Introduction

Immigration creates economic value and potential fiscal revenues when workers move from countries where their productivity and wages are low to countries, such as the United States, where their productivity and wages are relatively high. Highly educated immigrants contribute substantially to technological and scientific innovation, entrepreneurship, and productivity growth. Less-educated immigrants supply useful skills by providing much-needed labor to fill jobs in agriculture, construction, and personal services—sectors where local demand from employers is increasingly not matched by a supply of American workers. The country’s employment-based immigration policies should encourage the inflow of workers who make the greatest contributions to the U.S. economy.

Unfortunately, the complex and outdated U.S. immigration system, even in its employment-based component, imposes significant inefficiencies and costly restrictions on the inflow of foreign-born workers. Current immigration policies ultimately lead to inferior economic outcomes. Instead of being allocated to the workers who make the greatest economic contributions, employment-based visas are typically allocated to those who happen to be first in line, or are distributed randomly via a lottery. The difficulty of obtaining employment-based visas discourages highly educated potential immigrants who would contribute significant value to U.S. employers and generate tax revenues. At the same time, less-educated potential immigrants have extremely limited options for legal entry despite being in high demand from U.S. employers, who often end up turning to unauthorized workers.

The goal of this proposal is to introduce simple but significant changes to the U.S. employment-based temporary immigration system that would make that system more efficient. The proposed changes also would increase the economic benefits of employment-based immigration for the U.S. economy and contribute additional revenue to the federal budget. The proposed system uses market-based auctions to allocate temporary permits that allow employers to hire foreign workers. An employer who purchases a permit effectively purchases the right to hire a foreign worker for a specified period. The foreign worker selected for that job, in turn, receives a temporary worker visa after passing a background check, and will be fully mobile across employers who own permits. The employer can resell the permit in a secondary market if the foreign worker leaves that job. These auctions would first be implemented to replace the current H-1B, H-2A, and H-2B visa programs, and would ultimately replace most of the current temporary employment-based immigration...
system. To succeed, the auctions need to be accompanied by increased workplace enforcement, such as mandating that all employers use E-Verify.

Auctioning permits to hire foreign workers would offer a number of economic benefits. It would lead to a more efficient allocation of foreign workers across employers while protecting workers through visa portability and employer competition. Permits would be allocated to employers who value these workers’ contributions the highest and who hence would bid the most for permits.

The auctions would generate revenue for the federal government. Baseline estimates suggest that auctioning of employer permits would generate from $700 million to $1.2 billion in revenues annually, with the higher end of the range possible if more visas are available for high-skilled workers. In the long run, a more efficient immigration system would have an even bigger budget impact by increasing productivity and gross domestic product (GDP).

This proposal focuses on temporary employment-based immigration, which plays an important role in the employment-based immigration system. Most immigrants, however, are admitted permanently on the basis of family ties. Among permanent immigrants, employment-based immigration accounts for only 14 percent of permanent resident visas awarded each year, with about half of those going to accompanying dependents. The economic and fiscal gains would be far greater than those discussed here if the immigration system put a greater emphasis on employment and skills. Similarly, there could be important implications of providing currently undocumented immigrants with a path to legal permanent residence. These are complex and controversial issues; this proposal focuses on more circumscribed reforms to employment-based temporary visas.

The Challenge

The economic consensus is that, taken as a whole, immigrants raise living standards for U.S. natives by boosting demand and increasing productivity, contributing to innovation, and lowering prices of the goods and services they produce. The greatest economic gains come from those immigrants who join the U.S. labor force and provide skills that are in relatively short supply among U.S. workers. At the same time, however, immigrants impose costs on local public services, such as schools and hospitals.

The main goal of the employment-based immigration system should be to select and allocate immigrants in the most economically efficient way while at the same time protecting immigrant and native workers alike. A second crucial goal is to generate government revenue that compensates for the costs imposed by immigration.

There are two ways that the United States currently admits immigrants on the basis of employers’ demand for their skills: employment-based permanent visas (“green cards”) and temporary foreign worker visas. For skilled workers, temporary foreign worker programs have become a critical stepping-stone to permanent visas; estimates suggest that more than half of H-1B visa holders adjust status through the employment-based green card program (Jasso 2008; Mukhopadhyay and Oxborrow 2012), and more than 90 percent of employment-based green card recipients adjust status from a temporary visa in a typical year.

Three of the most important temporary foreign worker programs are the H-1B program for workers in specialty occupations, and the H-2A and H-2B programs for agricultural and nonagricultural seasonal workers, respectively. H-1B visas are issued for an initial period of three years, whereas H-2A and H-2B visas are valid for only one year. Figure 12-1 shows the number of visas issued in these categories during FY 1992–2011.

