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MORE H-1B VISAS, MORE AMERICAN JOBS, A BETTER ECONOMY

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American employers cannot find enough highly skilled workers to fill essential positions. There are not enough American workers with advanced skills in computer, engineering, and mathematical occupations to perform the work that many high-tech companies need. This shortage of skilled labor has forced many companies to outsource operations abroad.

Raising the cap on H-1B visas for skilled workers would allow American businesses to expand operations here in the United States, creating more jobs and higher wages for American workers. Increasing the H-1B cap would also raise significant tax revenue from highly skilled and highly paid workers.

Heritage Foundation calculations show that raising the cap to 195,000 visas would increase revenues by a total of nearly \$69 billion over eight years. Unlike tax increases, this would be an economically beneficial source of revenue for PAYGO offsets. (The pay-as-you-go rule mandates that any new congressional spending or tax changes must not add to the federal deficit; any new costs must be offset with money from existing funds.)

Congress should therefore act now to raise the cap on visas for highly skilled workers.

H-1B VISAS FOR SKILLED WORKERS

Congress created temporary H-1B visas for nonimmigrant workers to prevent a shortage of skilled workers from hurting the economy. This visa allows foreigners with advanced skills to work in the United States for three years, and it can be renewed for another three years. After that, these workers must leave the country.

Congress permits U.S. Citizenship and Immigration Services (USCIS), an agency within the U.S. Department of Homeland Security, to issue 65,000 H-1B visas a year to workers with at least a bachelor's degree and an additional 20,000 to workers with at least a master's degree. This represents far fewer people than American high-tech employers need. USCIS received 163,000 applications for these limited visas within a week of accepting applications for FY 2009² and reached the cap within hours of accepting applications for FY 2008.

SKILLED-WORKER SHORTAGE

The job market remains tight in highly skilled occupations despite the weakening economy. There are simply not enough Americans with the advanced mathematical, computer, and engineering skills that employers in these fields need. Table 1 shows the occupations of employees sponsored for H-1B visas and the national unemployment rate for those occupations.

Over half of all companies seeking H-1B workers need them for computer and mathematical occupations, a job sector with unemployment just above 2 percent—less than half the national average. The next-largest occupations for which employ-

^{1.} Employees of universities are also exempt from the annual cap; H-1B visa renewal does not count against the cap.

^{2.} U.S. Citizenship and Immigration Services, "USCIS Releases Preliminary Number of FY 2009 H-1B Cap Filings," press release, April 10, 2008, at http://www.uscis.gov/files/article/USCIS%20Update_H1B_Preliminary%20Count1_10Apr08.pdf.

^{3.} U.S. Citizenship and Immigration Services, "USCIS Reaches FY 2008 H-1B Cap," USCIS Update, April 3, 2007, at www.immigration.com/newsletter/H-1B%202007%20Quota.pdf.

ers need skilled H-1B workers are architecture and engineering, which have an unemployment rate of 1.8 percent.

Economists estimate that the structural rate of unemployment in the United States is between 4 percent and 6 percent. The unemployment that exists at this rate is the natural unemployment that occurs as workers move between jobs and industries. In occupations with only 2 percent unemployment, there is virtually no one who is unemployed involuntarily—which means that raising the H-1B cap will not cost Americans any jobs. Virtually every American who wants a job in the high-tech sector has one.

H-1B Applicants by Occupation and Unemployment Rate

Occupation	Percent of Applicants	Unemployment Rate
Computer and Mathematical	54.6%	2.1%
Architecture and Engineering	12.0%	1.6%
Business and Financial Operations	10.5%	2.4%
Life, Physical, and Social Science	6.1%	2.0%
Management	4.4%	1.8%
Healthcare Practitioner and Technical	4.3%	1.3%
All Other	8.2%	n/a
National Average		4.6%

Note: This table excludes educational occupations because employees of higher educational institutions are exempt from the H-IB visa cap.

Source: Heritage Foundation calculations based on data from the U.S. Department of Labor. See Appendix A for details.

Table I • CDA08-01 Theritage.org

National

SKILL SHORTAGE CAUSES COMPANIES TO EXPAND OVERSEAS

Without enough skilled workers at home, many American companies must either expand outside the U.S. or not expand at all. Microsoft, for example, recently opened an office in Vancouver, British Columbia, so that it could employ 150 foreign engineers that the United States would not admit. The shortage of skilled workers here at home prevented those jobs from even being created in the U.S.—along with the additional jobs that accompany those of the skilled workers.

