

# Immigration Policy Through The Lens of Economic Growth

## *Does Our Current Policy Harness the Economic Benefits of Immigration?*

Immigrants create a more dynamic economy. They add to the stock of entrepreneurs, consumers, service providers, and taxpayers and have done so since America's inception. In fact, the current share of immigrants in the U.S. population is close to that observed during the early 20<sup>th</sup> Century when waves of European immigrants helped the U.S. become the largest economy in the world. Today, immigrants in the technology, manufacturing, agricultural, and service sectors continue to expand the economy and job opportunities for native-born American citizens.

However, common economic concerns about immigrants position them as competitors with native-born Americans for jobs and wages. This fear of competition has led to an immigration system that deprives the U.S. of valuable labor, skills, and innovations and undermines economic potential.

In the wake of a slow economic recovery, policymakers are now taking a fresh look at our current immigration policy from the perspective of economic growth. With that context in mind, this report examines immigrants' impact on the economy and analyzes the effectiveness of current policy in harnessing the potential economic benefits of immigration. Specifically, this report looks at the three main visas issued: high-skilled temporary work visas (H-1B), low-skilled temporary work visas (H-2A/B), and Legal Permanent Resident (LPR) visas, or green cards that put immigrants on the path to citizenship.

This analysis finds that not only does today's system fall far short of economic needs, but Washington is unable to adjust caps in real-time to eliminate future labor shortages. Ultimately, to achieve pro-growth immigration policy, we need to increase the number of visas available to immigrants with institutionalized mechanisms in order to ensure a sustainable immigration policy.

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## From Supply and Demand to Economic Growth: Shifting The Framework For Thinking About Immigrants' Economic Impact

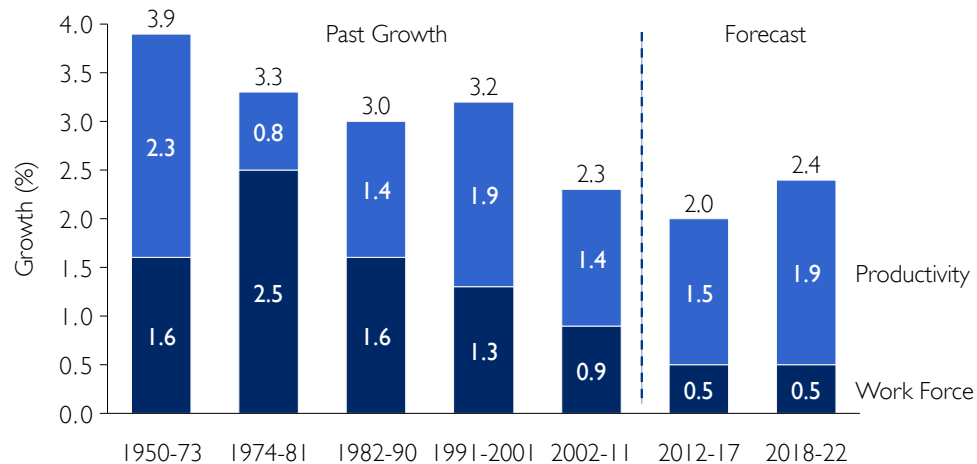
The intuition that underpins current immigration policies is based on a supply and demand framework. As the supply of labor increases, wages must fall. This intuition only holds, however, in a world far simpler than the real world. In this simpler world, immigrants are workers who disappear when a task is completed. They do not innovate, and they do not buy goods and services from native-born Americans. Yet, in the real world, when an immigrant spurs job creation through innovation, spends money in his or her local economy, or enables native-born workers to specialize in more complex, higher paying work, that intuition falls apart.

A better framework for thinking through the impact of immigrants is economic growth, or GDP. There are two basic components to economic growth: population growth and productivity growth. As population growth increases, economic growth quickens on the margin. If we are more productive, the economy will grow faster. Recently, forecasts of potential economic growth are declining as population growth slows (Exhibit 1).

### Exhibit 1

#### Population Growth Slowdown Will Continue to Reduce Potential Economic Growth Over the Next Ten Years

Potential Work Force and Productivity Growth



Source: CBO, Potential GDP Growth Projections

Without offsetting increases in labor productivity, U.S. economic growth will slow over the next decade. So the question is, “What impact do immigrants have on the two components of economic growth (Exhibit 2)?”