The H-1B and H-2B programs are numerically limited. The cap on H-1B visas has been binding every year since 2004, and the cap on H-2B visas was binding in five of the past ten years. These numerical limits are arbitrarily fixed and infrequently changed. They do not respond to changes in labor demand due to long-run economic growth or to the business cycle. More broadly, labor market conditions have no effect on the number of temporary or permanent employment-based visas available, nor on their price (fees); when times are good and the needs of U.S. businesses greatest, caps are not raised (nor are visa fees adjusted). Employers who need visas later in the year are unable to obtain them. At the high-skilled end of the labor market, this deprives the country of the tremendous contributions of highly educated immigrants. At the low-skilled end, this has often encouraged employers to turn to unauthorized workers or, when cost pressures have been high, to move production offshore to lower-wage countries.

These and other temporary worker programs also impose costly, cumbersome restrictions and regulations on employers and foreign workers. The H-2A program for seasonal agricultural workers, for example, requires that employers try to find U.S. workers before petitioning for foreign workers. Even after H-2A workers are hired, employers must continue to recruit U.S. workers and hire any qualified and eligible U.S. worker who applies for a job until half of the period of the H-2A work contract has elapsed. Employers must also provide housing and transportation to H-2A workers. These requirements increase employers’ cost of hiring H-2A
workers by 15–25 percent. In addition, such regulations create considerable compliance and monitoring costs for the federal government. Simplifying and streamlining such regulations is an important part of immigration reform, but there are other inefficiencies that should be rectified as well.

As explained by Orrenius and Zavodny (2010) and Peri (2012), one of the major failures of the current system is that it does a poor job of identifying and admitting workers whose skills bring the greatest value to the American economy. The basic reason for this failure is that visas are not allocated based on market forces or on any other method that reveals the value of prospective foreign workers and prioritizes admissions based on that value. For instance, H-1B and H-2B visas are allocated on a first-come, first-served basis or, in years of very high demand, via a lottery. In the latter case, employers who apply to admit several workers but whose applications are not all approved are not able to prioritize their most important hires: they can only hire the workers the government decided to process first.

Overall, this bureaucratic and cumbersome system discourages employers from hiring foreign workers, reduces economic growth, thereby slowing job creation for U.S. workers, and squanders potential government revenue. Firms are willing to pay the government in order to obtain more temporary visas, but this willingness is currently hard to quantify. Our proposal will reveal employers’ valuation of foreign workers, encourage their efficient allocation and selection, and produce additional government revenue.

The Proposal

The United States should replace its current system for allocating temporary worker visas with permit auctions for employers. It should begin with the H-1B and H-2 programs. The auction system could then be progressively extended over time to cover all employment-based temporary worker programs (L, O, P, and TN). This gradual implementation of
a market-based system provides an opportunity to work out any logistical challenges and to build public support before expanding the system more broadly.

The auctions would work as follows. Permits for the H-1B category would be sold in one auction, and permits for the H-2 categories would be merged and sold in another auction. Like the current visas, H-1B permits would be valid for three years, and H-2 permits for one year. The annual total number of permits available at quarterly, electronic auctions would initially equal the average annual number of temporary visas in those categories over the previous ten years. Employers would submit sealed bids for permits, which would be allocated from highest to lowest bid until the number of permits available is exhausted. To avoid the so-called winner’s curse, all bidders would pay the lowest accepted bid, which would signal the market-clearing price for that type of permit.

An employer who holds a permit would be allowed to hire a foreign worker. If the worker is abroad, she would receive a temporary visa that matches the type and duration of the permit. If the worker is already in this country, she would move from the current employer to the new employer. Employers would be able to resell permits in a secondary electronic market. Permit resale prices would reflect changes in labor demand. An increase in price would signal higher demand for foreign workers. Changes in prices should be used in determining the number of permits available at future auctions because they indicate changes in demand for temporary workers.

For the duration of their temporary visa, workers would be free to move across employers who hold a valid permit for that type of worker (H-1B or H-2). This portability, plus the easy availability of permits to firms in the secondary market, would ensure that foreign workers have the mobility across employers needed to secure fair treatment. At the same time, the cost of the permit, instead of cumbersome wage requirements, would create an incentive for employers to hire U.S.-born workers by serving as a tax on foreign labor.

This system would maintain the central role of employers in selecting foreign workers but add an important role for market forces in allocating visas. Employers with the greatest need for foreign workers, as indicated by their willingness to pay for permits, would be able to obtain permits to hire foreign workers. In addition, providing a simpler, more-transparent system for employers of less-skilled workers should reduce their need to hire unauthorized workers, ultimately reducing the incentive for undocumented immigration. Border enforcement and workplace enforcement tools, such as the E-Verify program and random workplace checks, would be needed in order for the auction system to work. We recommend that employers who participate in the auctions be required to participate in E-Verify; this is currently required of H-2A petitioners but not of H-1B or H-2B petitioners.

