annual performance report. Values for gotaways have never been

<sup>3</sup>See Massey, Durand, and Pren (2016) for the most up-to-date estimates based on MMP data.

<sup>4</sup>See Espenshade (1990) for the first application of RTM. Border Patrol began collecting fingerprints from each person apprehended in 2000, which has enabled a much more precise calculation of the recidivist ratio. Chang (2006) used this data to estimate the probability of apprehension and successful illegal entries during 2001–05. This study has never been publicly disseminated by the U.S. government. It is important to note that both Espenshade and Chang assumed that the probability of at-border deterrence equaled zero.

officially published by DHS, although values for the period 2006–2013 have been released through other channels.<sup>5</sup> Publishing measures that are based on known-flow data is an important first step. However, known-flow data are fundamentally flawed for estimating border security measures.

In January 2015, my colleague John Whitley of the Institute for Defense Analyses (IDA) and I were asked by DHS Secretary Jeh Johnson to carry out a research project to produce credible border security estimates. Over the course of 2015, our IDA research team developed estimates by using a migrant survey to calculate the probability of at-border deterrence and the RTM approach to estimate the probability of apprehension and number of successful illegal entries.<sup>6</sup> We were given full access to all internal administrative DHS data related to immigration enforcement, which enabled us to develop estimates of the key measures for illegal entry between ports on the southern border, at ports on the southern border, and in the maritime domain.

In order to develop estimates for illegal entry between and at ports on the southern border, we implemented an analytical approach that begins with an important distinction between “traditional” migrants, who seek to evade U.S. law enforcement authorities when illegally entering the United States, and asylum seekers, who enter illegally but then present themselves to law enforcement in order to claim asylum. Although the number of asylum seekers was low prior to 2011, their numbers have risen dramatically since then. Our approach is implemented through the following steps:

- First, we separated apprehensions of asylum seekers, who are not returned to their home country in any set timeframe and are not part of the repeat-trials population, from apprehensions of traditional migrants, who are assumed to have been attempting to evade Border Patrol or the port enforcement authority—the Office of Field Operations (OFO);

<sup>5</sup>Known-flow data for 2006–11 were published in Government Accountability Office (2012), and data for 2012–13 were released to the public through FOIA requests.

<sup>6</sup>Unlike previous RTM studies, we do not assume the probability of at-border deterrence to be equal to zero. We use data from the EMIF migrant survey implemented at the border by the Mexican research institute COLEF to estimate the probability of at-border deterrence, and we validate the EMIF-based estimates through econometric analysis of apprehension records. See Institute for Defense Analyses (2016) for in-depth discussion.

- Second, we estimated the probability of at-border deterrence for Mexican nationals returned to Mexico using migrant survey data;
- Third, we estimated the probability of apprehension for traditional Mexican nationals using estimates of the probability of at-border deterrence and the recidivist ratio for this group;
- Fourth, we estimated the number of successful illegal entries of traditional Mexican nationals using the estimate of the probability of apprehension and the number of apprehensions;
- Fifth, we estimated the number of successful illegal entries of traditional non-Mexican nationals using the estimate of the probability of apprehension for traditional Mexican nationals. We thus assume that the probabilities of apprehension for Mexican nationals and non-Mexican nationals are not systematically different.
- Finally, we report the number of apprehensions of asylum seekers. It may be the case that some migrants who successfully evaded Border Patrol would have claimed asylum had they been caught. We did not try to estimate the number of these illegal entries since the number of successful illegal entries by this group is unlikely to be very large.

Our estimates related to illegal entry at ports are the first plausible estimates that have ever been made. Migrants attempt illegal entry at ports by hiding inside cars or trucks, using counterfeit documents, or using someone else's legitimate document. We applied the RTM approach to at-port entry and found that it could provide plausible estimates.<sup>7</sup> We were also able to develop estimates for the maritime domain, which involves illegal entry by sea from Haiti, the Dominican Republic, and Cuba.

Table 2 presents the key results of our research. From 2005 to 2015, successful illegal entries by traditional migrants have fallen by roughly 90 percent, from almost 2 million to 200,000. The large majority of these illegal entries took place between ports. There has

<sup>7</sup>The port enforcement authority, CBP's Office of Field Operations, runs the Compliance Examination (COMPEX) program, whose data should permit estimation of successful illegal entries through ports of entry. This program's data suggest that in recent years, the number of such entries is zero, which is not plausible. Although we had been hoping to use COMPEX data to develop at-port estimates, we realized that these data are useless for that purpose, and we turned to the RTM approach, which proved successful at yielding more plausible estimates.

TABLE 2  
ESTIMATES OF KEY BORDER SECURITY OUTCOMES AND LAW ENFORCEMENT OUTPUTS

	2005	2007	2009	2011	2013	2014	2015
<i>Southern Border: Between Ports of Entry</i>							
Successful Illegal Entries	1,700,000	1,100,000	510,000	340,000	360,000	210,000	170,000
Probability of Apprehension	36%	40%	45%	41%	44%	55%	54%
At-Border Deterrence Rate*	11%	12%	23%	38%	51%	58%	58%
<i>Southern Border: At Ports of Entry</i>							
Successful Illegal Entries	230,000	150,000	93,000	51,000	36,000	46,000	28,000
Probability of Apprehension	24%	29%	38%	45%	42%	29%	39%
At-Border Deterrence Rate*	27%	21%	26%	42%	55%	58%	67%
Memo: Requests for Asylum**	27,000	21,000	17,000	22,000	63,000	170,000	140,000
<i>Maritime Domain</i>							
Successful Illegal Entries			8,100	3,100	650	1,100	840
Probability of Apprehension			25%	34%	68%	68%	61%

\*For Mexican nationals only. \*\* Apprehensions of asylum seekers between and at ports of entry.  
SOURCE: Institute for Defense Analyses (2016).

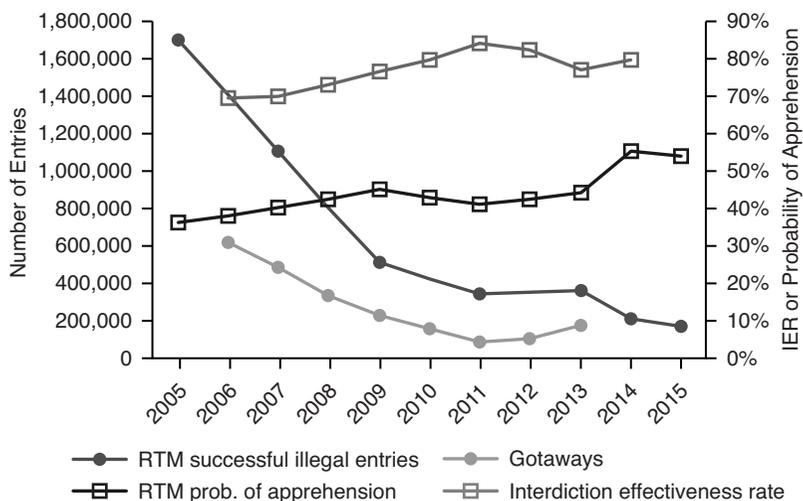
been a dramatic change in the at-border deterrence rate. In 2005, only 11 percent of Mexican nationals caught and returned to Mexico gave up attempting illegal entry, but in 2015, 60 percent gave up. This rise has arguably been due primarily to the Border Patrol imposing consequences on those they apprehend. The between-port probability of apprehension rose from roughly 40 to 55 percent, a smaller increase that reflects the fact that Border Patrol faces an adaptive adversary—smuggling organizations that seek to prevent this probability from rising as border enforcement intensifies.

Table 2 also shows that the number of apprehensions of asylum seekers has risen dramatically since 2011, reaching 140,000 in 2015, which is close to the estimated number of successful illegal entries of traditional migrants. Clearly, there has been a major change in the composition of the migrant flows coming to the southern border, a change that has important implications for illegal immigration enforcement policies and programs.

Our estimates are subject to various limitations that are documented in Institute for Defense Analyses (2016). Continued research and refinements will improve their accuracy, but they are the highest quality estimates that have been made for key border security outcomes to date.<sup>8</sup> In particular, they much more accurately represent true illegal immigration outcomes on the southern border than the known-flow measures DHS has recently pursued. Gotaways systematically undercount the number of true successful illegal entries, because there will always be entries that are never observed. The IER is intended to represent the probability of apprehension, but it will always systematically overstate it, because the IER illegitimately includes apprehensions of people not trying to evade Border Patrol (e.g., asylum seekers) and turnbacks. Figure 1 shows the RTM-based estimates of between-port successful illegal entries and the probability of apprehension with known-flow gotaways and the IER. As would be expected, the number of gotaways is significantly below the number of RTM successful illegal entries, and the IER is significantly above the RTM probability of apprehension. The reasons for these differences are well understood, and known-flow-based measures should be avoided for purposes of border security reporting.

<sup>8</sup>The report was reviewed by several external academic researchers, who found no significant material weaknesses in our methodology.

FIGURE 1  
 BETWEEN-PORT SOUTHERN BORDER SECURITY OUTCOMES:  
 KNOWN-FLOW ESTIMATES VERSUS RTM ESTIMATES



SOURCE: Institute for Defense Analyses (2016) and sources cited in footnote 5.

### Why Has Illegal Migration across the Southern Border Changed?

Our estimates clearly establish that successful illegal entries on the southern border have fallen dramatically over the past decade. Why have they fallen? Illegal migration flows are influenced by many factors, including economic conditions in the destination country (e.g., the United States), economic conditions in the home country (e.g., Mexico), enforcement against illegal migration, the ease of migrating legally, demographic change in the home country, and other factors (e.g., criminal activity in Mexico.) According to analysis of data from the Mexican Migration Project migrant survey, prominent academic researchers have long argued that border enforcement does not deter initial illegal migrations from Mexico to the United States, but it does cause these migrants to not return to Mexico, so that intensified border enforcement ironically increases the resident illegal immigrant population (see Massey, Durand, and Pren 2016).

Over the past decade, several things have happened that would be expected to have significant impacts on the decision of a Mexican national to illegally migrate to the United States or not.

- First, the United States experienced the Great Recession and then a recovery.
- Second, the number of potential migrants from Mexico was falling due to demographic change.
- Third, the Mexican economy may have been improving.
- Fourth, the U.S. government carried out a border enforcement buildup that involved a large increase in the number of Border Patrol agents as well as deployment of infrastructure and technology.

This buildup included a major change in the consequences applied to Mexican nationals who are caught attempting illegal entry. Prior to the mid-2000s, almost all of those apprehended were subjected to “voluntary return,” which simply meant a short bus ride back to Mexico. After 2005, the U.S. government began to apply a range of consequences, including expedited removal and reinstatement of removal (which curtailed the ability to migrate legally in the future), misdemeanor and felony prosecutions for illegal entry, and consequences designed to disrupt the relationship of a migrant with their smuggler. The dramatic rise in the at-border deterrence rate suggests that intensifying consequences had a major impact on migrant decisionmaking.

My research colleagues and I have tried to identify the impact of each of these variables on the decision to illegally migrate from Mexico using data and estimation techniques that differ from previous research. We use quarterly data for the period 2002–15 from the nationally representative Mexican Encuesta Nacional de Ocupación y Empleo (ENOE) household survey, which captures when an individual in a household migrates to a foreign country. We restrict our ENOE sample to a group that accounts for the large majority of illegal and legal migrations and to control for attrition bias.<sup>9</sup>

We develop region-specific economic and enforcement measures that permit exploiting geographic variation to identify the impacts of these variables on the decision to migrate of individuals observed in

<sup>9</sup>We include only Mexican males between 16 and 50 years of age with less than a post-secondary education. Attrition bias is present because the ENOE survey follows a given household cohort for five quarters: we use data for the second quarter only of each household cohort to control for this bias.

the ENOE survey. Economic explanatory variables include a U.S. unemployment rate variable and an expected Mexican wage variable that reflects the probability of being employed and wage earned if employed. U.S. enforcement explanatory variables include a variable that captures the intensity of border enforcement that a person in the ENOE survey would be likely to encounter if attempting illegal entry and the likelihood of being prosecuted for illegal entry if caught. These variables are based on the historical crossing locations that an individual from a given state in Mexico is likely to choose. The impacts of enforcement and consequences are thus identified by variations in the intensity of enforcement and consequences along the border. In addition to economic and enforcement variables, our regression analysis includes a variable that indicates the likelihood that a person observed in the ENOE survey would migrate illegally as opposed to legally, as well as a range of control variables.