## Exhibit 2

# Boosting Population And Productivity: How Immigrants Impact Economic Growth

Component of Economic Growth	Immigrants' Impact	Empirical Evidence
Increasing Population Growth	<b>More Producers and Consumers:</b> Immigrants increase economic production and spend money on goods, services, and housing in their local economies.	In Arizona, immigrants account for nearly 15 percent of the population and \$47 billion worth of goods and services and spent \$30 billion in their local economies in 2008. <sup>1</sup>
Increasing Productivity Growth	<b>Innovation:</b> More skilled workers raise the productivity of the U.S. economy, which is the only way to raise our standard of living. <b>Promoting Specialization:</b> Low-skilled workers offer low-cost services for simple tasks that enable natives to specialize in more complex, higher paying work. <b>Lowering Prices:</b> By offering low-cost services, immigrants drive down the price of goods, raising real wages.	Immigrants and their children had a founding role in 40 percent of Fortune 500 companies. <sup>3</sup> Through specialization, immigration is found to raise native-born wages by 0.6 percent. <sup>5</sup> In total, immigrants drive down the price goods by 0.3 to 0.4 percent of GDP. <sup>6</sup>

## More People Means A Larger Economy

From the perspective of population growth, immigrants grow the economy by simply being another worker and consumer in our economy, and this creates more economic opportunities for native-born Americans. What they produce is managed, marketed, transported, and designed by others and what they buy is produced, sold, and delivered by others.

Raúl Hinojosa-Ojeda of UCLA found that immigrants residing in Arizona, a state known for its strict anti-immigration laws, spent \$30 billion in their local economies in 2008, \$15 billion of which was spent by undocumented immigrants.<sup>1</sup> Their spending adds to economic output and creates more job opportunities. Overall, more immigrants means higher population growth and more robust economic growth. And through their impact on innovation, specialization, prices, and demographics, immigrants increase the productivity of the U.S. economy.

## High-Skilled Immigrants Are Some Of Our Best Innovators

Highly skilled immigrants do not take jobs; they help create them. Bill Gates testified before Congress that for every immigrant hire at Microsoft, an average of four non-immigrant employees are hired<sup>2</sup> as a result of the innovations by high-skilled immigrants. Evidence shows that the macro effects of immigrants' innovations are substantial: a 2011 study by the Partnership for a New American Economy found that first generation immigrants and their children had a founding role in 40 percent

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of Fortune 500 companies, which employ more than 10 million people worldwide.<sup>3</sup> Further, a study by the Fiscal Policy Institute found that immigrants account for 30 percent of all small business job creation.<sup>4</sup>

High-skilled immigration not only ensures the innovations of these immigrants help drive U.S. job growth, they ensure they exist at all. By connecting immigrants to the U.S. economy's skilled workforce, capital,

and market, innovative workers are more productive than they would be in their home country. This case for more high-skilled immigration has led to bi-partisan support for more high-skilled immigration as a means to growing the national and global economy.

### **Immigrants Raise Native-Born American Wages By Promoting Specialization And Lowering Prices**

The economic benefits of low-skilled immigrants are rarely touted, often because they are not seen as direct job creators like high-skilled immigrants. Yet this view ignores the way low-skilled immigrants impact the labor market. Rather than compete with the majority of Americans, low-skilled immigrants mostly compete amongst themselves for jobs native-born Americans do not want. Economists refer to these jobs as complementary to those of native workers, and by working these jobs, immigrants enable natives to do more complex work that pays higher wages.

For example, immigrants who work as caretakers enable both parents the opportunity to work and produce. And by taking low-skilled jobs in construction, immigrants create new opportunities for project managers and engineers. In fact, a study by Francesco D'Amuri of the Italian central bank and Giovanni Peri of the University of California finds that the impact of increased low-skilled immigration on specialization leads to a 0.6 percent increase in native-born wages.<sup>5</sup>

Moreover, Patricia Cortes of Boston University estimates that by offering low-cost services, immigrants lower consumer prices by 0.3 to 0.4 percent of GDP.<sup>6</sup> Lower prices means higher real wages as more goods and services can be purchased with the same amount of money.

