



MERAGE FOUNDATION  
FOR THE  
AMERICAN DREAM

National Advisory Board

Dr. Henry Cisneros  
Dr. Phillip Clay  
Ambassador Jeffrey Davidow  
Ambassador Stuart Eizenstat  
Peter Goldmark  
Dr. David Ho  
Governor Madeleine Kunin  
David Lipton  
Afsaneh Mashayekhi-Beschloss  
Jenny Ming  
Hamid Moghadam  
Sharmin Mossavar-Rahmani  
Safi Quereshey  
Jack Rosenthal  
Dr. Donna Shalala  
Chris Whittle

June 29, 2006

Dear Colleague:

I am pleased to send you the Foundation's fifth Occasional Paper. We hope that the series has helped to increase understanding of the immigration issues facing the U.S. Previous papers have focused on immigration and crime, immigration and social security, immigration and public opinion, the fiscal and economic impact of immigration. This paper, authored for the Foundation by Stuart Anderson, Executive Director of the National Foundation for American Policy and former Executive Associate Commissioner for Policy and Planning at the Immigration and Naturalization Service under President George W. Bush, provides a thoughtful view of the impact of employment on recent immigration to the U.S.

We hope you read the paper and discuss it with your friends and colleagues.

Paul Merage  
President



MERAGE FOUNDATION  
FOR THE  
AMERICAN DREAM

National Advisory Board

Dr. Henry Cisneros  
Dr. Phillip Clay  
Ambassador Jeffrey Davidow  
Ambassador Stuart Eizenstat  
Peter Goldmark  
Dr. David Ho  
Governor Madeleine Kunin  
David Lipton  
Afsaneh Mashayekhi-Beschloss  
Jenny Ming  
Hamid Moghadam  
Sharrin Mossavar-Rahmani  
Safi Quereshey  
Jack Rosenthal  
Dr. Donna Shalala  
Chris Whittle

June 29, 2006

Dear Colleague:

The paper by Stuart Anderson reviews recent studies and the views of experts concerning the effect recent immigrants have had on jobs and income, including on native born citizens in the high tech sector and among high school drop outs. It describes the conflicting views of respected economists. It concludes that most scholars, contrary to recent stories in the media, believe immigrants have had a relatively minor impact on drop outs and low income minorities. Mr. Anderson's paper—again, based on recent published analyses—indicates that immigration likely has had a net positive overall impact on jobs and the economy.

The Foundation welcomes your response to the paper ([mkaplan@meragefoundations.com](mailto:mkaplan@meragefoundations.com)).

Sincerely,

Marshall Kaplan  
Executive Director

June 2006

## **The Debate over Immigration's Impact on U.S. Workers and the Economy**

**Stuart Anderson, Executive Director, National Foundation for American Policy**

### **Executive Summary**

The debate over the impact of immigration on U.S. workers and the American economy has intensified in recent years. Economists and policy analysts using competing methodologies have come to different conclusions. The paper finds that the benefits of international graduate students and skilled immigrants to the U.S. economy are often overlooked in the broader discussion of immigration. Moreover, it finds that immigrants do not exert a significant negative impact on natives, including native workers with lower levels of education. Funding for the study was received from the Merage Foundation for the American Dream, based in Newport Beach, CA, which requested the study to be part of its occasional paper series on immigration.

Among the findings of this paper:

- “Foreign students, skilled immigrants, and doctorates in science and engineering play a major role in driving scientific innovation in the United States,” according to a study by Keith Maskus, an economist at the University of Colorado, Aaditya Mattoo, Lead Economist at the World Bank’s Development Economics Group, and Granaraj Chellaraj, a Consultant to the World Bank. Their research found that for every 100 international students who receive science or engineering Ph.D.’s from American universities, the nation gains 62 future patent applications.
- There is little evidence that native professionals are harmed by the entry of H-1B foreign-born professionals. Examining the information technology sector, a study by Madeline Zavodny, a research economist at the Federal Reserve Bank of Atlanta, found, “H-1B workers . . . do not appear to depress contemporaneous earnings growth.” Foreign-born professionals do not appear to present unfair competition by working for substantially lower wages than their native counterparts in science and engineering fields.
- Harvard University economist George Borjas, the most influential economist arguing that immigrants have a negative impact on U.S. workers, has presented research finding native-born high school dropouts may have seen their wages drop by as much as 8 percent due to immigration between 1980 and 2000.

- Borjas has attracted critics of his approach to analyzing immigration. Among the most notable critics is University of California, Berkeley economist David Card, who writes, “Overall, evidence that immigrants have harmed the opportunities of less educated natives is scant.” George Mason University economist Tyler Cowen and analyst Daniel Rothschild conclude, “Most economists have sided with Card.”