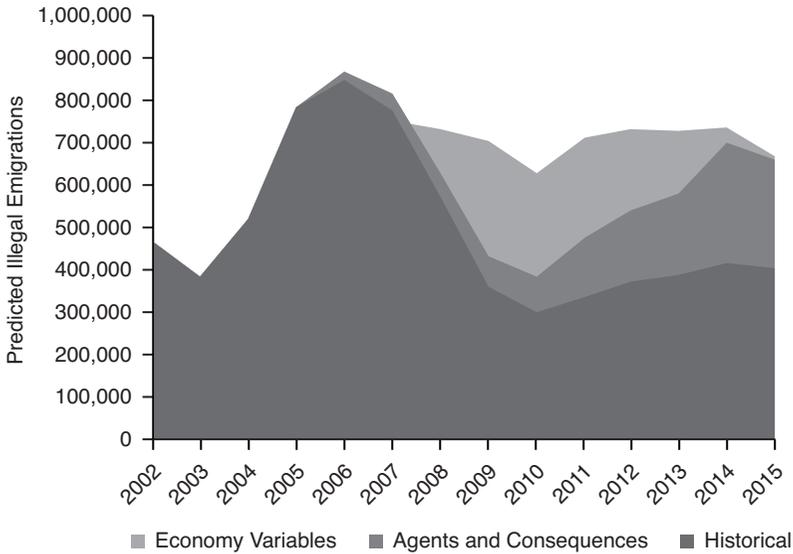
TABLE 3  
DECISION-TO-MIGRATE REGRESSION RESULTS

Explanatory Variable	Coefficient	Std. Err.	P> z
Border Enforcement Intensity Index (USBP Agents)	0.31	7.01	0.97
Border Enforcement Intensity Index Squared	0.04	0.46	0.92
Border Enforcement Intensity Index *Illegal Likelihood	-1.57	0.30	0.00
Border Enforcement Intensity Index *Illegal Likelihood Squared	0.02	0.01	0.00
Illegal Likelihood	10.18	2.14	0.00
Misdemeanor Prosecutions	-0.05	0.72	0.94
Felony Prosecutions	-5.09	2.11	0.02
Ln(U.S. Unemployment Rate)	-0.53	0.34	0.12
Ln(Mexican Expected Income)	-0.15	0.04	0.00
Quarter Dummies:			
Second Quarter	0.32	0.06	0.00
Third Quarter	0.13	0.07	0.06
Fourth Quarter	-0.02	0.09	0.79

NOTE: Estimation technique: logit.

SOURCE: Roberts (2016).

FIGURE 2  
COUNTERFACTUAL SIMULATIONS



SOURCE: Roberts (2016).

Regression results are presented in Table 3. Border enforcement intensity significantly lowers the likelihood that someone with a high propensity to migrate illegally will choose to do so. Although misdemeanor prosecutions have no significant impact on the decision to migrate, felony prosecutions have a powerful one. A higher expected income in Mexico significantly lowers the odds of migration, and a higher U.S. unemployment rate also lowers it.<sup>10</sup>

We used the regression results in Table 3 to predict historical levels of aggregate illegal emigration from Mexico during 2002–15 of this particular group. Demographic change in Mexico is incorporated into these predictions because of the use of ENOE survey weights. We then simulated what would have happened if explanatory variables remained constant at their 2005 levels. We first held enforcement variables (agents and consequences) constant. We then additionally held the economic variables constant. Figure 2 shows the results of these simulations.

<sup>10</sup>Although the latter coefficient is not significant at the 10 percent level.

The historical-level values suggest there has been no rebound in illegal migration from Mexico since 2010. The downturn that began in 2007 was initially driven almost entirely by the U.S. Great Recession, and the enforcement buildup had limited impact. Starting in 2010, however, the U.S. economy began to recover, and the impact of the enforcement buildup began to grow. By 2015, the enforcement variables accounted for all of the difference between the historical level and the counterfactual simulations. This means that had the enforcement buildup not occurred, illegal migration would have increased to levels consistent with recovery in the U.S. labor market. Border enforcement has now broken the link between the U.S. business cycle and illegal Mexican immigration flows by impacting the decision of potential illegal Mexican migrants and deterring them from coming to the border.

### Building Credible Security on the Southern Border

The U.S. government faces two basic challenges in building credibility on border security with respect to mass illegal immigration. First, it must carry out actions that improve border security. Second, it must credibly report on border security outcomes and determine whether its actions have impacted those outcomes. The Washington political establishment has been reluctant to do either since illegal entries started rising in the late 1960s. For many decades, an establishment consensus has held sway that treats border enforcement with respect to mass illegal immigration as a nuisance responsibility that must be carried out but has little or no impact on these flows, which are believed to be affected only by economic and demographic trends. As a result, there are more political and institutional rewards in Washington for focusing on facilitation of cross-border travel and trade flows, which supports the economy and minimizes complaints from a traveling and trading public.

However, the public has insisted for decades that enforcement be taken with the same level of seriousness as facilitation. After the 1986 Immigration Reform and Control Act failed to curtail illegal immigration, the Clinton administration carried out an initial border enforcement buildup in the 1990s. Although there was some initial promising discussion of how to measure border security outcomes,

this was quickly dropped.<sup>11</sup> The Bush administration inaugurated a second major enforcement intensification after failed immigration reform efforts in 2006 and 2007. After the Obama administration took office in 2009, DHS Secretary Janet Napolitano did not roll back this intensification, but she chose to pursue a misguided approach to measuring border security outcomes that ended in failure. This put the government in a difficult situation when comprehensive immigration reform was again attempted in 2013. As could have been predicted from earlier immigration reform failures, border security was the subject of intense dispute and disagreement, and the lack of any credible evidence on border security outcomes inevitably undermined the possibility that the 2013 reform could succeed.

A new administration has come into office that has made achieving southern border security one of its core goals. The new administration and Congress will need to determine what constitutes desirable border security outcomes, and what policies and measures are needed to achieve them. I would offer the following recommendations:

- *The Washington political establishment needs to stop treating border enforcement against illegal immigration as a nuisance issue.* Three failed immigration reform attempts over the course of a decade did not fundamentally change this attitude. It remains to be seen if the 2016 election will. The research results presented here also make it clear that enforcement does impact migrant decisions. It is no longer tenable to oppose border enforcement because it doesn't work.
- *The White House must demand meaningful border security measurement.* Unless the new White House requires the executive branch to report objective and rigorous measures, opposition from lower levels in the federal bureaucracy will likely prevent progress. Border security measurement needs the same status and protection from political pressures that are enjoyed by programs producing economic estimates such as inflation, income, and unemployment.
- *The Department of Homeland Security and its components must stop opposing objective measurement of meaningful*

<sup>11</sup>See Bipartisan Policy Center (2015) for more extensive discussion of the history of border security measures.

*border security outcomes.* DHS has never reported meaningful border security measures. Instead it continues to report measures that either show that DHS components have achieved “mission success” or that convey little or no meaningful information about the state of border security. DHS currently reports a misleading proxy for the probability of apprehension between ports of entry, and more importantly, it has never officially reported any estimate of successful illegal entries—not even Border Patrol’s estimate of gotaways. DHS has never reported any measure related to illegal inflow and probability of apprehension for ports of entry. The new Secretary of DHS will face the choice of fundamentally transforming DHS’s culture so that it focuses and reports on meaningful enforcement outcomes, or giving in to constituencies that seek to distort or suppress quality estimates. If public perceptions of border security are to change, DHS’s culture must change, and transparency must prevail.

- *The U.S. government must make its administrative data and estimate methodologies available for external review and research.* Producing credible estimates will not be enough to establish credibility if external researchers cannot replicate these estimates and evaluate the methodology used to generate them. We on the IDA research team know that the quality of our estimates is high—but why should anyone believe us? Belief comes through a scientific process of review and critique that is open to all researchers. Government agencies routinely share highly sensitive data with researchers in ways that protect the data from misuse. The sharing of DHS administrative data with external researchers is long overdue and should be a top priority of the new administration.

## Conclusion

The challenges that will likely continue to impede progress are well illustrated by the fate of our research project in 2016. In his annual “State of Homeland Security” speech in February 2016, Secretary Johnson revealed publicly that he was supporting the research reviewed in this article: “We are working with outside, non-partisan experts on a project called BORDERSTAT, to develop a clear and comprehensive set of outcome metrics for measuring

border security, apprehension rates, and inflow rates.”<sup>12</sup> Later on in this address, the secretary stated: “In terms of border security, as I mention in my remarks, I want to get to a better place in how we measure border security. We have an initiative which I hope to finish before we leave office.”<sup>13</sup>

Although this project had been completed by November 2015 and could have been released to Congress and the broader public well before he left office, neither happened. The news media became aware of the project in September 2016, and several media outlets ran stories on it. Congress then sent a letter to DHS in October 2016 demanding that it be provided with the study, but DHS declined to respond. As of today, the study has still not been authorized for dissemination to either Congress or the public.

This lack of progress is made all the more puzzling by the fact that our results show a dramatic fall in successful illegal entries on the southern border and the major role of border enforcement in bringing that about and sustaining that decline. The government needs to take charge of this story, tell it honestly and properly, and start establishing greater credibility.

Two tests will take place this year that will indicate whether progress can be made. First, the National Defense Authorization Act passed in 2016 requires that DHS provide to Congress estimates of all of the measures discussed in this article.<sup>14</sup> Second, the executive order on border security and immigration enforcement improvements that President Trump issued in January requires that DHS produce a comprehensive study of southern border security by July 2017.<sup>15</sup> This study provides another opportunity for DHS to report proper measures on southern border security. One can only hope that the executive branch will pass these tests successfully.

<sup>12</sup>The speech is available on the DHS website at [www.dhs.gov/news/2016/02/11/remarks-secretary-homeland-security-jeh-c-johnson-state-homeland-security](http://www.dhs.gov/news/2016/02/11/remarks-secretary-homeland-security-jeh-c-johnson-state-homeland-security).

<sup>13</sup>See discussion at 1:00:49 in video posted here: [www.c-span.org/video/?4045771/secretary-jeh-johnson-state-homeland-security-address&start=3649](http://www.c-span.org/video/?4045771/secretary-jeh-johnson-state-homeland-security-address&start=3649).

<sup>14</sup>See Subtitle G, section 1092, pp.S.2943—430–37. Available at [www.congress.gov/114/bills/s2943/BILLS-114s2943enr.pdf](http://www.congress.gov/114/bills/s2943/BILLS-114s2943enr.pdf).

<sup>15</sup>See Section 4(d) of the executive order. Available at [www.whitehouse.gov/the-press-office/2017/01/25/executive-order-border-security-and-immigration-enforcement-improvements](http://www.whitehouse.gov/the-press-office/2017/01/25/executive-order-border-security-and-immigration-enforcement-improvements).

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## BOOK REVIEWS

### **The Art of Peace: Engaging in a Complex World**

Juliana Geran Pilon

New Brunswick: Transaction Books, 2016, 383 pp.

Juliana Geran Pilon's *The Art of Peace* asks a question of first-rate importance: Why does our country do so badly peacefully protecting its interests? We outspend and outfight our enemies, winning battles—but not the peace. Now, the new challenges such as accelerating nuclear proliferation, Russian hybrid warfare, cyberwar, Chinese aggrandizement, political terrorism, and criminal networks require disenthraling ourselves from the intellectual and emotional pathology Pilon calls “Strategic Deficit Syndrome”—that is, a lack of grand strategy, a failure to synchronize all the elements of statecraft, not just the military, and to study ourselves and the world. This is not a fringe view. She quotes no less an establishment figure than Ambassador Robert D. Blackwill, a member of the Council on Foreign Relations, on the so-called National Security Strategy as a “wish list disassociated” from both the world and U.S. objectives. And that is our problem.