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### **Immigrants Smooth The Demographic Transition**

As the U.S. population ages and birth rates continue to fall, immigrants can help temper the transition to an older society. An older country not only strains the

finances of government programs, but is also less innovative as risk aversion rises with age. According to Philip Longman's cross country analysis of an entrepreneurial activity index created by Babson College and the London School of Business, as a country ages, innovation falls.<sup>7</sup> Although a constantly increasing level of immigrants would be required to fully avoid this transition, immigration at slightly higher levels would at least smooth the transition over the next several decades.

Overall, through both their impact on population and productivity, immigrants expand the U.S. economy. Immigrants do compete with high school dropouts for jobs, but most studies find minimal impact on wages.<sup>8</sup> The question for future immigration policy is, "Does our current policy fully harness the potential economic benefits of immigration?" The rest of this paper examines this question and how to ensure the U.S. immigration system best supports the U.S. economy for decades to come.

## Every Year, Innovative U.S. Companies Are Denied Over 100,000 High-Skilled Workers

Every April, healthcare, technology, and many other companies submit hundreds of thousands of applications for H-1B visas to hire foreign workers. Without enough qualified domestic workers available, these firms ask the government for permission to hire foreign talent to expand their businesses. And every year, the government denies this opportunity to more than a hundred thousand talented immigrants. Why?

The cap for H-1B visas is only 65,000, which is less than one half of one percent of the total U.S. workforce, yet H-1B visas are the most common temporary visas for high-skilled workers. There are some exceptions to the cap. The first 20,000 people with Master's Degrees from American universities who apply for an H-1B visa are excluded from the cap, as are employees of non-profits, higher education institutions, and their contractors. Even with these exceptions, the effect of the cap is striking.

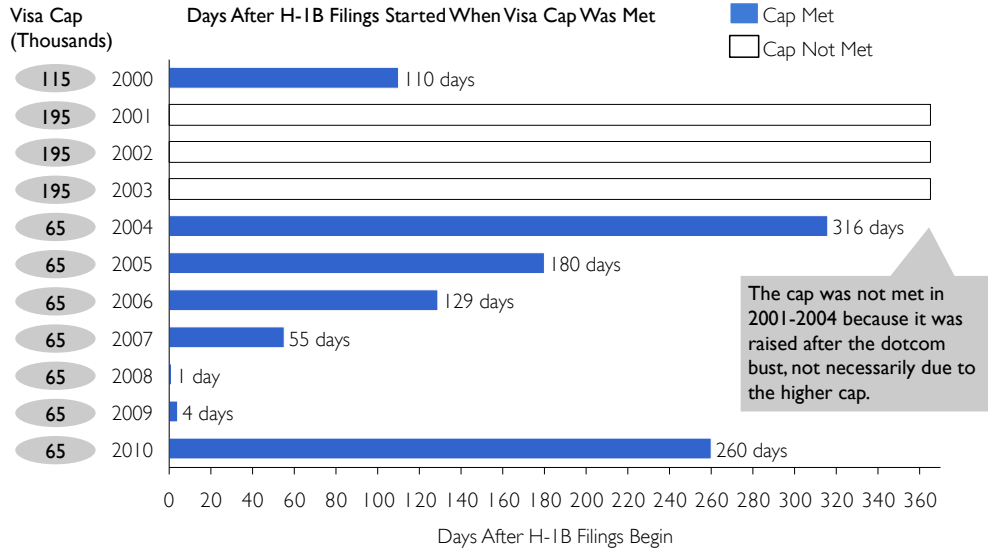
**"...the cap for H-1B visas is only 65,000, which is less than one half a percent of the total U.S. workforce."**

According to an analysis by the Brookings Institution's Neil Ruiz, Jill Wilson, and Shyamali Choudhury, in 2011, 325,522 H-1B requests were filed, but only 117,000, or 36 percent, were issued.<sup>9</sup> However, after H-1B visas are exhausted, requests stop flowing, making this proxy for demand somewhat limited, but other proxies for demand confirm the conclusion that demand for H-1B visas outstrips supply.