- In the past year, many economists and commentators have cited research performed by Giovanni Peri, Department of Economics, University of California, Davis. Peri’s analysis found that immigration increased the real wages of U.S. native-born workers as a whole by approximately 1 percent between 1990 and 2000, compared to the Borjas and Katz study that found a 1.3 percent decline. And rather than the 7 to 8 percent decline in real wages for native high school dropouts found in the Borjas-Katz research, Peri’s analysis shows only a 1.2 percent decline for such workers between 1990 and 2000.

The immigration issue remains complex, as evidenced by how results differ on its impact depending on the chosen methodology. This paper finds that immigrants increase specialization in the economy, enhance the nation’s productive capacity, and aid innovation in the United States. The best evidence suggests that immigrants improve their own lot and that of their children by coming to America and exert little adverse impact on natives.

## **Introduction**

The debate over the impact of immigration on U.S. workers and the American economy has intensified in recent years. Economists and policy analysts with different ideologies have come to different conclusions. In many ways, examining immigration solely for its impact on native workers, particularly the impact on a relatively small segment of such workers, fails to account for the larger economic perspective of the nation. For example, immigrants are crucial to labor force growth in the United States, which plays a role in overall economic growth. “Growth in the native population has been in decline since the 1970s, so immigrant workers have filled in, providing half of the growth in the U.S. labor force since 1990.”<sup>1</sup>

William Beach, director of the Center for Data Analysis at the Heritage Foundation, and James Sherk, an analyst at the Center, note that the importance of immigrants, in their view, is not simply because they increase the number of workers but because of the "deepening in the division of labor." As Beach and Sherk explain: “New workers (whether straight out of school or straight from across the border) enable established workers to do new things and give businesses opportunities to create new value for customers. To paraphrase [economist] Adam Smith, new workers encourage greater specialization by existing workers because the new workers take the lower-paying jobs. Then a more specialized work force provides opportunities for businesses to develop new production processes and better products.”

Beach and Sherk compare a large city that can employ many medical specialists to a small town that can only support a general practitioner. “No matter how well the town's doctor could do if he focused just on treating cancer victims, the town's economy cannot support so narrowly tailored an expert. The city, however, has hospitals staffed with specialists in virtually every field, each of whom can do a better job than a GP at treating the diseases they have focused their energies on fighting. Immigration works in the same way,” write Beach and Sherk. “By expanding the size of the labor force, immigration allows American workers to increase their degree of specialization and become more productive, earning higher wages. That same specialization also permits businesses to apply their capital in new and more productive ways, expanding economic growth.”<sup>2</sup>

## High Skill Immigration

While much of the debate in the past two years has centered on illegal immigration, there are also critics of legal immigration, including the entry of highly skilled foreign-born scientists and engineers.

Much of the discussion over high skill immigrants has focused on H-1B visa holders and the wages they receive. The primary way skilled foreign nationals are hired to work in the United States is through H-1B temporary visas (generally limited to 6 years), since insufficient quotas and processing delays make it virtually impossible to hire someone directly on a green card (permanent residence). In many cases the individual may first have graduated from a U.S. university before being hired by employer in H-1B status.

In 9 of the past 11 years, employers have used up the entire quota of H-1B visas prior to the end of the fiscal year. Before 1990, Congress placed no numerical limitation on the number of skilled foreign nationals employers could hire in H-1 temporary status. In the Immigration Act of 1990, Congress chose an annual cap of 65,000 and introduced several requirements in establishing a new H-1B category. Congress has changed this limit at least three times in the past 8 years, though the number has reverted back to the original 65,000. In FY 2005, FY 2006, and, most recently, FY 2007, the supply of visas was exhausted before the start of the fiscal year. Even the recently added 20,000 exemption from the H-1B cap for those who graduated with an advanced degree from a U.S. university was exhausted by January 2006 and employers also expect this exemption to be used up before the end of FY 2007.

An alleged negative impact on natives is generally cited as a reason why Congress has not raised the H-1B cap in recent years. But there is little evidence that native information technology (IT) workers and other native professionals, including scientists and engineers, are harmed by the entry of H-1B professionals.

A study by Madeline Zavodny, a research economist at the Federal Reserve Bank of Atlanta, examined the flow of Labor Condition Applications (LCAs) for information technology professionals. Employers file such applications when petitioning for a skilled worker on an H-1B visa.<sup>3</sup> Zavodny found, "H-1B workers . . . do not appear to depress contemporaneous earnings growth." Since the period examined by Zavodny showed a higher concentration of H-1B visa holders entering a field than would be expected in other fields, it is reasonable to conclude Zavodny's findings have broader application.