Her interest is in minimizing the resort to violence everywhere by understanding war and peace in the manner of the Chinese sage Sun Tzu, as elements of life. Each contains the seeds of the other. We will do better to manage them, rather than to pursue total “solutions” that end in disaster, like President Woodrow Wilson and the war to end all wars. She calls for a comprehensive approach to war and peace that has an enhanced role for civilian talents and agencies, at least so

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that the military may focus on its own areas of expertise. Perhaps most of all, she finds in Sun Tzu a logic both humane and effective: the acme of military skill is to subdue the enemy without firing a shot. Get inside the enemy's head to disrupt his plans, rather than seek cataclysmic battle. Use peacetime to pursue national objectives and thereby make war less likely.

She ranges easily between military theory, international relations, our recent wars, the role of the Constitution, the strategic thought of the American Founders, public opinion, and relations between voters and their leaders. She has studied the relevant government literature, such as reports and strategy statements, carefully—no small job, since many of them are pretty low on signal and pretty high on noise. She delivers her message fluently, with an occasional flash of humor—and exasperation—driven by her ultimate focus on the real world. Readers with an interest in the study of war and peace will come away with their own views challenged and enriched.

Her theme recalls President Lincoln in 1862: “We must disenfranchise ourselves, and then we shall save our country.” She finds the country in peril because we are operating on the wrong assumptions about human nature, international relations, state and substate conflict, leaders and the led, and how to organize government for the defense of national sovereignty. She finds us making false dichotomies between national morality and benevolence, on the one hand, with self-respect and preservation, on the other. Her analysis should (but won't) end the jejune debates of academics over “realism” and “idealism,” to say nothing of “soft power.”

She pays full attention to the relationship between domestic politics and foreign policy. She especially notes the fault line between left and right in our society. It is national defense where identity politics is most dangerous by undermining unity of national purpose about fundamental things. Debates among experts on nuclear forces, for example, still show the traces of “hawk” versus “dove” team identities that go back to the Vietnam War. Pilon's discussion of immigration, the Statue of Liberty, and the incorporation of immigrants is invaluable and would do much to clarify current debates. In general, she calls for transcending “ideological tribalism.” Easier said than done, but the saying is the first step in the doing.

At the heart of these problems she finds Strategic Deficit Syndrome (SDS). We don't try to understand our enemies, current and potential, or ourselves, almost guaranteeing failure. In particular,

she finds a failure of our institutions to credit the role of nonmilitary functions in foreign relations, peace, and even the conduct of war. So, these inherently civilian functions in the defense of the nation either fall to the military, which has enough to do as it is, or they don't get done. The cost is to the civilian agencies, in terms of losing missions they should have, and to the military for being given missions it shouldn't have. As Col. Michael R. Eastman writes in his introduction, we blur the distinction between national strategy and military strategy—that is, between what we should do and what we can do.

The military is an asset that can act fast. But it can also be deeply wasteful, compared to previously having invested in, say, public diplomacy, which would explain to foreign publics the ideas and principles that animate us, and for which we will fight if necessary—thereby making it less necessary. The military, says Pilon, “should not be the only—or even the main—branch of government to prepare itself for future threats.” And there is no point in blaming the abstraction of “the bureaucracy,” says Pilon, because it does not intentionally fail.

Instead, she recommends dropping the distinction of hard versus soft power (the latter concept she examines and demolishes), and dropping the definition of victory as purely military. She calls for a concept of “peacefaring as a tool not only not antithetical to warfare but complementary.” But the nonmilitary capabilities—intelligence, foreign aid, public diplomacy, and strategic communications—are in trouble because of SDS. As Pilon notes, there is “confusion about the nation’s values and conception of peace, exacerbated by ignorance and misunderstanding of history and tradition.”

In contrast, Sun Tzu and the American Founders shared a “keen appreciation for grand strategy and the role of nonlethal power.” They appreciated unity of effort, strategic proportionality, and preserving our own freedom of action. Pilon compares George Washington to Sun Tzu, who “explored strategy in peace no less than that in war, for unless the peace is won, wars will necessarily be lost. Moreover, it is during peace that wars have a chance to be prevented.”

The Founders, she explains, saw cultural intelligence as central. They saw a need to realistically assess “the total . . . environment of every conflict, anywhere.” How modern this sounds when any conflict now, even one fought for a little cause in a little place, can reach out to us.

Sun Tzu thoughtfully observed state relations and broke them down into basic logic in a slim volume we know today as *The Art of War*. No, the Founders were not aware of Sun Tzu, but they rediscovered the inevitable logic of statecraft, which resonated with other sharp observers such as the ancient Western sages the Founders knew well.

Sun Tzu—and history—teach that, contrary to popular belief, peace is not the normal state. Life is perpetual strife; don't make it worse. War may not start from "miscalculation," as the academics often teach. Instead, war and peace are in a continual cycle. There is no need to make it worse, especially by naïve "improvements" or total solutions that go against the natural flow of things. The Treaty of Versailles, for example, was the kind of imposed peace that Sun Tzu, and Sir Basil Liddell Hart, saw as the mirage of victory leading to the next war. Indeed.

But recognizing this, we can carve out decent national and personal lives so long as we minimize the resort to violence and don't chase utopian fantasies that always turn to increased, totalitarian control to force perfection onto society. The latest of the species is political correctness/post-modernism/social justice, which increasingly resembles the visions of George Orwell, in both *Animal Farm* and 1984.

"Peace" to the totalitarian ideologies such as Communism or Islamism is temporary and tactical on their part—or when they win completely. A strategy of wearing them out needs the efficient allocation of all our relevant capabilities, of which the military is only one, if the most important.

Sun Tzu is simple but deep: The effective leader subdues the enemy without violence. The most effective strategic target is the enemy's mind or plans. The second is his alliances. If that still doesn't work, attack his army. And if that doesn't work, last you may be forced to attack his cities. Mutual Assured Destruction, targeting enemy cities with nuclear weapons and making our own cities equally vulnerable, would have struck him as insane. Instead, trying to make "oneself invincible . . . is the indispensable prerequisite to waging peace." (If only the THAAD system were already deployed in defense of South Korea and Japan.) Pilon writes: "It is precisely because he hated armed conflict that he advocated being prepared for it."

In sum, Pilon makes the case and explains how we could critically examine intelligence and influence operations, alliances, leadership,

team-building, and national ethos. Under Sun Tzu's example we also would study how our Founders' used—and left us a legacy of—liberalism, trade, influencing by example, resilience, and control of government by the Constitution. Sun Tzu would, we can surmise, think that awareness of Strategic Deficit Disorder could focus us on synchronizing elements of power with goals. He might especially address our cultural ignorance and our intelligence deficit. Perhaps some of this critical reexamination of institutions must actually spread to academia and the media. While Pilon is realistic about what can be done in our big institutions—often, not much—she urges action, anyway, as the concrete first step. She is a distinguished academic, but her goal is in the real world.

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### **Illiberal Reformers: Race, Eugenics, and American Economics in the Progressive Era**

Thomas C. Leonard

Princeton: Princeton University Press, 2016, 264 pp.

Thomas C. Leonard's *Illiberal Reformers* tells a story that captures the mind, breaks the heart, and turns the stomach. Today, many economists argue that minimum wage laws are bad policy because they reduce employment opportunities for low-skilled workers. Leonard recounts the ways in which Progressive Era economists argued that minimum wages were *good* policy precisely because they reduced employment opportunities for those workers. Social scientists in the thrall of the eugenics movement enthusiastically endorsed policies that excluded “unfit workers” from the labor market lest those workers' earnings enable them to continue polluting the gene pool. Leonard shows how policies like minimum wages and prohibitions of child labor were not victories for oppressed laborers under the thumb of rapacious capitalists. Instead, they were explicitly intended to limit competition.

*Illiberal Reformers* is a detailed, but compact, intellectual history of American economics during its separation from “political economy” and its emergence as a separate profession guarded by a new scholarly organization, the American Economic Association.

Leonard notes that many early American progressive economists were trained at German universities, where they were inculcated with the views of the German Historical School and its contempt for English economics and its classical-liberal bent. Progressives admired the emerging German administrative state and were taken with the idea of a society run by experts trained in scientific research and blessed with superior insight into the human condition. They rose to intellectual and political prominence with their conviction that *laissez-faire* was no way to run an industrial society. Armed with their new understanding of the science of economics, they would run an administrative state that would eliminate the waste and inefficiency endemic to capitalism.

Motivated by a curious combination of, in Leonard's words, "compassion and contempt" for the poor, progressive reformers were vain in their own conceit, thinking that they could arrange the members of a great society with the same ease with which their visible hands would move pieces about upon a chessboard. They were, in short, Adam Smith's classic "Men of System." While Smith stressed the importance of local knowledge—and Friedrich Hayek would later highlight the importance of using knowledge distributed across many minds—the progressives cut this Gordian knot by conceiving of society as a literal organism. The state was a "moral person," in the words of reformer Richard T. Ely.

The enthusiasm for reform rested on incorrect—or at least incomplete—theories of wage and price determination. Many of the leading reformers held that wages were determined not by marginal productivity but by customary standards of living. Foreigners and other non-Caucasians could "under-live" American workers because they were accustomed to lower standards of living. Nonwhite workers would thus win the race to the bottom, ultimately culminating in "race suicide." In this view, Darwinian and competitive forces were dysgenic, meaning that unchecked reproduction among the fecund and "swarthy" would overwhelm the genetically superior, leading ultimately to the degradation of the human race.

In supply and demand analysis, a minimum wage increases quantity supplied and reduces quantity demanded, creating unemployment. This is often the prelude to a discussion of unintended consequences: apparently compassionate policies hurt the least well-off among us. But, as Leonard shows, for many that was not an

unintended consequence at all. Many economists of the Progressive Era explicitly supported minimum wages because they would reduce employment among African Americans, immigrants, and the members of “low-wage races” (their term). The intended consequences were unemployment among “unfit workers” and the progressive improvement of the human race.

These offensive ideas were not the hysterical effusions of cranks and ideologues operating at the fringes of economics and public policy. Richard Ely and John R. Commons, among many others, were squarely mainstream thinkers, the founders of influential societies, and the editors of influential journals. Prestigious lectures and prizes are named for them. The *American Economic Review* and the *Journal of Political Economy* were outlets for eugenicists and scientific racists advancing viewpoints we rightly call repugnant today. Outside of economics, Woodrow Wilson would go from the presidency of Princeton University to the presidency of the United States with explicitly racist and eugenic views. Still others—famous jurists like Louis Brandeis and Oliver Wendell Holmes as well as members of the literati like Jack London, Eugene O’Neill, Virginia Woolf, and D.H. Lawrence—were enthusiasts for the scientific management of society.

Their rhetoric was astounding. Sidney and Beatrice Webb claimed that “unemployment is not a mark of social disease, but actually of social health” in light of policies aimed at eliminating unemployables from the labor market. Those who would “debauch our labor market” and “wreck by their competition the standards of other workers,” in Walter Lippmann’s words, had no place in the labor market. Richard Ely recommended stopping Indian famine relief efforts: “Why not, Ely ventured, ‘let the famine continue for the sake of race improvement?’”

The sordid intellectual and moral origins of workplace regulations, minimum wages, and so on are not by themselves evidence that they are bad ideas or poor anti-poverty measures; but Leonard’s book shows us that we should be more skeptical of calls for intervention in the name of the betterment of the benighted. H.L. Mencken famously said that “the urge to save humanity is almost always only a false-face for the urge to rule it,” and the eugenic economics of the Progressive Era would be a case in point. Historians and textbook writers should revise their understanding of Progressive Era labor legislation and note that many of the rules restricting labor force

participation by women and children were not there to protect women and children from exploitative employers or from degrading and destructive work but to protect white male breadwinners from competition—and to make it so that the grossly misnamed “unemployables” would have a harder time reproducing.

*Illiberal Reformers* is also a very useful cautionary tale in a policy environment where claims like “the science is settled!” are cudgels brandished against heretics and dissenters from the consensus. Those who believe “the science is settled” on minimum wage or other labor restrictions would do well to read *Illiberal Reformers* in order to see how those convinced of their unassailable theories enacted policies for monstrous reasons. *Illiberal Reformers* also provides a useful intellectual backdrop against which to interpret the women’s rights movement, the Civil Rights Movement, and more recently the “Black Lives Matter” movement.

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## **The Great Leveler: Violence and the History of Inequality from the Stone Age to the Twenty-First Century**

Walter Scheidel

Princeton: Princeton University Press, 2016, 444 pp.