Since the cap was reduced from 195,000 in 2004, visa issuances have been exhausted every single year. And, in fiscal year 2008, the cap was met in a matter of hours, meaning employers had to wait a full 364 days until they could file new applications (Exhibit 3).<sup>10</sup>

**Exhibit 3**

**In 2008, Demand for H-1B Visas Exhausted Supply in One Day, Leaving Many Employers Without Necessary Workers**



Source: Government Accountability Office

Moreover, the Government Accountability Office (GAO) found that while H-1B visas have consistently stayed between 100,000 and 150,000 a year, other avenues for high-skilled immigrants have not. For example, L-1 visas, which are for high-skilled intra-company transfers and are not subject to a cap, increased 53 percent from 2000 to 2008. This analysis implies that without a binding cap, there is plenty of demand for more H-1B visa issuances.

Innovative tech companies such as Microsoft (4,109 requests in 2010), Intel (1,510), IBM (1,468), and Google (1,009) are most harmed by the cap. In fact, almost half of H-1B requests come from computer occupations. Looking through the number of requests across more than 20 fields, Ruiz, Wilson, and Choudhury concluded that there is “significant continued demand for high-skilled foreign workers with employer requests annually outpacing available slots.”<sup>11</sup>

Demand for more H-1B visas clearly outstrips supply, but a key question asked by immigration critics is whether employers are merely looking to benefit from lower-wage foreign competition. Looking at the domestic supply of graduates in these fields suggests calls for additional immigrants are justified.

The high majority of H-1B visa requests are for Science, Technology, Engineering, and Math (STEM) jobs, which have grown rapidly in today’s data-driven economy. Last year, jobs in the computer and mathematical sector expanded by seven percent, far outpacing job growth in the rest of the management and professional

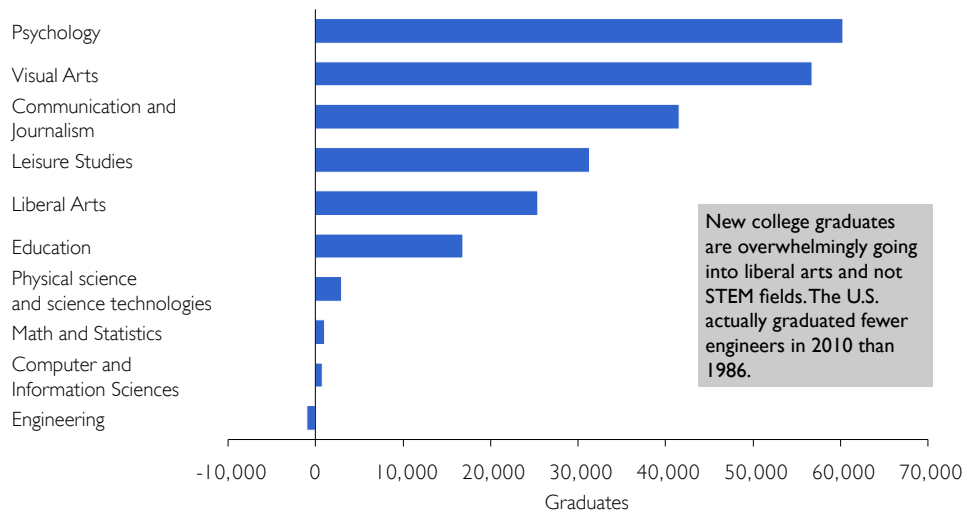
services sector.<sup>12</sup> Yet the number of STEM graduates has not kept up with the growth potential of these industries (Exhibit 4).

Despite graduating over 700,000 more students in 2010 than 1986, we produced 1,000 fewer engineers, just 750 more computer and information science degrees, 1,000 more math degrees, and only 3,000 more physical science degrees.<sup>13</sup> This data may even understate the problem as foreign students are much more likely to graduate with STEM degrees. In 2009, 38 percent of foreign students with visas majored in STEM fields, compared to 18 percent of students who are U.S. citizens.<sup>14</sup> Assuming only half of 2005 foreign student visas were for undergraduate studies, foreign students would account for one quarter of all STEM degrees awarded in 2009. However, not all of these foreign graduates will stay in the U.S., further compounding the shortage of STEM graduates.

#### Exhibit 4

### Despite More Than 700,000 College Graduates In 2010 Compared To 1986, The U.S. Is Not Increasing STEM Graduates

Change of Number of College Graduates By Degree, 1986 to 2010



Source: Digest of Education Statistics, HPS Insight

Despite a booming technology industry and stagnating growth in the number of STEM graduates, the U.S. continues to deny visas to hundreds of thousands of immigrants every year at the expense of a larger economy and more jobs.