As to unemployment, the study concluded that the entry of H-1B computer programmers "do not appear to have an adverse impact on contemporaneous unemployment rates." However, there is some degree of ambiguity on employment, since the study also noted that some results "do suggest a positive relationship between the number of LCA [Labor Condition] applications and the unemployment rate a year later." But Zavodny concluded: "None of the results suggest that an influx of H-1Bs, as proxied by Labor Condition Applications filed relative to total IT employment, lower

contemporaneous average earnings. Indeed, many of the results indicate a positive, statistically significant relationship.” This would mean H-1B employment is actually associated with better job conditions for natives, according to the study, which could be because H-1B professionals are complementary to native professionals.<sup>4</sup>

There is little evidence foreign-born professionals in information technology, engineering, and science fields present unfair competition by working for substantially lower wages than their native counterparts. Under the law, employers hiring H-1B professionals must pay the greater of the prevailing wage or “the actual wage level paid by the employer to all other individuals with similar experience and qualifications for the specific employment in question.” While H-1B visas are temporary visas, employers sponsoring individuals for permanent residence through an employment-based green card must also pay employees at least as much as comparable Americans.

Research by Paul E. Harrington, associate director of the Center for Labor Market Studies at Northeastern University, shows foreign-born and native professionals earn virtually identical salaries in math and science fields. This is further evidence that foreign-born do not work for far less as a way of undercutting wages, even though it may be reasonable for an employer to pay less to someone with weaker language skills. Harrington found salaries in computer or math sciences were actually higher for the foreign-born among bachelor degree holders and doctoral degree holders and the same for recipients of master’s degrees. He found similar salaries for natives and foreign-born at the bachelors, master’s, and PhD levels in life sciences, as well as at the doctoral level in engineering, and a greater edge for natives at the bachelor and master’s level for engineering.<sup>5</sup>

It is easy to miss the broader picture if one concentrates solely on the more narrow issue of the impact of immigration on small segments of the U.S. native-born workforce. In a paper for the Washington, D.C.-based Immigration Policy Center, economist Giovanni Peri, explains, “The United States has the enormous international advantage of being able to attract talent in science, technology, and engineering from all over the world to its most prestigious institutions. . . .The country is certainly better off by having the whole world as a potential supplier of highly talented individuals rather than only the native-born.”<sup>6</sup>

Peri describes why his research shows a gain from immigration to native-born Americans with a college degree:

The relatively large positive effect of immigrants on the wages of native-born workers with a college degree or more is driven by the fact that creative, innovative, and complex professions benefit particularly from the complementarities brought by foreign-born scientists, engineers, and other highly skilled workers. A team of engineers may have greater productivity than an engineer working in isolation, implying that a foreign-born engineer may increase the productivity of native-born team members. Moreover, the analysis in this paper probably does not capture the largest share of the positive effects brought

by foreign-born professionals. Technological and scientific innovation is the acknowledged engine of U.S. economic growth and human talent is the main input in generating this growth.<sup>7</sup>

Foreign graduate students, particularly those who study science or engineering, are indeed a boon to the U.S. economy and education system. They are critical to America's technological leadership in the world economy. "Foreign students, skilled immigrants, and doctorates in science and engineering play a major role in driving scientific innovation in the United States," according to a study by Keith Maskus, an economist at the University of Colorado, Aaditya Mattoo, Lead Economist at the World Bank's Development Economics Group, and Granaraj Chellaraj, a Consultant to the World Bank. Their research found that for every 100 international students who receive science or engineering Ph.D.'s from American universities, the nation gains 62 future patent applications.<sup>8</sup>

In conducting their research, Maskus, Mattoo, and Chellaraj found that "increases in the presence of foreign graduate students have a positive and significant impact on future U.S. patent applications and grants awarded to both firms and universities."<sup>9</sup> One of the issues the economists examined, which they answered in the affirmative, is "the possibility that skilled migrants may generate dynamic gains through increasing innovation." One reason this issue is important to policy discussions is such gains would aid future productivity and increase real wages for natives. "Put differently, in a dynamic context immigration of skilled workers would be complementary to local skills, rather than substitutes for them," note Maskus, Mattoo, and Chellaraj. "Thus, more realistic theory suggests that skilled migration would support rising aggregate real incomes in the long run."<sup>10</sup> The bottom line conclusion, the researchers note, is that "reducing foreign students by tighter enforcement of visa restraints could reduce innovative activity significantly" in the United States.