This is a grisly and depressing tome if I have ever read one, though hopelessness and despair are common features of the human experience. They are cornerstones in our history, and we ignore history’s tragedies to our own peril. Inspired by Thomas Piketty’s *Capital in the Twenty-First Century* (2013), Walter Scheidel draws together a vast array of quantitative and narrative evidence for his central thesis that

throughout recorded history, the most powerful leveling invariably resulted from the most powerful shocks. Four different kinds of violent ruptures have flattened inequality: mass mobilization warfare, transformative revolution, state failure, and lethal pandemics. . . . Hundreds of millions perished in their wake. And by the time the dust had settled, the gap between the haves and the have-nots had shrunk, sometimes dramatically [p. 6].

A classicist, historian, and demographer all in one, Scheidel integrates a variety of world historical evidence into a convincing, if depressing, portrait of wealth equalization over time and across space. Most world histories are plagued with problems that only a regional specialist might recognize, but Scheidel does not allow himself to stray from the subject at hand and his narrative plays a structural, supportive role for the real star: huge amounts of data on inequality.

I am an intellectual, social, and political historian interested primarily in ideas, individuals, institutions, and the interactions between each. I am not a quantitative historian and am in no way qualified to speak on the validity of Scheidel's argument in this regard. My goal, therefore, is to take his case *as given* and proceed to distinguish the implications for libertarians and libertarianism if indeed significant leveling of wealth has occurred only as the result of widespread death and destruction.

The volume begins with a broad discussion of the argument, methodology, and "A Brief History of Inequality," from the primordial use of brute force to the modern exercise of international finance capitalism. At no point does the author endorse either equality or inequality. Rather, he argues that the concentration of wealth (measured primarily by Gini coefficients—"the extent to which the distribution of income or material assets deviates from perfect equality") has been a fundamental fact of human existence, essentially, forever. The fruits of inequality include the ultimate foes in libertarian thought, the state and all its attendant extractive parts. The egalitarian harvest, however, is a bloody and detestable mess. Scheidel maintains a careful and measured distance from his subject, able to recognize the very real social and historical problems associated with both concentration and compression. Both processes included horrifying levels of violence, and neither is truly preferable. With a word of caution to the modern devotees of "equality at all costs," Scheidel writes,

If we seek to rebalance the current distribution of income and wealth in favor of greater equality, we cannot simply close our eyes to what it took to accomplish this goal in the past. We need to ask whether great inequality has ever been alleviated without great violence, how more benign influences compare to the power of this Great Leveler, and whether the future is likely to be very different—even if we may not like the answers [p. 22].

Scheidel leads us backward in time from the present day through the democidal 20th century, the beginnings of imperialism and capitalism, the medieval and ancient eras, to the origins of the human species. Spatially, we are pulled from the United States to Soviet Russia, from industrial Europe to Qing China, from the Han dynasty frontier to the Roman Empire, from plague-infested Constantinople to plague-infested Lima. He argues that the hunter-gatherer way of life demanded fewer and simpler possessions, but sedentary agriculture encouraged the accumulation of property and heritable wealth. Those who accumulated the most wealth tended to acquire political and even spiritual authority as well. Over time, divisions between the power of some and the helplessness of others calcified into sociopolitical class hierarchies, conceptions of political authority, justice, and general ideas about how the world simply or *naturally* was. Material inequality played a critical role in the development of states, and states in turn ensured the continued existence of particular concentrations of wealth. This process has taken place only under conditions of extended peace and relative prosperity, however, leading Scheidel to argue that “the absence of major violent ruptures has been a vital precondition of high inequality” (p. 62).

This is certainly not to say that the Roman and Han Chinese empires were peaceful or peace-generating institutions. Rather, Scheidel treats political units as mere bodies or vehicles for the exploitation of labor and the expropriation of resources. The Roman and Han states existed to serve the purposes of those societies’ elites—namely, protection for the concentrations of wealth and power these individuals managed to amass or inherit. The results in civilizations across the world have been largely the same: inequality is steadily built up and its attendant problems exacerbated until the requisite level of “despotic intervention” reaches a socially or technologically intolerable point. In such collapse-ready situations, one or more of Scheidel’s “Four Horsemen” run amok, razing cities and civilizations alike.

After the Roman collapse, the Plague of Justinian, and centuries of low-level warfare, medieval Europe suffered the worst devastation in its history during the 14th and 15th centuries. The Black Death wiped away at least a third of the population and leveled wealth concentration more than any single event before the Second

World War. High wages encouraged migration to urban centers, and by the early 1400s Gini coefficients in Italian, German, and Dutch cities reached from the 0.7s to the 0.9s. As Scheidel notes, “High wealth inequality of at least 0.75 was a standard feature in the major cities of late medieval and early modern Western Europe” (p. 93). From the 15th to the early 20th century, inequality steadily increased worldwide. Despite periodic local or regional moments of leveling, the general trend points to a centuries-long process through which the wealthy and powerful amassed more and more over time. Elites funneled their windfalls into capital investment, colonial corporatist ventures, and the professionalized fusion of modern statecraft and business interests. While plagues certainly operate as powerful temporary levelers, they spare capital wealth and the productive capacity of the land. Our next “Horseman” is not so discriminating.

War destroys land, labor, and capital alike. The more modern the conflict, the more total its destructive capacity. Before the era of mass mobilization warfare, conflict between armies accounted for only small and discrete moments of leveling, if not a further concentration of wealth. In the modern era—since roughly the Napoleonic Wars—mass armies and weapons capable of destroying entire nations have dramatically expanded the leveling capabilities of the warrior Horseman. The strongest example of “total war” leveling is 20th century Japan. In 1938, near the height of imperial Japan’s power, the wealthiest 1 percent of the population claimed a fifth of total income and Japanese Gini coefficients may have ranged from 0.45 to 0.65. During the decade and a half of Japanese warfare, the top 1 percent’s share of income fell to a meager 6.4 percent. The most elite of elite estate values declined more than 90 percent. Almost all of the wealth concentrated among Japan’s wealthiest and most powerful was claimed by the war effort, physically destroyed in the fighting, or redistributed by the postwar regime. “Total war ended in total defeat” and near-total leveling of wealth.

Together, the world wars created a “Great Compression” of wealth inequality. Throughout the world, inequality trends roughly corresponded with the more dramatic Japanese example and for largely the same reasons. Those countries most deeply touched by the war generally experienced the greatest amounts of leveling, and, if Scheidel and Piketty are to be believed, inequality is slowly

creeping back up to prewar levels. Importantly, though, these events were not conscious attempts at leveling wealth. Rather, they were the catastrophic results of long-standing foreign and domestic policies and deep cultural conflict.

Purposeful and violent leveling through revolution has been a powerful correlative to the unintended consequences of modern mass warfare. The leveling effects of violence are far sharper if the poor kill the rich and redistribute physical wealth rather than destroying it outright. As it happens, though, the revolution rarely stops with the 1 percent, and violence can quickly consume a society. In Russia, China, and a host of other countries, revolutionary regimes not only murdered private wealth holders in numbers rarely seen throughout history, but they also attempted to abolish inequality as a matter of law. The horrifying examples of Soviet and Maoist democide illustrate the devastating hazards of pursuing equality at the costs of humanity.

Our final Horseman is that which brings state failures and systems collapses. While this is the least well-documented phenomenon covered in the book, it is among the more interesting and probably has been the most potent leveler. In these cases, entire social structures could be wiped clean. In the case of Tang China, warlords purged virtually the entire ruling aristocracy. As the Western Roman Empire fell, its social-political organization and even basic productive technologies like the pottery wheel disappeared. The most dramatic example is the Late Bronze Age collapse, perhaps prompted by invasions, natural disasters, and the Hittite Empire's fall (c. 1200 BC). In Mycenae, Mayan Central America, and ancient Harappa, systems collapse entailed the liquidation of wealthy elites and most concentrated capital. Scheidel argues that, despite the relative lack of modern examples or complete data, "Ozymandian collapse may well have been the single most potent and reliable leveler in all of history" (p. 279). Much rarer than bouts of disease or warfare, civilization-ending failures are nearly always more complete levelers—so complete, in fact, they often take any data with them into the dustbin of history. To make matters worse, Scheidel investigates supposedly peaceful alternatives to violent leveling and dismisses each in turn. Nothing but violence, or activities associated with violence (like land reform or emancipation), have had an appreciable negative effect on inequality.

What are we, then, to take from this unfortunate yet well-researched volume? Those of a hopeful cast of mind may be uncomfortable accepting Scheidel's claims, but those claims have a firm basis in liberal social and historical theories. The liberal theory of history posits that any social use of individual power *necessarily* divides the population into antagonistic factions—those who positively embrace said use of power and benefit from its use, and those whose liberties are constrained. When the powerful accumulate and exercise enough power in foolish or tyrannical ways, the libertarian interests of exploited individuals will no longer bear it. The resultant clash between the powerful and the exploited produces change over time and constitutes the stuff of history. This is the theory given down to us by Guizot, Acton, Croce, and innumerable others; and, though it demands *some* qualification to account for nonsocial levelers like plagues and pandemics, it is perfectly consonant with Scheidel's presentation of war, revolution, state failure, systems collapse, and their attendant consequences for inequality. Still more important, though, the liberal theory of history offers potential solutions to the "Great Leveler Problem" that inequality has been built on violence and only mass violence has ever seriously reduced inequality.

Scheidel largely discounts the possibility of peaceful reform, but perhaps what we need is a *nonviolent systems collapse* or an *individualist revolution*. If we can manage to combine the strongest horsemen with the ideological opposite of coercion, perhaps we can both reduce inequality and do so nonviolently. Rather than a true collapse, this might look more like a systems replacement. Instead of absolute leveling through nuclear annihilation, we might achieve it through digital currency reform, the 3-D printed domestic economy, an artificial intelligence explosion, space exploration, or the perfection of genetic manipulation. We might level inequality with any number of technological singularities or moral-cultural revolutions, but we should recognize that *violence nearly always begets violence*. In a world where our next mass conflict could be our last, no one should be willing to take the risk. As we lurch forward into an uncertain new era fraught with potential catastrophe, we should be mindful that power can never be trusted and its steady—but *peaceful*—dismantling might make the difference between survival and extinction.

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## **Gaining Currency: The Rise of the Renminbi**

Eswar S. Prasad

New York: Oxford University Press, 2017, 321 pp.

When China began its journey from a centrally planned economy to a socialist market economy in late 1978, it had virtually no footprint in the global economy. Today it is the world's largest trading nation, and its currency, the renminbi (RMB, also known as the yuan), has become an international medium of exchange, albeit on a small scale compared to the dollar, euro, yen, and pound.

In his new book, Eswar Prasad, former head of the IMF's China Division and currently Tolani Senior Professor of Trade Policy in the Dyson School at Cornell University, tells the story of the rise of the RMB and considers its future as a "safe haven" currency (i.e., one investors can turn to during a financial crisis).

Although the RMB has achieved official reserve status and is now included in the IMF's basket of currencies defining the Special Drawing Right (SDR), it still suffers from weak institutions that restrict the RMB's use as a global currency. So, while China has come a long way since 1978, it still has a way to go in becoming a global financial center with a trusted reserve currency.

Prasad begins with an overview of China's long monetary history, noting that paper currency, in the form of certificates of deposit issued by "private deposit shops" and secured by coins or goods as collateral, first appeared in the 7th century during the Tang dynasty, well before the use of paper money in 17th century Europe. However, it was not until the 10th century, during the Song dynasty (960–1279), that paper money became widely used in the form of banknotes, again issued privately and backed by coins or goods. In 1160, the Song ruler established a monopoly over the supply of currency, which was backed by metallic base money. Private currency was outlawed "on the grounds that only the government could ensure a reliable supply of a currency stable enough to support economic activity" (p. 3).

The banning of private currency was controversial and provoked debate over the role of government in supplying a stable currency. That debate was not new; it went back a thousand years to the Han dynasty (206 BC–220 AD), when only metallic money existed and private mints competed with the government. Confucian scholars argued that giving the state monopoly power in minting coins would

lead to debasement without competing private mints, while public officials contended that only they could provide sound money.

Although the debate over private money issuance was lost as the Song government exercised its power to ban private production, the results of that monopoly were as expected: an eventual overissuance of paper money, inflation, and economic instability during the later Song era.