A recent survey of high-tech companies found that 65 percent had expanded their hiring outside the United States because of the shortage of H-1B workers. Restricting H-1B visas reduces economic growth.

LIFTING THE CAP CREATES AMERICAN JOBS

Welcoming more foreigners with advanced skills into the U.S. would create more jobs for Americans. H-1B visa holders are often key employees whose skills are necessary for companies to grow.

Consider a software firm that needs an additional software engineer in order to expand its product line. If the company cannot hire a software engineer, not only will it be unable to use that person's highly specialized skills to expand its product line, but the shortage of skilled workers will prevent the company from hiring the computer programmers, sales associates, and technical support staff that also would have been needed in that division.

This is not just a theoretical problem. Research shows that technology companies hire five new workers for each H-1B visa for which they apply. On average, the skills of each highly skilled H-1B worker support the jobs four Americans. Keeping the H-1B cap at 65,000 comes at the expense of hundreds of thousands of American jobs.

HIGHER WAGES AND GREATER EQUALITY

Many American high-tech workers oppose raising the H-1B cap, fearing that increasing the supply of skilled workers could reduce their wages. When companies cannot hire as many highly skilled workers as they need, competition drives wages up, so

^{4.} Organisation for Economic Co-operation and Development, "Revised OECD Measures of Structural Unemployment," *OECD Outlook* No. 68, December 2000, at http://www.oecd.org/dataoecd/44/50/2086120.pdf.

^{5.} Peter Whoriskey, "Skilled-Worker Visa Demand Expected To Far Exceed Supply," *The Washington Post*, April 1, 2008, p. D3.

^{6.} National Foundation for American Policy, "H-1B Visas and Job Creation," *Policy Brief*, March 2008, p. 8, at http://www.nfap.com/pdf/080311h1b.pdf.

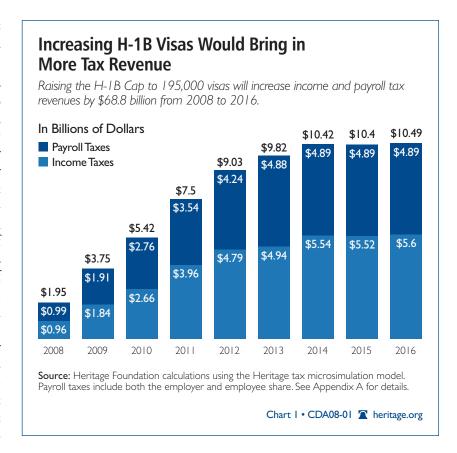
^{7.} Ibid.

raising the visa cap may indeed cause the wages of some Americans to fall or stagnate.

Why, then, should Americans favor higher numbers of H-1B employees? Because raising the visa cap would increase wages for many more Americans than would see their wages fall. Since each H-1B worker creates four new American jobs, the demand for such somewhat lessskilled but necessary workers would raise their wages. The number of workers in the economy whose skills complement the advanced skills of H-1B workers is far greater than the number of those who compete with them for jobs. Raising the H-1B cap would increase the demand for the labor of, and thus raise wages for, hundreds of thousands of Americans who are less readily identifiable but no less real than the software engineers who compete with H-1B workers.

Some policymakers are concerned about income inequality. The major cause of growing inequality over the past generation has been the market response to the shortage of skilled workers. Skill levels have not increased as quickly as new technologies have increased the demand for workers with advanced skills. Businesses competing for the limited supply of these skilled workers have driven their wages up sharply. Consequently, the wages of highly skilled workers have risen much faster than wages overall, resulting in greater inequality.

Policymakers should be aware that increasing the H-1B cap would increase the supply of highly skilled workers as well as the demand for lessskilled workers—thereby reducing the wage differential. The greater supply of highly skilled workers



would mean that fewer business resources would go toward bidding up wages, slowing wage growth at the top. The greater demand for workers with complementary skills would *raise* wages for employees whose skills are less advanced than those of H-1B workers.

MORE TAX REVENUES

Raising the H-1B cap would also increase tax revenues significantly. H-1B visa holders earn high wages—the average H-1B worker earned \$71,000 in 2007—and pay substantial taxes on those earnings. 9

Chart 1 shows estimates from The Heritage Foundation's tax model of the total tax revenue ¹⁰ the government would receive if Congress increased the H-1B cap to 195,000 workers. ¹¹ This is a conservative estimate of potential new revenue, consid-

^{8.} See David Autor, Lawrence Katz, and Melissa Kearney, "Trends in U.S. Wage Inequality: Revising the Revisionists," Review of Economics and Statistics, forthcoming in 2008, at http://www.economics.harvard.edu/faculty/katz/files/AKK-ReStatRevision.pdf; Claudia Goldin and Lawrence Katz, "Long-Run Changes in the Wage Structure: Narrowing, Widening, Polarizing," Brookings Institution, Brookings Papers on Economic Activity, September 2007, at http://www.economics.harvard.edu/faculty/goldin/files/GoldinKatz_Brookings.pdf; Claudia Goldin and Lawrence Katz, "The Race between Education and Technology: The Evolution of U.S. Educational Wage Differentials, 1890 to 2005," National Bureau of Economic Research Working Paper No. 12984, March 2007, at http://www.nber.org/papers/w12984.