Do international students "crowd out" Americans who wish to attend college? The authors dispute as "questionable" a contention by Harvard economist George Borjas that suggests U.S. domestic and foreign graduate students are highly substitutable. The authors argue that results from international tests "indicate that the native U.S. student pool for engineering and science programs is likely to be limited due to lower math and science achievement." Pointing to research by Richard Freeman, Maskus, Mattoo, and Chellaraj are not asserting that Americans aren't as smart as potential foreign graduate students, but point to data over the last three decades showing "The number of PhDs granted to undergraduates of U.S. institutions, most of whom were U.S. citizens, did not change much during this period, while there was a substantial growth in the number of foreign bachelor's graduates obtaining U.S. doctorates. Thus the change in proportion is mostly due to the expansion of Ph.D. programs, with a majority of the new slots being taken for foreign students rather than through substitution."<sup>11</sup>

It is striking how a restrictive policy toward immigration could carry implications beyond the immediate future. At the 2004 Intel Science Talent Search, the nation's premier science competition for top high school students, I conducted interviews to

determine the immigration background of the 40 finalists. The results were instructive. Two-thirds of the Intel Science Talent Search finalists were the children of immigrants. And even though new H-1B visa holders each year represent only 0.03 percent of the U.S. population, it turns out more of the children (18) had parents who entered the country on H-1B visas than had parents born in the United States (16). In other words, if critics had their way, most of the coming generation's top scientists would not be here in the United States today, since we never would have allowed in their parents.<sup>12</sup>

### **A Fixed Number of Jobs?**

Much of the anxiety over immigration appears to stem from a belief that new entrants to the labor force compete with existing workers for a fixed number of jobs. However, it is easy to forget that people work today in companies and industries that did not even exist in the early 1990s. Within sectors, jobs increase or decrease from year to year based on product demand and other factors. "When I was involved in creating the first Internet browser in 1993, I can tell you how many Internet jobs there were, there were 200. I can tell you how many there are now, there's two million now," said Marc Andreessen, a founder of Netscape.<sup>13</sup>

Job creation through immigrant entrepreneurship receives little attention in the immigration policy discussion. Indian and Chinese entrepreneurs appear to have founded nearly one-third of Silicon Valley's technology companies, according to research by University of California, Berkeley professor Annalee Saxenian. She writes, "Silicon Valley's new foreign-born entrepreneurs are highly educated professionals in dynamic and technologically sophisticated industries. And they have been extremely successful . . . By 2000, these companies collectively accounted for more than \$19.5 billion in sales and 72,839 jobs."<sup>14</sup>

The enormous churning of jobs in the economy is another often overlooked phenomenon. While nobody wishes anyone to lose a job, it is a common occurrence in America. As Dallas Federal Reserve Bank economist W. Michael Cox and his colleague Richard Alm have explained, "New Bureau of Labor Statistics data covering the past decade show that job losses seem as common as sport utility vehicles on the highways. Annual job loss ranged from a low of 27 million in 1993 to a high of 35.4 million in 2001. Even in 2000, when the unemployment rate hit its lowest point of the 1990's expansion, 33 million jobs were eliminated." Cox and Alm further note, "The flip side is that, according to the labor bureau's figures, annual job gains ranged from 29.6 million in 1993 to 35.6 million in 1999. Day in and day out, workers quit their jobs or get fired, then move on to new positions. Companies start up, fail, downsize, upsize and fill the vacancies of those who left..."<sup>15</sup> While it is understandable why individuals come before Congress and plead to prevent competition for their company or employment category, the experience in countries with highly regulated labor markets is that attempts to limit competition do far more harm than good.

As a way of illustrating the premise that a "fixed" number of jobs do not exist in the U.S. economy, it is useful to examine immigration's impact on a micro-level, as the

*Washington Post* recently did in an article about a popular local restaurant. "We would not exist without immigrant labor," said Ashok Bajaj, owner of the Oval Room, a Washington, D.C. restaurant. "If the laws change, the entire economics of the restaurant industry would change, too." Bajaj, a New Delhi native who moved here from London in 1988, told the Post he was willing to invest a million dollars here "because of the availability of labor at attractive prices." More than two-thirds of the restaurant's employees are immigrants. "If those workers in the Washington area hadn't been available, Bajaj said, he probably would have opened the restaurant somewhere else, perhaps in London, Sydney or New York."

The story goes on to note, "A wide range of other businesses profit from the restaurant industry's immigrant labor. Thursday morning, the bread guy dropped off \$32.75 worth of ciabatta and other items. Restaurant supplier Adams-Burch pulled up with \$79.20 worth of brandy snifters. Keaney Produce pushed \$97.10 worth of arugula and other produce down the long, dim corridor to the kitchen, and the delivery guy from Samuels & Son unloaded \$305.26 worth of salmon, cod and other seafood. The booming restaurant business in Washington has rippled through to Philadelphia-based Samuels, which has been around since the 1920s. It has expanded from about 25 employees a decade ago to 150 today on the strength of the increasing numbers of high-end restaurants. Those are union jobs paying \$12 to \$19 an hour, and Samuel D'Angelo, the company president, figures that about 75 percent of his workforce was born in the United States." However, D'Angelo adds, "If there weren't all these immigrants out there to staff these white-tablecloth restaurants, things wouldn't have progressed the way they have in the last five or 10 years."<sup>16</sup>

### **The Research of George Borjas**

The most influential economist arguing that immigrants have a negative impact on U.S. workers is Harvard University economist George Borjas. Many news articles and commentators have cited his research, which concludes that since 1980 immigration has reduced the wages of native high school dropouts by approximately 8 percent.<sup>17</sup> "The immigrant influx of the 1980s and 1990s lowered the wage of most native workers, particularly of those workers at the bottom and top of the education distribution," write Borjas and his co-researcher Lawrence Katz, an economist at Harvard University and the National Bureau of Economic Research. "The wage fell by 8.2 percent for high school dropouts and 3.8 percent for college graduates."