In the 13th century, during the Yuan dynasty (1260–1367), China became the first country to issue an inconvertible paper currency (i.e., fiat money backed by nothing other than the government's promise to accept it as legal tender). It is noteworthy that Song intellectuals, such as Ye Shi, had a rudimentary understanding of the quantity theory of money, as well as the theory of monetary disequilibrium. They recognized that overissuance of paper currency would cause inflation and disrupt economic activity.

When inflation did occur during the Ming dynasty (1368–1644) because of an excess supply of paper money, China turned to the use of metallic money in the form of silver and coins. Paper currency did not appear again until 1853, during the Qing dynasty (1644–1911), and was backed by silver and bronze.

After the 1911 revolution, China experienced a period of competing currencies, as both government and private currencies circulated side by side. Those currencies were convertible into silver. However, the rise in world silver prices during the latter half of 1934 led to a drain of reserves, and in November 1935 China went off the silver standard.

From 1938 to 1941, the Kuomintang government allowed four banks to issue legal tender (*Fa Bi*), nominally convertible into British pound sterling and the U.S. dollar. That currency came into direct competition with paper currency issued by the China Reserve Bank, established by the Japanese in 1938, and later the Central Reserve Bank. The Kuomintang used its printing presses during the war to pay for military expenses, and the resulting hyperinflation made the *Fa Bi* worthless by 1948.

The RMB was introduced in 1949, when the People's Republic of China (PRC) was established. Chairman Mao's picture, however, did not appear on the currency until 1987; and he was not shown alone until 1999.

Many lessons can be learned from this monetary history, and Prasad does an excellent job in summarizing it. He then moves to

chapter 2, where he provides a tutorial on some fundamental concepts in international finance and organizes his book around three themes in the rise of the RMB: (1) the importance of opening the capital account and allowing more flexibility in the exchange rate regime, (2) the steps leading to the acceptance of the RMB as an international medium of exchange, and (3) the use of the RMB as a reserve currency. Those topics are covered in chapters 3–6.

The People's Bank of China (PBC), under Governor Zhou Xiaochuan, has been a strong proponent of financial reform and liberalization, including opening the capital account to impose more market discipline on domestic banks, making the exchange-rate mechanism more flexible and less politicized, and internationalizing the RMB by building confidence in it as a reserve currency. China has made progress on all those fronts, as Prasad explains. However, progress has been hindered by strong special interest groups, notably large state-owned banks and state-owned enterprises (SOEs). Those constraints, and the lack of central bank independence, have encouraged Zhou to advocate “managed convertibility” rather than full convertibility for the RMB.

China's growing debt problem is another key issue affecting the rise of the RMB as a reserve currency. In a system of state-owned banks lending to SOEs that are too big to fail, there is bound to be a debt problem. If the possibility of bankruptcy is absent in such a system, the only thing that can prevent disaster is further state intervention and this boils down to state guarantees of more debt. Moreover, Prasad recognizes that “the RMB's future trajectory as a reserve currency will depend, to a large extent, on China's success in creating large, liquid, and well-regulated debt securities markets” (p. 133). The recent downgrading of China's sovereign debt by Moody's is a sign that things are not moving in the right direction.

The heart of the book is found in chapters 7 and 8 where Prasad explores the shortcomings of China's state-dominated financial system and the reforms necessary to make the RMB a safe haven currency—including instituting a genuine rule of law, allowing capital freedom, and letting market forces be the main drivers of the exchange rate. Prasad notes the advances China has made in opening its capital markets and making macro prices (interest rates and the exchange rate) more market oriented. But he also exposes the cracks in China's institutional infrastructure and makes recommendations for reform. In particular, in chapter 7, he argues that, given current

institutional constraints, the goal of making the RMB a safe haven currency is a “mirage.”

Although the RMB is convertible for current-account transactions, the capital account is still tightly controlled. Chinese investors are strictly limited in moving funds offshore, and foreign investors face very narrow options in moving funds to the Mainland. Those obstacles are being removed little by little. The absence of capital freedom in China and the large role of the state in the financial sector make it difficult for the RMB to become a widely accepted reserve currency. Indeed, the RMB accounts for only 1 percent of global foreign exchange reserves. A telling sign of the limitations of the RMB as an international currency is that Zimbabwe treats it as legal tender!

In contrast to the PRC, Hong Kong is a key destination for foreign investment and a global financial center because the Hong Kong dollar is closely linked to the U.S. dollar via a currency board, backed by a strong institutional infrastructure with limited government, a genuine rule of law, free expression, and the highest degree of economic freedom in the world. All those institutions, notes Prasad (p. 156), are “necessary for building confidence” in a nation’s currency and financial regime. The value of free speech, or what Nobel economist Ronald Coase called “a free market in ideas,” is that it allows people to improve institutions by pointing out weaknesses, which can then lead to improvements. Prasad clearly understands that preventing such an exchange of ideas has been, and will be, detrimental to China’s development as a global financial center.

Deng Xiaoping, China’s paramount leader, who opened China to the outside world and embarked on economic liberalization during the 1980s, abandoned “class struggle” in favor of economic development as the primary goal of “socialism with Chinese characteristics.” Yet, as Prasad points out, there has been a reversal under President Xi Jinping who has written, “Never allow singing to a tune contrary to the party center. Never allow eating the Communist Party’s food and smashing the Communist Party’s cooking pots” (p. 162).

This reversal bodes ill for China’s future. As Liu Xiaobo, one of China’s most famous dissidents, expressed in his Nobel Peace Prize lecture (read by Liv Ullmann in his forced absence on December 23, 2009), “Freedom of expression is the foundation of human rights, the source of humanity, and the mother of truth.

To strangle freedom of speech is to trample on human rights, stifle humanity and suppress truth.” As a key signatory to Charter 08, which defended the rights of all individuals to freedom and democracy, Liu was imprisoned and died earlier this year from liver cancer at the age of 61. His life and the lives of countless others were taken by the state’s refusal to recognize a basic human right.

The Communist Party of China (CPC) pays lip service to the rule of law, and the PRC Constitution holds that “the State respects and protects human rights” (Art. 33, Sec. 3). However, as Prasad argues, the reality is that “the legal system will remain subservient to the CPC and will not in any way provide checks and balances on the government” (p. 168).

China’s “socialist rule of law” should not be confused with Hong Kong’s liberal rule of law that protects persons and property by limiting the power of the state. Beijing could learn from Hong Kong’s mantra, “Big market, small government.”

Prasad raises an important question in chapter 7, namely, “whether financial and other markets can function efficiently without the free flow of information” (p. 164). He calls that “an open question” but goes on to say, “certain reforms remain necessary if a market-oriented system is to work smoothly, especially a legal framework that protects contractual arrangements and property rights.”

There is increasing evidence that a free market in ideas also plays a key role in economic development and that the lack of a free flow of information is detrimental to the smooth operation of capital markets (see, for example, *How China Became Capitalist* by Ning Wang and Ronald Coase). Yet for a person like Liu Xiaobo, the primary consideration is not efficiency but freedom.

In chapter 8, Prasad asks whether China’s financial regime is a “house of cards.” He points to the risk of capital outflows and the accumulation of external debt as the capital account is opened, the instability of the state-dominated banking system, wide swings in the stock market, a growing shadow banking system, an exchange rate regime that fails to reflect market forces, and legal/political barriers to fundamental reform. Solving those problems would help instill confidence in the RBM and facilitate the move from an export- and investment-driven development program to one that is more balanced toward domestic consumption. Adding flexibility to interest rates and the exchange rate would also improve the allocation of capital.

China has taken a gradualist/controlled approach to opening the capital account and freeing up the exchange rate. Prasad reviews the various policies used to accomplish those goals and argues that “trying to maintain a gradual approach . . . can create tensions that show up in large and volatile movements of capital” (p. 178).

Recent capital outflows attest to his observation. However, if China were to adopt the reforms Prasad calls for—in particular, protecting property rights and adhering to a genuine rule of law—capital would be more likely to be attracted to and stay in China. Furthermore, with greater flexibility in the exchange rate, the PBC would not have to accumulate trillions of dollars in foreign exchange reserves and then waste them by trying to prop up the RMB to ward off being labeled a “currency manipulator.”

The pace of reform will depend on politics: so long as the CPC’s main goal is economic development and “stability,” the gradualist approach will continue. That approach has worked well in the nonfinancial sector since 1978, as the nonstate sector grew. However, the pace of reform has been much slower in the financial sector. A statement from the China Securities Regulatory Commission during the turmoil in the stock market in 2015 shows the tension between the leaders’ declared aim of opening markets versus the Party’s desire to maintain control: “The stock market is required to serve the people and the party, and the party alone represents the people. So if the market goes the wrong way or ‘misbehaves’, it is unpatriotic and should be corrected. Anyone who . . . helps the market ‘misbehave’ is a traitor” (p. 211).

Xi Jinping supports the Central Committee’s 2013 “Decision on Major Issues Concerning Comprehensively Deepening Reforms,” which calls for letting “the market play the decisive role in allocating resources,” improving the “property rights system,” and promoting a “market-based Renminbi exchange rate,” as well as “interest-rate liberalization” and “the opening of the capital market.” However, he engages in doublespeak when he pledges: “We in the Communist Party are firm Marxists and our party’s guiding thought is Marxism-Leninism, Mao Zedong Thought and Socialism with Chinese Characteristics.” Thus, while the Central Committee’s roadmap for reform is promising, the reality is, as Weiyang Zhang has pointed out in a recent issue of the *Cato Journal*, “If people are not allowed to freely debate how to reform the political system, then it will be impossible to develop the right ideas to implement this roadmap.”

Chapter 9 provides a snapshot of China's growing power and influence in the global economy. President Xi Jinping's "China Dream" is to have the Middle Kingdom regain its historical prominence and take a key leadership role in global affairs, in addition to achieving all-around development at home. By expanding its influence in multilateral organizations and extending its economic reach through the "Belt and Road Initiative," China hopes to further internationalize the RMB.

In chapter 10, Prasad cautions that, while the RMB has risen as an international currency, there need to be more fundamental reforms rather than mere tinkering with existing institutions. In a nutshell, his view of the rise of the RMB and its future is that,

despite becoming a reserve currency, the RMB has essentially given up its claim of being seen as a safe haven currency, one that investors turn to for safety. In the absence of . . . fundamental reforms, especially the rule of law and a democratic system of government, the rise of the RMB will erode but not seriously challenge the dollar's status as the dominant global reserve currency [p. 247].

By "democratic system," Prasad means "a constitutional democracy" with separation of powers and a just rule of law. That ideal, however, clashes with the reality that the CPC, with its monopoly on power, dictates the range of effective rights so that the individual is subservient to the state.

China's leaders have placed stability above freedom; but without freedom there can be no lasting stability—assuming freedom is bounded by a rule of law that protects persons and property. Prasad is correct in pointing out that what China's leaders want is "collectivist liberalism" not Western liberalism, which places individual rights above state power. Building free-market institutions and making the RMB a safe haven currency mean limiting the power of government and sharply curtailing the reach of the CPC. Paper constitutional provisions for "free speech" and other personal liberties are not enough; those fundamental rights need to be enforced, which the CPC is unwilling to do, lest it lose its "leadership" role and authority.

If China wants to be a major player in global capital markets and ultimately make the RMB a key reserve currency, a fully convertible

RMB must be backed by trust in private property, an independent judiciary, a transparent financial system, and the free flow of information. Yet, instead of moving toward a more open society and privatization, President Xi and his comrades have been cracking down on those who want more competition in the political system and a legal system that protects individual rights. Prasad points to a recent article in *Xinhua*, the CPC's mouthpiece, titled "Why Should China Say No to 'Wrong Western Values?'" (February 13, 2015), to illustrate that, at its core, the Party's soul is still Marxist.

Although China has made significant progress in opening its trade sector, its financial sector remains harnessed by the legacy of central planning, where state-owned banks lend to SOEs, controls on capital flows and interest rates persist, stock markets are subject to sudden changes in government policy, exchange rates are strictly managed, and there is a Great Firewall blocking the free flow of information. China may have a beautiful physical infrastructure, but it lags far behind in creating an institutional infrastructure with secure property rights, broadly defined to include both economic and civil liberties.