**BUDGET CONSEQUENCES**

The United States would initially auction 125,000 H-1B permits and the same number of H-2 permits each year. A lower-bound estimate of the auction price of H-1B permits is $5,000, and a more likely figure is close to $10,000. H-2 permits might sell for between $1,000 and $2,000. We suggest that all employers, both for-profit and nonprofit, be subject to the same rules, prices, and overall numerical limits. The federal government could then rebate a fraction of the permit price (possibly 50 percent) to nonprofit organizations that purchase H-1B permits, which currently account for about 30,000 H-1B issuances annually.

This would generate the following revenues:

- H-1B permit auctions would raise $550 million if all 125,000 permits sell for a price of $5,000 each, with 30,000 permits going to nonprofit organizations that are rebated one-half of the price. At a price of $10,000 each, H-1B permit auctions would raise $1.1 billion after rebates. Each $1,000 increase in the permit price at auction would generate another $110 million.

- H-2 permit auctions would raise $125 million if all 125,000 permits sell for a price of $1,000 each, or $250 million if sold at $2,000 each. Each $500 increase in the permit price at auction would generate another $62.5 million.

The revenue from the auctions would replace the fees currently charged for temporary foreign worker visas. The Department of Homeland Security (DHS) currently charges a base filing fee of $325, plus a $750 ($1,500) fee to small (large) for-profit employers, a $500 fraud prevention fee, and an optional $1,225 premium processing fee for H-1B petitions. There is also an additional $2,000 fee if H-1B or L-1 visa holders comprise more than 50 percent of a petitioner’s U.S. workforce. DHS charges $325 for H-2A and H-2B petitions, plus a $150 fraud prevention fee for H-2B petitions. H-1B employers also bear other costs, including fees for legal advice and the risk that if the foreign worker moves to another employer the initial employer will not recover any of its expenses. For H-2 programs, employers incur the costs of trying to recruit U.S. workers and hiring consultants and lawyers to help them navigate visa requirements and regulations. The fact that the employer can resell the permit at any time will help ensure employers’ willingness to participate in the auctions.

The federal government can increase employers’ willingness to participate in the auctions and hence generate more revenue.
by simplifying and streamlining the procedures that currently govern the programs. Creating a more efficient way than the current green card program for employers to sponsor skilled temporary foreign workers for permanent residence also would increase employers’ willingness to participate in the H-1B auctions.\(^6\) Reducing other requirements, such as those regarding recruiting U.S. workers and providing housing and transportation to foreign workers, would increase employers’ willingness to participate in the H-2 auction. As more employers participate, and permit prices rise, the government would need stricter worksite enforcement to ensure that potential H-2 employers do not turn to unauthorized workers. Stricter enforcement would increase program costs, whereas simplifying and streamlining the program rules would reduce costs.

**ECONOMIC EFFECTS**

Beyond generating additional revenue, the auctions would have several economic benefits that have an indirect positive budget impact. A permit auction, by ensuring that the most highly valued workers gain entry, would likely cause a shift toward temporary foreign workers who are relatively highly compensated, particularly in the H-1B visa category. An increase in average salaries paid to temporary foreign workers would increase federal income and payroll tax revenue. A more efficient, more transparent, and more flexible immigration system would help firms expand, contribute to more job creation in the United States, and slow the movement of operations abroad.\(^7\) Enabling companies to hire foreign workers when they are unable to find U.S. workers would help firms expand, creating and preserving other jobs in the United States. This would boost employment and tax revenues in the long run.

Auctions also would create more flexibility and the ability to respond to temporary shocks or long-run trends. When demand for temporary foreign workers is low, as measured by falling permit prices, the federal government could easily choose to auction fewer permits. This would cushion any adverse impact of immigration on U.S. workers. During times of rising demand, the government could increase the number of permits and keep their prices stable. This way, the federal government would earn more revenue from auctions when demand for permits rises. Keeping the permit price stable in periods of expansion would reduce employers’ incentive to turn to unauthorized workers. The federal government can even choose a simple rule to increase (decrease) the number of permits based on the past increase (decrease) in permit prices.

In addition to using permit auction revenues for budget relief, the government could redirect some of the income to communities with large shares of immigrants and to preparing U.S. natives for technology-intensive jobs. State and local governments bear most of the fiscal cost of immigration. Although temporary foreign workers impose little of these costs, redirecting auction revenues to immigrant-intensive areas would help build support for broader immigration reform. Subsidizing the education and training of U.S. natives in technology-intensive fields would help build the skilled workforce necessary for America’s economic future.