One of the criticisms of Borjas' approach is that the numbers cited above are derived from a static analysis. A static analysis generally does not take into account additional actions that may take place in response to a particular event. For example, in the case of immigration, the availability of additional workers may increase investment. Taking into account such additional actions would require a "dynamic" analysis. "As emphasized above, these simulations assume the capital stock is constant so that the results summarized [above] represent the short-run impact of immigration. An alternative simulation would measure the impacts under the assumption that the capital stock adjusts completely to the increased labor supply," according to Borjas and Katz. "As expected,

the labor market impact of immigration is muted in the long-run, as capital adjusts to the increased workforce. In fact, there's barely a change in the wage of the typical worker."<sup>18</sup> The long-run Borjas-Katz analysis shows a 4.8 percent wage decline for native high school dropouts. "The increase in the capital stock, however, completely removes the wage loss suffered by college graduates."<sup>19</sup> This more "dynamic" approach has received less attention in the media than the approach showing larger possible wage effects. Borjas deserves credit for acknowledging his critics by including this "long-run" scenario in his research.

### **The Other Side of the Debate**

In recent years, George Borjas has attracted critics of his approach to analyzing immigration. Among the most notable critics is University of California, Berkeley economist David Card, who writes, "Overall, evidence that immigrants have harmed the opportunities of less educated natives is scant."<sup>20</sup> George Mason University economist Tyler Cowen and analyst Daniel Rothschild conclude, "Most economists have sided with Card."<sup>21</sup>

Card performed pioneering research on immigration when he examined the economic impact of the Mariel boatlift on Miami residents. In 1980, Cuban leader Fidel Castro decided to allow wholesale immigration from Cuba to the United States. This exodus from Cuba boosted the labor force in the Miami area by 7 percent in a short period of time. An estimated 125,000 Cubans departed from Mariel to the United States, half of whom settled permanently in Miami. Yet after Card conducted a detailed analysis of the Mariel boatlift's impact he found, "First, the Mariel immigration had essentially no effect on the wages or employment outcomes of non-Cuban workers in the Miami labor market. Second, and perhaps even more surprising, the Mariel immigration had no strong effect on the wages of other Cubans."<sup>22</sup> The implicit conclusions from Card's study are that the Mariel Cubans were not perfect substitutes for Miami workers and that the new people spent money on goods and services and encouraged increased investment, all of which created additional employment opportunities.

In a more recent paper, Card again found that any negative impact on U.S. workers is limited. "New evidence from the 2000 Census re-confirms the main lesson of earlier studies: Although immigration has a strong effect on relative supplies of different skill groups, local labor market outcomes of low skilled natives are not much affected by the relative supply shocks," writes Card. "Recent evidence on the response of local industry structure to immigration-induced supply shocks shows that the absorption of unskilled immigrants takes place within industries in high-immigrant cities, rather than between industries, as implied by simple trade models."<sup>23</sup>

An important issue among researchers is whether to adopt the traditional approach of examining immigration's impact within cities or regions or to employ the more recent method of George Borjas, who uses a "national" approach. Under a national approach, one would examine wages among workers in the nation as whole, rather than examining their wages within cities.

David Card implicitly criticizes Borjas for perhaps seeking out a model that ensures finding the negative impact on natives that Borjas believed would be found if the only right approach was used. As noted, rather than examining cities, Borjas' approach is to use a nationwide approach that, among other things, assumes workers move out of local areas in response to the entry of immigrants, meaning the negative results would only show up examining national – rather than local – data. “As the evidence has accumulated over the past two decades that local labor market outcomes are only weakly correlated with immigrant densities, some analysts have argued that the cross-city research design is inherently compromised by intercity mobility of people, goods, and services,” writes Card. “Underlying this argument is the belief that labor market competition posed by immigration *has* to affect native opportunities, so if we don't find an impact, the research design *must* be flawed.”<sup>24</sup>

Card makes three important points in rebutting Borjas on the impact of immigration on native high school dropouts. First, Card notes that even though new immigrants in recent decades have added to the supply of dropouts, “the overall fraction of dropouts in urban areas fell from 24.3 percent in 1980 to 17.7 percent in 2000.” Second, Card disputes the premise that natives leave areas where immigrants go to work and avoid immigration's impacts, questioning a central reason cited by Borjas for utilizing a “national” model. Card looked at the effects of immigration inflows on native migration rates between 1980 and 1990 and found that native mobility had virtually no effect on the impact of immigration on native workers.<sup>25</sup>