In conclusion, Prasad's well-written book will enlighten readers regarding the challenges China faces in liberalizing its capital account, deepening its financial market, internationalizing its currency, and increasing the range of choices open to its people, which is the key criterion of progress. His book will be of great value to all those who want to achieve a better understanding of the interplay of the political and economic forces shaping China's future and the rise of the RMB.

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### **Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America**

Nancy MacLean

New York: Viking Press, 2017, 366 pp.

Although not her intent, Duke historian Nancy MacLean's new book has been a great make-work program for libertarian scholars across several disciplines. *Democracy in Chains* tells the story (and I use that word purposefully) of the "radical right's stealth plan for America." The unsurprising central figure of her story is billionaire

Charles Koch. However, his surprising partner in plotting to destroy American democracy is the late James Buchanan, who won the Nobel Prize in Economics in 1986 for his contributions to public choice theory. MacLean sees that theory as the missing piece that Koch needed to put his “master plan” into effective practice.

Public choice theory is the application of the economic way of thinking—or “rational choice theory”—to politics. The theory starts from the assumption that political actors are no different from economic ones in wanting to improve their own well-being through exchange. Therefore both markets and politics can serve as institutional contexts for exchange, and public choice theory attempts to identify the results of such exchanges under those alternative institutional contexts. The analytical goal is to determine when “private choice” (the market) works better or worse than “public choices” (politics or other forms of collective choice). Public choice theory challenges the public-interest view of politics. It often shows how public-interest justifications for political action are unlikely to work because there’s no incentive for political actors to produce those outcomes via political exchange. It is, in Buchanan’s words, “politics without romance.” And, because public choice theory helps show why many things government does are really about benefiting particular individuals rather than the public at large, it is a theoretical framework that is often, though far from exclusively, deployed by people with libertarian inclinations.

There’s nothing especially radical about this theory. In fact, when Buchanan won the Nobel Prize, some in the media wondered why it was really necessary to give the Nobel to someone who had the ground-breaking insight that politicians are self-interested! Of course public choice theory is more sophisticated than that, but it is also true that we see its basic ideas as part of our nightly entertainment. The popular British TV series *Yes, Minister* was written with the explicit intent of illustrating public choice theory’s understanding of the political process. Shows such as *House of Cards* and *Veep* also give us a perspective on politics that nicely aligns with the insights of public choice. The characters in those shows are self-interested, if not often egomaniacal. They want to get reelected, so their behavior is partially dictated by an awareness of voter preferences, as well as an acute understanding of what voters are oblivious to. In fact, they often like it when voters are unaware because it allows them to work in the shadows. Deals are struck with special interests, and others are

stabbed in the back. Meanwhile, characters, such as *Veep's* Selina Meyer (Julia Louis-Dreyfus), offer public-interest justifications for legislation that viewers know are mere rhetorical smokescreens for the real rationale: the trading of political favors that occupies the days of most politicians. And do viewers regard those shows as nefarious, anti-democracy, right-wing propaganda? No, in fact, most probably believe that they are roughly accurate portrayals of what goes on in our hallowed halls of government. Part of Buchanan's project was to systematically explain such behavior with existing rational choice concepts. So, despite MacLean's efforts to make public choice seem both obscure and radical, not only is the theory widely used in economics—and not just by “right wingers”—but we also see its influence in popular culture.

In MacLean's telling, however, it was Buchanan's contributions to public choice theory that provided Charles Koch with the intellectual framework and vision he needed to institute his radical “stealth plan” to take over America's political institutions and restrict the power of democratic majorities in the name of protecting the wealth, power, and privilege of a rich, white, and male minority. Classical liberalism becomes not an intellectual inquiry with a long and noble history and deep concern for the least well off, but an intellectually bankrupt smokescreen by which various “Koch operatives” and “Koch-financed academics” serve as lackeys for the will to power of the capital-owning elite. MacLean believes she has revealed the full depths of this “master plan” by discovering Buchanan's key role, which has been overlooked by previous treatments of the evolution of libertarian ideas or the nefarious influence of the Koch brothers.

In particular, MacLean makes a great deal out of what she claims are two intellectual influences on Buchanan that explain the particular intellectual path he took. She argues that he was strongly influenced by the pre-Civil War politician and political theorist John C. Calhoun and the 20th century Southern Agrarians, especially the poet Donald Davidson. MacLean argues that Calhoun's defense of minority rights in the context of the Constitution made him the “intellectual lodestar” of the Buchanan-Koch “movement.” Calhoun, of course, was a defender of slavery, which fits MacLean's narrative that Buchanan and public choice theory serve to defend the privileges of rich white men and frustrate the desires of everyone else to use the political process to exercise countervailing power.

It also fits her claim that the key event in motivating Buchanan's work was the 1954 *Brown v. Board of Education* decision that desegregated U.S. schools. Her evidence for this claim is an article by Warren G. Nutter and Buchanan (1959) that laid out the case for competing private schools as a better educational system in light of the deep controversy over *Brown*. In that article, written while both were at the University of Virginia, they back mandatory universal education funded by government through a voucher-type system. They argue that the institutions that deliver the actual education should be private. It's fair to say that Nutter and Buchanan left themselves open to MacLean's criticism by not explicitly mentioning the racially charged social and political context into which they made their argument, in particular the way it could be used to resist integration.

But the argument for school choice has a long history outside the context of race. For example, it appears in nearly identical form in John Stuart Mill's *On Liberty* (1859) exactly 100 years earlier. Like Mill, Nutter and Buchanan genuinely believed that their proposed system would provide a better education for all students. Given the way integration had been so strongly resisted by state governments in the south, their proposal, with all of its imperfections, would have plausibly been better than the status quo at delivering more integration. This is consistent with Buchanan's career-long objections to utopian policy proposals, preferring instead imperfect changes that have a more realistic chance of improving people's lives on the margin, even if they fall short of an imagined ideal.

Nonetheless, because she contextualizes it within the pro-segregation forces of 1950s Virginia, MacLean sees Nutter and Buchanan's article as a thinly veiled defense of segregation and thereby opposing *Brown*. Combined with her claim that Buchanan took his concept of "Leviathan" from the racist Southern Agrarian Davidson, it becomes easy for her to tar Buchanan's entire project as racist, even as she is officially agnostic about whether Buchanan himself was a racist. When Charles Koch found Buchanan's work, with its intellectual critique of government, defense of restraints upon the majority, and commitment to markets, it became, she argues, a natural vehicle for Koch's master plan to create a white, plutarchical oligarchy in the United States.

By now, most readers familiar with public choice theory and the history of the libertarian movement in the United States are

straining to recognize much of anything that's accurate in this account. And that is why MacLean's book is best referred to as a "story" or "speculative historical fiction" in the words of public choice theorist Michael Munger (forthcoming). It also explains why the book has been a make-work program: libertarian scholars have spent the last several months picking apart MacLean's argument and supposed evidence. Not much has been left standing of her case, suffice it to say. In the rest of this essay, I will briefly review her errors of fact and interpretation but will then shift my focus to what I think is the most fundamental problem with the book: MacLean's inability to understand the ideas with which she is grappling. She starts by assuming, rather than demonstrating with evidence, that libertarian ideas are all about defending power and privilege. In combination with her inability to understand the contexts and questions that Buchanan and public choice theory were grappling with, her book became a massive exercise in confirmation bias resulting in misread and misinterpreted sources and factual claims unsupported by those sources. She had her story about libertarianism and, absent the intellectual tools to understand what she was reading, she interpreted her sources in ways that confirmed all of those prejudices. The result is a book that gets almost everything wrong, from the most basic of facts to the highest of theory.

Her factual and interpretive errors have been very well documented in a number of blog posts and reviews by classical liberal scholars such as Phil Magness, David Bernstein, Jonathan Adler, Russ Roberts, David Henderson, Art Carden, Don Boudreaux, Brian Doherty, J. C. Bradbury, and me, as well as several critical reviews by nonlibertarian historians and political scientists. The most comprehensive review has been from her Duke political science colleague Michael Munger (forthcoming), who is a past president of the Public Choice Society. As one example of her careless factual errors, Bernstein (2017) observes that she credits a 1985 speech by Ed Meese as being the inspiration for the creation of the Federalist Society (p. 189). Unfortunately, the Federalist Society was founded in 1982 and the speech has nothing to do with the Society. Bernstein also notes several factual errors about the George Mason University Law School. Several commentators have noted her claim that the Liberty Fund is "Koch-backed," when in fact all its funding comes from its founder, Pierre Goodrich. Russ Roberts (2017) and I (Horwitz 2017) both found places where MacLean's interpretation of

her sources is precisely the opposite of what they actually say, and we show how her creative use of quotation marks creates that result. Doherty (2017) shows that she completely misread a Charles Koch speech she claims was his endorsement of elements of Buchanan's ideas when it was, in fact, about Koch's own "market-based management" and ideas he adopted from Michael Polanyi. Bradbury (2017) carefully analyzes MacLean's treatment of a 1983 Buchanan article on Social Security that appeared in this journal and finds that she does not understand Buchanan's argument and selectively quotes to severely distort his meaning.

MacLean also claims that public choice theory involves no empirical work (p. 42), and that no empirical support exists for it, ignoring the vast quantity of empirical research in its flagship journal *Public Choice*, including in the very first issue. The irony here is that she employs zero quantitative or statistical data to back up any of the empirical claims she makes about the failures of free markets or the influence of ideas (e.g., the very questionable claim that James Buchanan was highly influential in bringing people to libertarianism). Her reference to Charles Dickens's novels, which are fiction, as a way to "grasp the reality of unregulated capitalism" is both an abuse of literature and nothing resembling empirical evidence.

And, most important, Phil Magness (2017a, 2017b) has pointed out that neither John Calhoun's nor Donald Davidson's name appears anywhere in the index of the 20 volumes of Buchanan's collected works. There is one mention of the Southern Agrarians in his autobiography, but not as an intellectual influence. Buchanan names his intellectual influences in several places in his work, and neither of those names appears in those lists. It is stunning to anyone reasonably familiar with Buchanan's work to read MacLean's passages in which she gives prominence to those thinkers. There is simply no evidence whatsoever to support that intellectual influence. They appear to be figments of her imagination. Finally, nearly absent from the book is Buchanan's teacher at Chicago, Frank Knight. He appears briefly as she discusses Buchanan's Chicago experience, but she has no discussion of his role as a deep influence on a number of aspects of Buchanan's thought. This is an enormous omission on her part, as anyone even casually familiar with Buchanan's work would recognize.

This catalogue of errors brings us to the central mystery of this book: MacLean is a well-regarded historian with a named chair at one of the top universities in the United States, so how is it possible

that she got so much wrong here? One hypothesis is that of pure mendacity: she hates libertarian ideas so much, and thinks that the influence of the Kochs is so nefarious, that she was willing to simply provide whatever evidence she could fabricate to bring them down. She thinks she is fighting back the forces of evil and is justified in doing so by whatever means necessary. Anyone familiar with Buchanan's work and libertarian ideas more broadly cannot rule this motive out after reading the book. Rather than adopt MacLean's preferred strategy of reading other authors in the worst light possible, however, I want to offer a different hypothesis.

It is clear throughout the book that MacLean simply does not have the intellectual background and tools to understand the ideas she is dealing with. She is not familiar enough with the economic and political theory, nor the social science more broadly, to understand the contexts and questions that motivate Buchanan's research and that of public choice theorists in general. Buchanan's intellectual context is not the South, either in the form of the Southern Agrarians (Buchanan's 1992 autobiography *Better than Plowing*, despite MacLean's claim to the contrary, makes clear his lack of a romantic view of farm life) or the slavery-defending Calhoun. The real context, made clear with a quick look at any of his major works, was figuring out how people choose in groups, and especially how choices can be made through the political process in ways that ensure that all voices get heard. Central to Buchanan's thought was the importance of consent in politics. One way to view his project is that it was an attempt to explain how nonmarket decisionmaking processes might also be made "mutually beneficial" in the way that market exchanges are. That is, how can we make it so that decisions made outside the market are ones that benefit all parties? These are the questions that lead him to grapple with Hobbes first and foremost, because one of Buchanan's concerns is how to enable both full participation and consent in political decisionmaking processes while still ensuring respect for the rights of individuals. His concern with consent and participation also explains the importance of John Rawls to his later work, as Rawls, like Buchanan, is concerned with how we justify collective decisionmaking and how people might consent to a set of governing rules.