Finally, auctioning off permits to hire foreign workers would likely have a positive impact on U.S. workers relative to the current system. Auctions would lead to a better allocation of foreign workers, which would ultimately make firms more efficient and help create more jobs for U.S. workers. In addition, the auction price of the permit would constitute a protection for U.S. workers because it would ensure that employers would prefer to hire a U.S. worker over a foreign worker, given the same availability and productivity. Visa portability and the permit resale market, rather than cumbersome regulation, also would ensure that employers are not able to exploit foreign workers by paying them less than the market wage. This would benefit both immigrant and native workers.

**EXTENSIONS**

The auctions of H-1B and H-2 visas could be a stepping-stone toward a broader reform of immigration policy. Auctioning these visas would reveal the value of foreign workers to U.S. employers. Quantifying the revenue from permit auctions would also increase public acceptance of foreign workers and set the stage for the federal government and the public to see the benefits of moving to a system that increases the number of temporary and permanent employment-based visas. Extending the auction system to all employment-based temporary visas would raise considerably more revenue than the auctions of H-1B and H-2 visas described above.

A final area for reform concerns the population of unauthorized immigrants. More than 11 million unauthorized immigrants currently live in the United States (Passel and Cohn 2012). A large-scale program that requires applicants to pay back taxes and a fee greater than administrative costs in order to access a path to legal residence would be a significant one-time source of revenue to the Treasury. Moreover, bringing these immigrants out from the shadows would improve their own circumstances and those of their U.S.-born children, encouraging them to invest in human capital and improving their future earning ability. Doing so would have the ancillary benefit of increasing tax revenues and decreasing transfer payments in the long run.
Conclusion

The current U.S. immigration system is outdated, inflexible, and inefficient. Immigration policy imposes rigid and arbitrary quotas, fees, and other rules on temporary and permanent admissions. The result is a complex system that is costly to employers and potential immigrants alike, and that ultimately reduces efficiency and slows economic growth. A complete overhaul of the immigration system is needed and should include an important role for market forces. Market forces are the best way to identify the foreign workers who are most valued by employers and to introduce the flexibility needed to respond to changes in the demand for foreign workers.

In this proposal, we identify a crucial reform of temporary worker visas that could set the train of immigration reform in motion, increase immigration’s economic contributions, and boost government revenue. We propose replacing the current H-1B, H-2A, and H-2B programs with permit auctions. This would introduce market forces into the hidebound immigration system. Doing so not only would increase federal government revenue, but also would help ensure that employers are able to hire the foreign workers who make the greatest economic contributions. These auctions would set the stage for a broader reform of the immigration system that would include auctions of an increased number of temporary employment-based visas. Immigration reform has the potential to raise revenue, increase economic efficiency, and ultimately boost U.S. GDP and raise standards of living.
Endnotes

1. See, e.g., the recent proposal by Microsoft (2012), in which the company proposes to invest $10,000 for each extra H-1B visa allowed.

2. Folding these visas into the auction would increase the number of visas available for auction and hence government revenues, but would require capping their numbers, which are currently unlimited.

3. Our proposal would not increase the total number of temporary workers entering under these programs, at least initially.

4. Peri (2012) notes that a temporary foreign worker issued an H-1B visa currently costs employers about $10,000 in processing fees and legal advice. Microsoft (2012) recently suggested that the United States increase the number of H-1B visas by 20,000 and charge employers $10,000 per visa. For H-2 visas, consultants charge around $2,500 per employer. (One company that provides such consultancy is MASLabor; see http://www.maslabor.com/pages/masLeadership.html.)

5. The economic rationale for the rebate is that nonprofit institutions hiring H-1B visa workers are mainly universities and research centers that create positive externalities for the economy by generating innovation and scientific discovery. The government also initially could set aside a fixed number of permits for small businesses to ensure they are able to participate in the auctions, because small businesses may have greater difficulty than large corporations with the transition to auctions. Any unused permits set aside for small businesses would be reallocated to the regular auction.

6. Important changes include removing the 7 percent per country cap on numerically restricted green cards and linking the number of employment-based green cards available to the number of skilled temporary worker visas issued (in earlier years) in order to ensure that backlogs do not occur. The proposal here focuses on temporary worker visas, so we do not elaborate on potential changes to the employment-based green card program. See Orrenius and Zavodny (2010) and Peri (2012) for more details about reforms to the permanent visa system.

7. When Google, for example, is unable to get employment visas for people it wants to hire, it tries to hire them to work in one of its overseas offices (see Matt Richtel’s article in the New York Times on April 11, 2009, “Tech Recruiting Clashes with Immigration Rules”). Microsoft opened a software development center near Vancouver, Canada, for its foreign engineers who cannot get visas to work in the United States (see Bloomberg News’ article in the New York Times on July 7, 2007, “Today in Business”).

References