Third, Card notes that if the Borjas-Katz approach was correct, then “the presence of immigrants in the U.S. labor market should have raised the wage premium for high school graduates relative to dropouts...in the absence of other factors.” In other words, having a high school diploma should have become more valuable when compared to dropping out of school. But according to Card that is not what happened. His research shows that the wage gap between dropouts and high school graduates has essentially been constant since 1980.<sup>26</sup>

Another critic of Borjas's approach is Diana Furchtgott-Roth, director of the Hudson Institute's Center for Employment Policy and the chief economist at the U.S. Department of Labor from 2003 to 2005. “Foreign-born workers complement rather than substitute for native-born workers because they have a different pattern of education and skills. . . . So how does Mr. Borjas get his results? Mr. Borjas assumes that immigrants and native-born Americans are perfect substitutes, and that physical capital is fixed and doesn't vary with additional immigration. Mr. Borjas measures immigration's effect on wages assuming that no other changes take place in the economy,” writes Furchtgott-Roth.<sup>27</sup>

In addition to the impact of immigrants on native high school dropouts, an area that inspires much controversy is whether newly arriving immigrants harm the employment prospects of black Americans. The 1997 National Academy of Sciences report *The New Americans* looked at this issue and concluded, “While some have suspected that blacks suffer disproportionately from the inflow of low-skilled

immigrants, none of the available evidence suggests that they have been particularly hard-hit on a national level. Some have lost their jobs, especially in places where immigrants are concentrated. But the majority of blacks live elsewhere, and their economic fortunes are tied largely to other factors.”<sup>28</sup>

### **Research by Giovanni Peri**

In the past year, many economists and commentators have cited research performed by Gianmarco I.P. Ottaviano, Department of Economics, University of Bologna, and Giovanni Peri, Department of Economics, University of California, Davis. “It turns out empirically and theoretically that immigration, as we have known it during the nineties, had a sizeable beneficial effect on wages of U.S. born workers,” concluded Gianmarco and Peri.”<sup>29</sup>

The economists explain that a key reason this increase in wages occurred was “because U.S.-born and foreign-born workers are not perfectly substitutable even when they have similar observable skills. Workers born, raised and partly educated in foreign environments are not identical to U.S.-born and raised workers. Such differences that we may call the diversity of foreign-born, is the basis for the gains from immigration that accrue to U.S.-born workers. Even a small amount of differences that translates in a relatively high elasticity of substitution between U.S. and foreign-born workers (between 4 and 7 percent) is enough to generate the average wage gains.”<sup>30</sup>

In his analysis published by the Immigration Policy Center, Giovanni Peri found much different results than George Borjas. Peri found that immigration increased the real wages of U.S. native-born workers as a whole by approximately 1 percent between 1990 and 2000, compared to the Borjas and Katz study that found a 1.3 percent decline. And rather than the 7 to 8 percent decline in real wages for native high school dropouts found in the Borjas-Katz research, Peri’s analysis shows only a 1.2 percent decline for such workers between 1990 and 2000.<sup>31</sup>

Peri explains that while he used a “national” (as opposed to the city analysis), his research differs from Borjas’s by “(1) accounting for the different occupational distribution of native and foreign-born workers within the same educational group (which more accurately gauges the ‘complementary’ effects of immigration); (2) allowing investments to follow opportunities (with the presence of more workers stimulating the creation of new businesses); and (3) calculating the overall effect of immigrants on natives’ wages (factoring in the ‘complementary’ distribution of foreign-born workers across occupations and educational groups).”<sup>32</sup>

Using this approach is why Peri’s findings differ from those of Borjas: “Because immigrants stimulate investment, have skill sets and educational levels that complement those of natives, and do not compete for the same jobs as most natives, this analysis finds that immigration increased the average wages of all native-born workers in the 1990s except those who did not have a high-school diploma (whereas the traditional Borjas approach finds a decrease among workers in all educations groups). Even for native-born

workers without a high-school diploma, the decline in wages from immigration was much smaller than the Borjas approach suggests.”<sup>33</sup>

## **Conclusion**

The immigration issue remains complex, as evidenced by how results differ on its impact depending on the chosen methodology. It appears immigrants increase specialization in the economy, enhance the nation’s productive capacity, and aid innovation in the United States. The best evidence suggests that immigrants improve their own lot and that of their children by coming to America and exert little adverse impact on natives.