## The Overlooked Benefits Of Low-Skilled Immigration

While increasing the levels of high-skilled immigrants is politically popular with both parties, the value of low-skilled immigrants is often overlooked. Low-skilled immigrants work in a wide range of industries such as agriculture, hospitality, food

processing, fishing, and tourism. These industries and their supply chains, which employ many Americans, reap significant value from immigrants' work.

The two main programs for temporary low-skilled workers are the H-2A and H-2B visas, which target agricultural and service jobs respectively. The H-2A visa has no cap, while H-2B visas are capped at 66,000 (33,000 in the first six months and 33,000 in the second), but past recipients are not counted towards the cap in future years. For both, employers must demonstrate that a U.S. worker is not available and that the visa issuance will not negatively impact wages.

Like H-1B visas, employer applications for H-2B visas outpace issuances every year. Analysis by Madeline Zabodny and Tamar Jacoby found that in 2009, 25 percent of applications were denied, continuing a trend in rising denials.<sup>15</sup> Moreover, their survey evidence suggests that without these workers, these businesses scale back, reducing jobs for American workers.

**“For H-2B, every year employer applications outpace issuances ... in 2009, 25 percent of applications were denied.”**

Despite having no cap, H-2A visas are handicapped by a costly issuance process that lessens the effectiveness of the policy. A September 2012 GAO report concluded that the application process can be a significant burden on employers.<sup>16</sup> First, employers must file H-2A applications with the Department of Labor no earlier than 75 days prior to the potential employees' start date. Then, they must file with the Department of Homeland Security.

The Department of Labor's approval deadline is 30 days prior to the employee's start date, but 37 percent of approvals are issued after the deadline, and seven percent come only 15 days prior to the employee's start date. Moreover, 63 percent of employers had to redo applications to meet new guidelines in 2011, up from seven percent in 2006. And seasonal employers, who need multiple groups of workers throughout the year, must repeat the process each time.

Due to these delays and costs, 42 percent of employers who applied for H-2A workers in 2011 would not in 2012, according to a survey by the National Council of Agricultural Employers.<sup>17</sup> Even prior to these recent trends, John R. Hancock, formerly the Department of Labor's chief of the agricultural certification unit, concluded, “The H-2A program is not currently a reliable mechanism to meet labor needs in situations where domestic workers are not available.”<sup>18</sup>

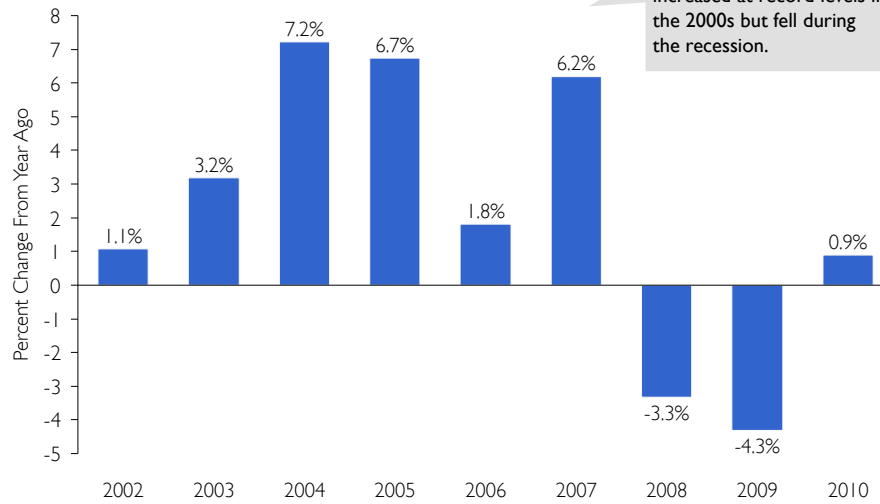
The main sign of the program's inadequacy is the large presence of unauthorized immigrants. In fact, when H-2A visa issuances stagnated from 2002 to 2006, unauthorized immigration increased at record pace before tapering off during the recession (Exhibit 5).