Those questions arose out of Buchanan's earlier work on the fiscal elements of the state, where Buchanan's initial exposure to the work of the Swedish economist Knut Wicksell was, according to him,

formative to his development of public choice. A similar story can be told about the Italian public finance economists whom he constantly lists as an influence. MacLean briefly notes the importance of Wicksell and the Italians in a discussion of Buchanan's own account of his work. However, she spends only two paragraphs on it, dismissing it with a "This in fact may be true" (p. 42), and then notes the irony of his relying on Wicksell because Wicksell was a man of the left. That fact throws a rather inconvenient truth into her narrative: rather than explore the intellectually fascinating and complex question of why a supposed man of the right would find intellectual influence from a man of the left, she can see the world only in terms of overly simplistic partisan politics. In the very next paragraph she tries to tie his views on public finance to "the southern-state 'Redeemer' governments that had put an end to Reconstruction." She then adds, "although Buchanan did not comment on the similarity" (p. 43). Well, perhaps that's because, even if such a similarity exists, the relevant context for Buchanan was Wicksell and the Italians, as he consistently indicated throughout his work.

Good historians don't have to take the statements of historical figures at face value, but finding a meaning other than the plain words of the subject requires actual evidence from other sources or statements of the actors. Otherwise, one ends up with pages of confirmation bias. Unfortunately, a lack of such evidence is not a barrier to MacLean's continued insistence that what Buchanan and others are really talking about is something very different than their plain words, especially with respect to race. Such evidence-free interpretations violate what should be the canons of sound historical scholarship, but are plausibly explained by her assumption that her subjects have socially destructive beliefs in combination with her inability to understand the ideas they are exploring.

She makes a similar move in her discussion of the article on education vouchers, citing the fact that Nutter and Buchanan didn't talk explicitly about race or *Brown* as evidence that the article is a racial dog-whistle. Here MacLean discovers one advantage of uncovering a purported "stealth plan" (despite the fact that all of this material is very publicly available): the absence of evidence can be cited as evidence for just how stealthy the plan is. Like conspiracy theories more generally, MacLean's argument is, in many places, unfalsifiable. There is no imaginable set of evidence that would, in her mind, count against it. She certainly does not articulate what such evidence would

look like, which would have been the intellectually responsible move. It also might not be the best of strategies on MacLean's part to accuse defenders of free markets of stealthy racism while offering explicit and approving citations to Richard T. Ely and John Maynard Keynes. Ely and Keynes were both active eugenicists, and Ely in particular made his views about the inferiority of some races a key element of his case for the necessity of government intervention into markets (see Leonard 2016).

But MacLean's intellectual misunderstanding of the relevant ideas extends beyond their historical context to the ideas themselves. She cannot understand that the article on education vouchers was nothing radical, nor was it "Mont Pelerin Society economics." It was a standard issue mainstream analysis of the benefits of competition using basic ideas from the economic way of thinking. They might have been wrong that such a system would be better for all, but actually engaging the argument would require abilities that MacLean does not appear to possess.

In addition, she is unable to correctly explain the idea of concentrated benefits and diffuse costs in the context of public choice's explanation of the growth of government. Her discussion of Buchanan's Southern Economic Association presidential address "What Should Economists Do?" shows that she does not understand what economists mean by "allocation problems"—it's not about "resource distribution" and inequality. She gets the message of Buchanan's "The Samaritan's Dilemma" article completely backward. She also completely misreads Buchanan and Tullock's (1962) discussion in *The Calculus of Consent* about the tradeoff between external costs and decisionmaking costs in the context of the role of the Constitution in 1900 and 1960, claiming they argue the exact opposite of what they do, as the next sentence after her truncated quote shows (p. 80). She claims (p. 290, fn. 42) that Tyler Cowen's (1998) *In Praise of Commercial Culture* "elaborated on old shibboleths" from Ludwig von Mises's (1956) *The Anti-Capitalistic Mentality*, which only demonstrates that she either did not read or did not understand either book, as their overlap is minimal and their major claims are completely orthogonal to each other. At some point, her consistent pattern of misusing and misreading her sources, and always in the same way, has to lead even a sympathetic reader to wonder whether there is something more at work here than confirmation bias resulting from having exceeded her intellectual limits.

She also repeatedly takes the positive claims of economists and reads them as normative ones, especially in her discussion of Tyler Cowen's (2013) *Average is Over* and also in several discussions of Buchanan's work. She also does not appear to understand the role of analytical assumptions, even when clearly indicated as such, in doing social science. The ability to distinguish among positive statements, normative statements, and analytical assumptions is central to understanding work in the social sciences and philosophy, especially political economy. Her inability to do so, and her self-admitted lack of knowledge of economics, are clear on page after page of the book.

It is understandable that a historian might lack the needed economic knowledge to tackle a project like this one. Absent an economist co-author, what could one do? If one is concerned with getting the ideas right, the responsible path would be to find people who know a lot about Buchanan and public choice theory and take the opportunity both to learn from them and to use them as a check on your claims in the book. In MacLean's case, just such an opportunity was available to her with nothing more than a walk across the Duke campus. In Duke's political science department are the current and two past presidents of the Public Choice Society, one of whom (Geoffrey Brennan) was a co-author of Buchanan's on multiple major works. MacLean had absolutely no contact with any of them, nor did she contact any of the faculty at George Mason University's economics department, where many public choice ideas were further developed and where many of the later events of the book unfold. Ignorance of another discipline is forgivable. Writing a "history" book about a major thinker and willfully refusing to engage living persons who know his ideas inside and out as a way to ensure the accuracy of your scholarship is an unforgivable scholarly transgression. Of all of the many such transgressions MacLean commits in this book, this one does the most damage to any claim that she was interested in the truth as opposed to writing a pure ideological tract.

The intellectual error that is most frustrating, however, is her understanding of the relationship between public choice theory and questions of power and privilege. As Munger (forthcoming) points out in his review, MacLean is an unreconstructed majoritarian. She genuinely believes—at least in this book—that the majority should always be able to enact its preferences and that constitutional constraints on majority rule are ways of protecting the power and privilege of wealthy white males. That's why she chose "democracy

in chains” as her title and why she believes public choice theory is a tool of the powerful elite. As Munger also observes, normally such a view would be seen as a strawman because no serious political scientist believes it, not to mention that no democracy in the world lacks constitutional constraints on majorities. For some people, however, what is “normally” true becomes inconvenient when it comes to exposing “Koch-backed” conspiracies. In addition, one must presume that a progressive like MacLean thinks *Loving v. Virginia*, *Roe v. Wade*, and *Obergefell v. Hodges*, not to mention *Brown*, were all decided correctly, even though all of them put local democracies in chains and, in some cases, thwarted the expressed preferences of a majority of Americans.

For public choice theory, constitutions protect the citizens from two forms of tyranny: tyrannies of the majority when they wish to violate rights and tyrannies of coalitions of minorities who wish to use the state to redirect resources to themselves by taking advantage of the logic of concentrated benefits and diffuse costs. Buchanan’s political vision is, according to Karen Horn (2011), a world without discrimination and domination. Constitutional constraints, for Buchanan, are a central way of ensuring that democracy actually protects rights by preventing the powerful from exploiting the powerless and that political decisions involve the consent of all. Constitutional constraints make democracy work for all citizens—they do not put it in chains.

When MacLean argues that public choice is a tool to protect privilege, she gets it exactly backward. Public choice shows us how those with the power to influence the political process can use that power to create and protect privilege for themselves *at the expense of the rest of the citizenry*. Public choice’s analysis of rent seeking and politics as exchange enables us to strip off the mask of bogus “public-interest” explanations and to realize that a great deal of political activity is the socially destructive exploitation of the least well-off. To borrow a bit from the left’s rhetoric: public choice is better seen as a tool of resistance to oligarchy than a defense of it.

*Washington Post* criminal justice columnist Radley Balko’s (2017) work in exposing the abuses and discrimination in the criminal justice system beautifully shows the way in which public choice theory can be deployed to critique the powerful in the name of the powerless. Viewing political actors as just as self-interested as market actors and understanding the logic of concentrated benefits and dispersed costs

help to explain why police unions don't serve the needs of either the police or the communities they supposedly protect. They also explain why the police are more interested in arresting low-level drug dealers, who are more likely to be nonwhite, than dealing with other forms of crime. The complications that MacLean ignores in her single-minded praise of democracy are demonstrated when we think about police violence. As Balko points out, when large majorities wrongly believe that crime is rising, they vote for people and policies that continue to violate our civil liberties. They empower police to invade the homes of innocents and generally treat Americans as guilty until proven innocent. Public choice helps us understand why putting majorities in metaphorical chains can help stop "democracy" from putting innocent human beings in real ones.

Public choice theory also sheds light on why corporate welfare remains so common even as so many see it as a problem. It can explain the growth of the military-industrial complex while challenging public-interest explanations of that growth. Public choice theorists tell similar stories about immigration policy and a number of other issues that concern modern progressives. The battles over Uber and Lyft can be seen as the powerful government-licensed taxi companies fighting to protect their monopoly privileges and profits against less powerful upstart entrepreneurs better meeting the wants of the public. These are all excellent illustrations of how public choice theory can explain frustrating political outcomes, and why the theory is useful in understanding how the powerful can victimize the weak. Public choice theory, properly understood, is a tool of critical thinking that enables us to deconstruct political rhetoric to see the underlying forces at work that are allowing those with wealth and access to power to use politics to acquire and protect their privileges and profits.

Unfortunately, public choice scholars and libertarian thinkers more generally have perhaps not done enough to stress this aspect of the tools of classical liberal social analysis. Too often we have left ourselves open to MacLean's misinterpretation by appearing to side with those with power, including elements of the long-standing fusionist project of seeing libertarianism as part of "the right." The last decade or so has seen much more analysis of how classical liberal ideas can improve the lives of the least well off, for example in the attempts to blend Rawls and Hayek and the bleeding heart libertarian movement more broadly, or in the growth of work on race and gender and the

ways that the state harms minority groups. Public choice theory has played a role in that work, but there could still be even more emphasis on how the theory helps us understand how political rhetoric does not align with political reality and how those with access to political power benefit from that misalignment. There is no doubt that MacLean has grossly mischaracterized the public choice and libertarian projects in this book, but those of us who have been mischaracterized will not do ourselves any good if we refuse to look in the mirror and ask whether there is anything we can do differently and better to prevent it from happening again.

One of the really unfortunate aspects of this book is that it is a missed opportunity for people in the humanities to get a better understanding of what public choice theory is actually about and why it might be helpful to the work that they do. Public choice could be a really valuable addition to the toolkit of humanities scholars. For historians, the uses seem obvious. Public choice is an analytical framework that need not generate any normative conclusions. Historians could use it to explain the machinations of the powerful without having to endorse any particular political views. Public choice's focus on the pursuit of self-interest in politics as well as in private life enables historians to offer new interpretations of historical events. Such applications of public choice theory would make for fascinating work in the hands of historians, but the worry is that MacLean's book may have poisoned that well for the foreseeable future. If any time historians cite Buchanan or make use of public choice theory, the reaction is "isn't that the racist theory that hates democracy?" then a huge opportunity for generating new knowledge will have been lost.

In many of the same ways, public choice theory can provide a new and innovative framework through which to read works of literature and other artistic products. In a recent article, Sarah Skwire (2017) sketches out ways in which public choice might offer us enlightening interpretations of Shakespeare. One can imagine other literary scholars approaching other classic works with public choice's framework for understanding political interaction, especially its ability to get behind the rhetoric of public interest and see the private maneuvering at play. If MacLean's book gets traction in the humanities at large, the damage to public choice theory might be too much to allow this sort of work to happen. And that would be a huge loss for our understanding of literary texts. MacLean's inability to understand what public choice theory is really about has not just created the immediate harm of a book that

has problems from start to finish. It may well also create external costs for people in her own and neighboring disciplines who might well have done high-quality and interesting work with the theory, had their introduction to it been something other than MacLean's book.