Pia Orrenius, a senior economist at the Federal Reserve Bank of Dallas who served on the President’s Council of Economic Advisers from 2004-2005, has provided a clear explanation of how a dynamic approach to the issue of immigration leads one to conclude there is relatively little negative impact, if any, on native workers: “Market forces on both the demand and supply sides also mitigate the labor market impact of immigration. With an influx of immigrants, the return on capital rises, spurring investment. Firms also increase production of labor-intensive goods, further dampening any adverse effects on low-skilled native workers. Meanwhile existing workers, like firms, respond rationally to immigration. Natives and previous immigrants move, upgrade their skills or switch jobs in response to immigrant influxes, much as they do in response to broader market forces, such as the rising skill premium. These responses reduce immigration’s negative impact. And as consumers we all benefit from the greater output and lower prices of many goods and services resulting from an immigrant workforce.”

Orrenius notes, “It should not be surprising that most studies find immigrants have little effect on average wages. New immigrants are more likely to compete with each other and with earlier immigrants than with native-born workers. Those just arriving in the U.S. are not close substitutes for U.S. workers, because they typically lack the language skills, educational background and institutional know-how of native-born workers. As immigrants gain this human capital over time they become more substitutable for native workers – but they also become more productive.”<sup>34</sup>

*New York Times* Columnist John Tierney recently placed the economic arguments over immigration in perspective. “Even if you accept the debatable economic premise that low-income workers are significantly harmed, the argument fails on moral grounds. . . . Suppose you were setting immigration policy from behind [a] veil of ignorance. Which of these would you choose? (1) Restricting immigration to protect some of the lower-paid workers in America from a decline in wages that would be no more than 8 percent, if it occurred at all. (2) Expanding immigration to benefit most Americans while also giving some non-Americans living in dire poverty the chance to quadruple their income. You don’t need to slog through “A Theory of Justice” to figure out this one.”<sup>35</sup> Notwithstanding Tierney’s entreaties, it seems clear that the debate over immigration in America will continue for years to come.

## **About the Author**

Stuart Anderson is Executive Director of the National Foundation for American Policy, a non-profit, non-partisan public policy research organization in Arlington, Va. focusing on trade, immigration, and related issues. Stuart served as Executive Associate Commissioner for Policy and Planning and Counselor to the Commissioner at the Immigration and Naturalization Service from August 2001 to January 2003. He spent four and a half years on Capitol Hill on the Senate Immigration Subcommittee, first for Senator Spencer Abraham and then as Staff Director of the subcommittee for Senator Sam Brownback. Prior to that, Stuart was Director of Trade and Immigration Studies at the Cato Institute in Washington, D.C., where he produced reports on the military contributions of immigrants and the role of immigrants in high technology. He has an M.A. from Georgetown University and a B.A. in Political Science from Drew University. Stuart has published articles in the *Wall Street Journal*, *New York Times*, *Los Angeles Times*, and other publications.

## **About the Merage Foundation for the American Dream**

The Merage Foundation for the American Dream, which provided funding for this study, was initiated in late 2004 to help American immigrants live their American Dream and to help Americans better understand the impact of immigration on the nation. The Foundation was initiated by Paul Merage, founder and former head of CHEF AMERICA. Paul Merage is President of the Foundation. The Foundation is directed by Marshall Kaplan, former Dean of the Graduate School of Public Affairs, as well as head of the Wirth Chair and Institute for Public Policy, at the University of Colorado. The Foundation provides stipends to college seniors who are immigrants to pursue their American Dream. It also publishes an Occasional Paper series. The papers have focused on crime and immigration, the economic and fiscal costs and benefits of immigration, the relationship of immigration to Social Security, and the importance of international students to America. The Foundation prepares award-winning DVDs and educational materials concerning America's immigration history and immigrant leaders who have contributed to America. The first four DVD's have been distributed to over 1200 high schools as well as to community organizations. The DVDs include profiles of Jack Rosenthal former Pulitzer Prize winning editor of *The New York Times*; Dr. David Ho, *Time Magazine's* Person of Year in 1996 and a distinguished scientist; and Isabel Allende, internationally respected author. The Foundation works with the New York Times/Scholastic and Donna Dewey, an Academy Award winner, to produce and distribute the DVDs. The Foundation convenes national and regional forums on immigration issues.