## Exhibit 5

### The Number Of Unauthorized Immigrants Increased Rapidly During The Mid-2000s, But Fell After The Crisis

Annual Change In Unauthorized Immigrants



Source: Pew Research Center

As with H-1B visas, demand from employers does not necessarily indicate there is a need for H-2A visas. Employers could be looking to exploit cheap, foreign labor rather than employ American workers. The state of Georgia conducted a real world test by passing H.B. 87, Georgia's Illegal Immigration Reform and Enforcement Act, in April of 2011. The law successfully curbed illegal immigration, but the result was worker shortages that cost Georgia growers \$140 million in crop losses, as farmers were 40 percent short of the workers they needed to harvest the fields, according to a University of Georgia study.<sup>19</sup> In fact, the situation was dire enough that Georgia tried to substitute prison parolees for immigrant labor. This plan failed – by mid-afternoon on the second day – as parolees were quick to quit working.<sup>20</sup>



Similar policies not only hurt farmers and immigrants, but they affect the entire supply chain. A study by the Center for American Progress stated that each job in the agricultural sector supported three other downstream jobs in sectors such as transportation.<sup>21</sup> Low-skilled immigrants do not just increase growth for the industry in which they work, but also its entire supply chain and workers.

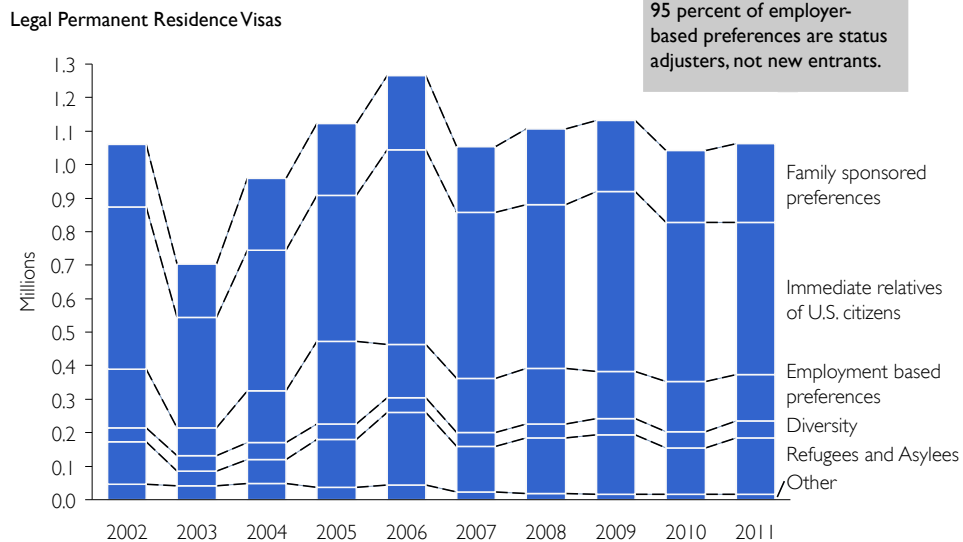
## Permanent Residency Targets Family Unification, Not Workers

Raúl Hinojosa-Ojeda of UCLA recently found that immigration reform that gave U.S. citizenship to immigrants, rather than temporary work status, would add \$708 billion more to the economy over 10 years.<sup>22</sup> His work shows that the more long-term certainty immigrants have about their status, the more beneficial they will be to the U.S. economy as they are more easily able to change jobs and gain skills.

These results suggest there is real economic value in permanent status over temporary status, implying that the Legal Permanent Resident (LPR) visa program can provide a tremendous boost to our economy. LPRs, commonly known as “green cards,” are the path to citizenship. After receiving an LPR, immigrants can apply for citizenship after five years of residency. But this program is not designed with the economic needs of the country in mind. Instead, LPRs are primarily designed to unite families, not bring in workers (Exhibit 5).

### Exhibit 6

#### Last Year, Family-Related Visas Accounted For 65% Of All Legal Permanent Resident Visas



Source: Department of Homeland Security, HPS Insight

The U.S. grants roughly one million LPRs a year across five main categories: immediate relatives of U.S. citizens, family-sponsored preferences, employment-based preferences, the diversity visa program, and refugees and asylees. LPR visas for immediate relatives of U.S. citizens are uncapped, but the U.S. generally grants around 400,000 per year. Combined with family-sponsored preferences, which unite families abroad with legal permanent residents, visas designed to connect families represented 65 percent of all LPR visas in 2011.