Having had our work so deeply misunderstood and maligned, including our commitment to improving the lives of all citizens, it's understandable how strongly so many public choice scholars, and libertarian academics more broadly, have reacted to the book. In turn, MacLean has accused those scholars of a "coordinated attack," and, at one point, claimed that "Koch operatives" were trying to destroy her reputation and silence her. The truth is simpler: when you attack a well-respected and beloved scholar and the ideas that many other living scholars take very seriously, they aren't going to roll over and play dead. The pushback against MacLean's book has included very careful documentation of her errors and misrepresentations as summarized above. Her response has been not to address the particular criticisms but to, instead, maintain the rhetoric of being unfairly "under attack" by the forces of the right. Her unwillingness to respond to the chapter-and-verse criticisms of her misinterpretations, misuse of sources, and unsupported claims is further evidence that concern with the truth is not her primary objective.

Despite the numerous flaws that cause its story to completely crumble, *Democracy in Chains* does ask some of the right questions that could have served as the basis for a productive dialogue between the Nancy MacLeans of the world and the libertarian scholars who have rushed to the defense of Buchanan and public choice theory. In the end, what her book has revealed is that, for many on the left, there is simply no interest in engaging libertarian scholars in a serious, good-faith intellectual conversation. MacLean's own responses and the unwillingness of so many other progressive historians and scholars to call her out on her obvious scholarly transgressions are very sad outcomes. A serious attempt to engage public choice theory by progressive scholars would have been welcome, as would a subsequent exchange that involved more than progressives taking legitimate scholarly criticisms as coordinated attacks and then shouting "Koch!" as if that were an answer to said criticisms. Such a conversation will have to await the publication of a different book. Serious scholars from all perspectives can only hope that such a book is committed to the truth, honest scholarship, and good-faith engagement with criticism in all the ways that MacLean's book is not.

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## **The Big Stick: The Limits of Soft Power and the Necessity of Military Force**

Eliot A. Cohen

New York: Basic Books, 2017, 304 pp.

In the spring and early summer of 2017, Republicans and Democrats alike reacted angrily when President Donald Trump called for deep cuts in nearly every government department in order to offset large increases planned for the Pentagon and the Department of Homeland Security. The State Department took a particularly big hit—a nearly 30 percent reduction from the year before. When Secretary of State Rex Tillerson appeared before the Senate Foreign Relations committee in June, Chairman Bob Corker explained that he had stopped considering the administration’s budget request after five minutes. “This is a total waste of time,”

<sup>1</sup>I thank David Bernstein, Art Carden, Lynne Kiesling, Phil Magness, and Sarah Skwire for very helpful comments on an earlier draft. Although I have received money from Koch-affiliated organizations in the past, I received no compensation for this review.

Corker concluded. Sen. John McCain agreed. Trump's budget was "dead on arrival."

Such criticisms appear to have had no effect on Donald Trump's determination to expand U.S. military power. It was as though he had been paying attention only to part of his high school history lecture on Teddy Roosevelt's presidency: he heard the "big stick" part of TR's quotable axiom, but missed the "speak softly" aspect. Although the U.S. military stick is already big—and certainly far more intimidating than anything Teddy Roosevelt could have ever imagined—it isn't big enough as far as Donald Trump is concerned. The headline of an early assessment of Donald Trump's foreign policy vision succinctly summarized how his approach would differ from his predecessor's: "Trump to focus on 'peace through strength' over Obama's 'soft power' approach."

Many serious national security professionals agree that this is precisely what is needed. For example, in his book, *The Big Stick: The Limits of Soft Power & the Necessity of Military Force*, Eliot Cohen explains "America needs a substantially larger military than the one it now has." And we must be willing to use it. Cohen, the Robert E. Osgood Professor of Strategic Studies at Johns Hopkins University's School of Advanced International Studies, concedes that the "magnetism of the United States has real political consequences," but "soft power . . . also has its limits." As such, we must rely much more heavily on hard power.

Despite the fact that Americans have grown weary from a decade and a half of protracted conflict, Cohen explains that the nation must remain ready to wage—not merely deter—more wars. He is particularly dismissive of past attempts to limit the use of force. "What is needed," he says, "is a prudent set of reminders to guide American leaders who have concluded, however reluctantly, that violence is the least bad policy choice."

It is almost as though Donald Trump read Cohen's book. Trump did, after all, promise to "bomb the s— out of ISIS," and bragged about authorizing "my military" to drop the Massive Ordnance Air Blast (aka the Mother of All Bombs) on a target in Afghanistan. Donald Trump is many things, but no one can doubt his willingness to wield hard power.

Trump has even endorsed the use of violence on a massive scale, violence that has, and will, inevitably result in the killing of many innocent people. During the course of the campaign, for example,

Trump mused openly about the use of nuclear weapons. Similarly, Cohen believes that nuclear weapons are useful for more than deterrence. “The actual use of nuclear weapons by the United States is not a last resort,” Cohen writes.

Such sentiments must appeal to Trump’s belief that nuclear weapons are a critical tool in the hard power toolbox. For example, in March 2016, Bloomberg News’s Mark Halperin asked the candidate if he would rule out using nuclear weapons against ISIS. Trump replied, “I’m never going to rule anything out.” On another occasion, Trump suggested that it would be appropriate to “fight back with a nuke” if ISIS carried out a terrorist attack. When MSNBC’s Chris Matthews pointed out that Trump’s musings about nuclear first-use might unsettle decades of nuclear nonproliferation policy, and could even encourage U.S. allies like Japan to reconsider their decision to forgo such weapons, Trump dismissed such concerns: “Then why are we making them? Why do we make them?”

And although Trump has occasionally spoken of the need to limit the spread of nuclear weapons, he, like Cohen, is a harsh critic of the deal that constrains Iran’s ability to develop such weapons for at least 10 years, because both believe that it didn’t go far enough. One suspects that their agreement on Iran goes well beyond the nuclear deal. Cohen never misses an opportunity to cast Iran in the worst possible light. Trump and his senior advisors do the same. In *The Big Stick*, for example, Cohen observes that Iran fought an eight-year-long war with Iraq, without noting that Iraq was the aggressor. He writes of Iran’s dreadful human rights record, but has nothing to say about equally reprehensible violations perpetrated by U.S. ally Saudi Arabia. Cohen, like Trump, seems willing to excuse or simply ignore Saudi behavior.

This also applies to the War on Terror. Cohen never mentions Saudi Arabia’s long-standing support for Islamic extremism, but agrees with Trump and his key advisors, such as Steve Bannon, that we are engaged in a war with Islamic extremists. Our failures in the war, to date, Cohen explains, stem chiefly from “Washington’s reluctance to identify the enemy correctly to begin with.” And achieving success will require our leaders to “shake off inhibitions and misconceptions and speak the truth about this war: that it will go on for decades, if not most likely generations.”

Donald Trump has done precisely what Cohen suggested. America faces, Trump explained in November 2015, a “far greater

threat than the people of our country understand.” “We cannot let this evil continue,” Trump said during a campaign event in September 2016. “We will not defeat it with closed eyes or silent voices,” he added. “Anyone who cannot name our enemy is not fit to lead this country.”

But while Trump often says things that seem drawn from *The Big Stick*, Eliot Cohen *really* doesn’t like Donald Trump. Indeed, in early March 2016, the bow-tied academic organized an open letter signed by over 120 Republican foreign policy professionals who were “united in [their] opposition to a Donald Trump presidency.” The signatories called Trump’s support for the use of torture “inexcusable.” They cast “his advocacy for aggressively waging trade wars” as “a recipe for economic disaster in a globally connected world.” They scorned Trump’s “hateful, anti-Muslim rhetoric,” which alienated partners around the world and endangered “the safety and constitutionally guaranteed freedoms of American Muslims.” They saw his enthusiasm for a border wall with Mexico to control illegal immigration as based on “an utter misreading of, and contempt for, our southern neighbor.”

The letter concluded:

Mr. Trump’s own statements lead us to conclude that as president, he would use the authority of his office to act in ways that make America less safe, and which would diminish our standing in the world. Furthermore, his expansive view of how presidential power should be wielded against his detractors poses a distinct threat to civil liberty in the United States . . . . We commit ourselves to working energetically to prevent the election of someone so utterly unfitted to the office.

They failed. And now they watch from the sidelines as Trump attempts to secure more money for the Pentagon, an initiative that Cohen strongly supports. Indeed, many traditional Republican hawks find Trump’s defense spending increases to be insufficient. “With a world on fire,” Senator McCain said, “we can and must do better.” House Armed Services Committee Chairman Mac Thornberry agreed: the two committee chairs separately proposed \$640 billion for the base defense budget in fiscal year 2018, \$37 billion more than Trump’s request.

For Cohen, that is merely a start. He calls for “avoiding the phony precision of projected requirements that have long bedeviled defense planning.” In a truly bizarre passage, he scorns the very concept of grand strategy as “a soothing concept” that is “not merely illusory, for the most part, but dangerous.”

Though he admits that “strategy is the art of matching military means to political ends,” Cohen opts instead for “setting standards for the size of the defense budget that will appear to be, and in some sense are, arbitrary.” According to Cohen, “setting defense spending as a percentage of gross domestic product (GDP) would be a major advance.” What “arbitrary” level seems reasonable to Cohen? He doesn’t spell it out precisely but observes that “a new, sustained target of 4 percent would hardly break the bank.”

Perhaps not, but under the Congressional Budget Office’s GDP projections from January 2017, Cohen’s 4 percent would amount to nearly \$800 billion in 2018. That is over \$200 billion more than was spent in 2017. Americans spend tens of billions more to pay for America’s ongoing wars, wars that Cohen supports. Although *The Big Stick* appears to be a full-throated defense of military primacy, Cohen never tells the reader what other spending to cut, and what taxes to increase, in order to fund his massive military spending increases.

If the big stick that Trump inherited gets even bigger, Cohen and others who share his enthusiasm for a larger military used more often may quietly cheer that outcome. At the same time, however, they must desperately hope that the man in possession of such incredible power doesn’t choose to wield it in a reckless manner. And this speaks to the most serious flaw in Cohen’s enthusiasm for a much larger military, and more frequent wars.

The U.S. Constitution strictly limited the nation’s military power and compelled presidents to go to Congress whenever they desired to initiate wars of choice. Under such a system, Americans could actually have a national debate about what type of military capability was required to keep us safe. But that isn’t the debate that the hawks want us to have. If some military power is good, more is obviously better. And if Donald Trump as president can’t convince Eliot Cohen to rethink the wisdom of leaving a big stick in the hands of an unfettered executive, nothing can.

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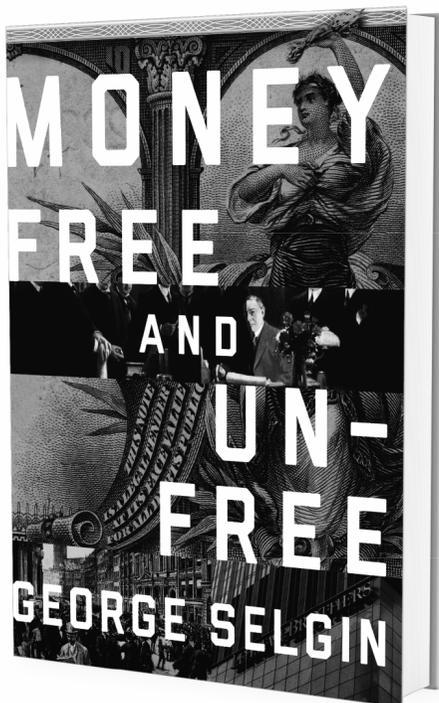
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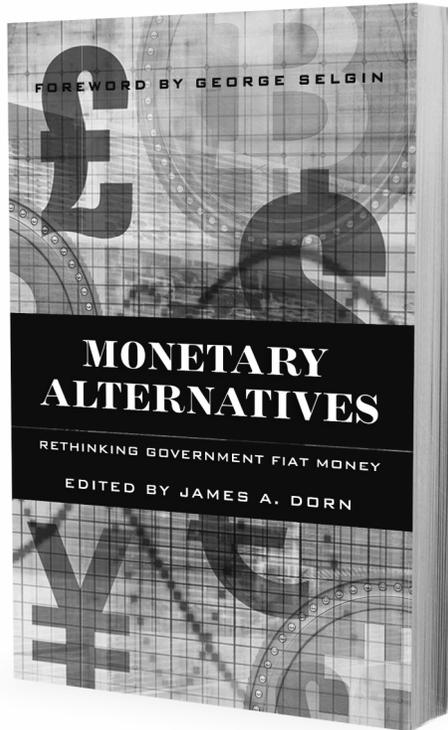
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