## ENDNOTES

- 
- <sup>1</sup> Patrice Hill, "How Immigrants Make Economy Grow," *The Washington Times*, May 1, 2006.
- <sup>2</sup> William Beach and James Sherk, "Growing the Labor Force," Letter to the Editor, *The Washington Times*, May 3, 2006.
- <sup>3</sup> Labor Condition Applications (LCAs) include such information as the job the individual will fill and the "prevailing" wage for that type of job in the geographic region he or she will work. Under the law, an H-1B visa holder must be paid at least the prevailing wage.
- <sup>4</sup> Madeline Zavodny, "The H-1B Program and Its Effects on Information Technology Workers," Federal Reserve Bank of Atlanta, *Economic Review*, Third Quarter 2003
- <sup>5</sup> Paul E. Harrington, "Understanding & Responding to Imbalances in Engineering & IT Labor Markets," Presentation to Business Roundtable, September 15, 2004. Salary data are for 1999.
- <sup>6</sup> Giovanni Peri, *Immigrants, Skills, and Wages: Measuring the Economic Gains from Immigration*, Immigration Policy Center, March 2006, p. 7.
- <sup>7</sup> *Ibid.*, p.6.
- <sup>8</sup> Gnanajaraj Chellaraj, Keith E. Maskus, and Aaditya Mattoo, "The Contribution of Skilled Immigration and International Graduate Students to U.S. Innovation," March 17, 2005; Stuart Anderson, "America's Future is Stuck Overseas," *The New York Times*, December 1, 2006.
- <sup>9</sup> Chellaraj, Maskus, and Mattoo, p. 5.
- <sup>10</sup> *Ibid.*, pp. 6-7.
- <sup>11</sup> *Ibid.*, p. 9.
- <sup>12</sup> Stuart Anderson, "The Multiplier Effect," *International Educator*, Summer 2004. Available at [www.nfap.com](http://www.nfap.com).
- <sup>13</sup> Marc Andreesen interviewed on *Lou Dobbs Tonight*, March 4, 2004.
- <sup>14</sup> AnnaLee Saxenian, "Brain Circulation, How High-Skilled Immigration Makes Everyone Better Off," *Brookings Review*, Winter 2002. In past years, the majority of H-1B visa holders have been from India and China.
- <sup>15</sup> Michael Cox and Richard Alm, "The Great American Job Machine," *The New York Times*, November 7, 2003.
- <sup>16</sup> "Immigration's Bottom Line," *The Washington Post*, April 30, 2006. The article states, "About 85,000 immigrants work in the region's leisure and hospitality sector, according to Pew, out of 215,000 total workers in that sector. There are about 86,100 unemployed people in the region, many of whom are just between jobs; were it not for immigrant labor, there would not be enough workers to staff the city's hotels and restaurants at their current levels."
- <sup>17</sup> George J. Borjas and Lawrence F. Katz, "The Evolution of the Mexican-Born Workforce in the United States," Working Paper 11281, National Bureau of Economic Research, April 2005, p. 63.
- <sup>18</sup> *Ibid.*, pp. 37-39.
- <sup>19</sup> *Ibid.*, pp. 39-40.
- <sup>20</sup> David Card, "Is the New Immigration Really So Bad?," University of California, Berkeley, January 2005, p. 1.
- <sup>21</sup> Tyler Cowen and Daniel Rothschild, "Hey, don't bad-mouth unskilled immigrants," *Los Angeles Times*, May 15, 2006.
- <sup>22</sup> David Card, "The Impact of the Mariel Boatlift on the Miami Labor Market." *Industrial and Labor Relations Review*, (1990), 43(2).
- <sup>23</sup> David Card, 2005.
- <sup>24</sup> *Ibid.* Emphasis in original. Card goes on to write, "The leading alternative to a local labor market approach is a time series analysis of aggregate relative wages. Surprisingly, such an analysis shows that the wages of native dropouts (people with less than a high school diploma) relative to native high school graduates have remained nearly constant since 1980, despite pressures from immigrant inflows that have increased the relative supply of dropout labor, and despite the rise in the wage gap between other education groups in the U.S. economy. While the counterfactual is unknown, it is hard to argue that the aggregate time series evidence point to a negative impact of immigration unless ones starts from that position *a priori*."

---

<sup>25</sup> Ibid., p. 8. Card writes, “Again, the conclusion is that native mobility has virtually no offsetting effect on the relative supply shocks created by immigration. Indeed, once controls are introduced for city-specific trends in native population growth, the data suggest that native mobility responses may slightly reinforce the relative supply effects of immigration.”

<sup>26</sup> Ibid., p. 18. According to Card, ““Although immigration presumably exerts downward pressure on the relative wages of dropouts, the wage gap between dropouts and high school graduates has been nearly constant since 1980, and has fallen by more than 50 percent relative to the gap between high school graduates and holders of bachelor’s degrees.”

<sup>27</sup> Diana Furchtgott-Roth, “Immigrants Don’t Depress Wages,” *New York Sun*, April 12, 2006.

<sup>28</sup> *The New Americans*, National Research Council, advance copy, 1997, p. S-5.

<sup>29</sup> Gianmarco I.P. Ottaviano and Giovanni Peri, “Rethinking the Gains from Immigration: Theory and Evidence from the U.S.,” August 2005, p. 28.

<sup>30</sup> Ibid.

<sup>31</sup> Peri, Immigration Policy Center.

<sup>32</sup> Ibid., p. 6.

<sup>33</sup> Ibid., p. 6.

<sup>34</sup> Pia Orrenius, “The Impact of Immigration,” Commentary, *The Wall Street Journal*, April 25, 2006.

<sup>35</sup> John Tierney, “Sense and Sandwiches,” *The New York Times*, May 2, 2006.