Refugees and asylees accounted for 16 percent of LPR visas last year, although this number varies significantly from year to year. The Diversity Visa Program, which grants visas to citizens of under-represented countries in the U.S. who have a high school degree and two years of work experience, accounts for another 4.7 percent of visas. These are capped at 55,000 a year, and approximately half go to Africans.

By comparison, employment-based visas are capped at 140,000 and accounted for only 15 percent of all LPR visas issued in 2011, four times fewer than visas designed to connect families. In absolute terms, 2011 saw the fewest number of employment-based visas issued since 2003. Within this category, foreign investor visas (which require a *minimum* of a \$1,000,000 investment, or \$500,000 in a high unemployment or rural area, that results in at least 10 new jobs) are capped at 9,940 a year. We deny people looking to invest in the U.S. every year.

**“...employment-based visas are capped at 140,000...four times less than visas designed to connect families.”**

Moreover, these visas are for previous immigrants, not new ones. People already working here under other legal means, such as an H-1B visa, receive 95 percent of employer-sponsored visas. Given these low caps, it is unsurprising to find there is a significant waitlist. In his book, "The Immigrant Exodus," Vivek Wadwa of Harvard University estimated more than 1.2 million high-skilled immigrants and their families were on the waitlist in 2006.<sup>23</sup>

Furthermore, the allocation of these visas is flawed, as no country can gain more than seven percent of all visa issuances. Economist Alex Tabarrok recently pointed out that Greenland has the same number of LPR visa allotments as the billions of citizens of China and India, which hold half of all H-1B visas. These rules significantly deter those looking to take the risk and uproot their lives to live and work in the U.S.

This analysis does not suggest that connecting families, taking in refugees and asylees, and offering people, largely from poor countries, the opportunity to improve their lives are not good policy outcomes. But it does reiterate that LPRs are not issued with the economic needs of the country in mind. Given the potential impact permanent residence could have on the economy, this failure significantly constrains potential economic growth.

## The Need For Stability In Reform

Past experience suggests that Congress cannot simply adjust caps to meet the demands of the economy. Therefore, as immigration policy is debated and caps are analyzed, reform should seek to minimize the need to revisit these political fights by providing a long-lasting solution.

Today's cap for H-1B visas is actually lower than in the early 2000s. From 2001 to 2004, Congress raised the cap for H-1B visas to 195,000, the only three years the cap exceeded issuances.<sup>24</sup> Congress only temporarily raised the cap to address industry concerns during the tech boom, but the cap was raised a year after the tech bust, as opposed to when the industry needed workers to expand.

The lesson of this experience is that policymakers will not anticipate the needs of our dynamic economy. Instead, caps biased toward restriction will always constrain booming industries when they most need foreign workers. While computer occupations currently account for almost half of H-1B visas, over the next decade, needs could shift to the health or manufacturing sectors, for example. Agricultural needs may vary year to year, as could the service and construction sector. Congress simply cannot be expected to adjust caps in a time-sensitive fashion to meet the demands of a dynamic economy. Our immigration policy should include institutionalized provisions that can adapt policy in a timely way to address the needs of an ever-fluctuating economy.

**“...caps biased towards restriction will always constrain booming industries when they most need foreign workers.”**

## Conclusion

Immigrants have been and can continue to be a source of economic dynamism as we look to grow our economy in the future. This report examined our immigration system to determine whether the level of visa issuances and the method of allocating those issuances best supports a growing U.S. economy. The evidence is clear: from high-skilled to low-skilled, visa caps and issuances miss an economic opportunity for the U.S. Moreover, current policy lacks institutionalized provisions that ensure our immigration system can keep up with the changing nature of the U.S. economy. In order to capitalize upon the economic benefits of immigrants and to address the needs and dynamic nature of our economy, we must increase the amount of visas issued across the board and institutionalize mechanisms to ensure immigration levels support a growing U.S. economy.

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<sup>3</sup> “The New American Fortune 500.” *Partnership for a New American Economy*, June 2011.

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<sup>5</sup> D’Amuri, Francesco and Giovanni Peri. “Immigration, jobs and employment protection: Evidence from Europe before and during the Great Recession.” *NBER Working Paper #17139*, June 2011.

<sup>6</sup> Cortes, “The effect of low-skilled immigration on US Prices: Evidence from CPI Data,” MIT, July 2006.

<sup>7</sup> Longman, Phillip. “The Global Baby Bust.” *Foreign Affairs*, May/June 2004.

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