^{9.} Based on data from 2007 Labor Condition Applications filed with the Department of Labor. For details, see Appendix B.

^{10.} See Appendix B for details. This includes income taxes and both the employee and employer share of the payroll tax.

ering that it does not account for increased taxes from the higher wages of workers whose skills complement those of the H-1B workers.

It should be noted that increasing the cap to 195,000 visas does not guarantee 130,000 new workers. In some years, all of the visas will be used; in others, the cap will never be reached. For our estimates, we used a conservative assumption of an additional 100,000 workers each year. Our inhouse tax model projects revenue from these new workers.

In the first year, the government would collect nearly \$2 billion in added tax revenue. For the next several years, the annual revenue raised would continue to increase as many current workers remain and new additional workers take advantage of the program. Annual tax revenues would rise by nearly \$10 billion in 2013. Between 2008 and 2016, the government would collect \$36 billion in income taxes and \$33 billion in payroll taxes—a total of \$69 billion over eight years.

This additional revenue could be used to offset the costs of an economic stimulus package, or any other new program, or to reduce the deficit.

REVENUE WITHOUT HARM

Congress must now comply with PAYGO rules, so finding sources of revenue to cover any program expansion is critical. New taxes from H-1B workers provide a better source of revenue for PAYGO purposes or for reducing the deficit than is provided by tax hikes. Raising taxes in a time of economic weakness would be counterproductive because higher taxes harm the economy.

All taxes, by definition, cause economic inefficiencies, ¹³ but bringing in taxpayers from other countries avoids the economic costs of raising tax rates. The \$69 billion in additional revenue essentially comes from the home countries of these workers, as they now pay American taxes instead of paying taxes to their own governments.

New workers are a boon to the economy, not a cost. Their skills are desired by American compa-

nies, and these companies cannot grow without workers to fill these positions. These workers increase the productivity of the company, allowing it to expand, *and* they pay taxes on the income they earn. Unlike revenues from tax hikes, this additional tax revenue comes at no cost to American workers. Rather than depress productivity and economic growth by keeping the H-1B cap low, Congress should accept these willing workers and the taxes they pay.

CONCLUSION

The current restrictions on employing highly skilled foreign workers are hurting America's economy. Many occupations requiring workers with advanced skills are at full employment. There are not enough domestic workers with advanced skills available to fill the positions that businesses need to have filled. Many companies have been forced to expand operations overseas instead of in the United States because of the shortage of highly skilled workers for key positions.

Congress should raise the H-1B cap to let businesses expand operations in America and to create jobs for Americans. Each highly skilled H-1B employee at a high-tech company supports the jobs of four Americans. The increased demand for workers with complementary skills both raises wages and reduces inequality.

Raising the H-1B cap will also increase tax revenue substantially. Congress should be extremely reluctant to raise taxes, especially during a time of economic weakness. Increasing the H-1B cap would provide revenue needed to comply with PAYGO requirements that will not hinder economic growth. Conservative estimates show that raising the annual cap to 195,000 visas would increase tax revenues by \$69 billion between 2008 and 2016.

Congress should therefore act now to lift the cap on H-1B visas.

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^{11.} Raising the cap to 195,000 workers does not necessarily mean that 195,000 workers will enter the country every year under the program. For details of the modeling, see Appendix B.

^{12.} For more information on saturation of visa quotas, see Appendix C.

^{13.} Joel Slemrod, "Optimal Taxation and Optimal Tax Systems," The Journal of Economic Perspectives, Vol. 4, No. 1 (Winter 1990), pp. 157–178, at http://www.jstor.org/stable/pdfplus/1942838.pdf. For a review of the evidence regarding inefficiency of public-sector spending, see Dennis Mueller, *Public Choice III* (Cambridge: Cambridge University Press, 2003).

APPENDIX A OCCUPATIONAL UNEMPLOYMENT RATES

The unemployment rates for Table 1 were obtained from the Department of Labor, Bureau of Labor Statistics, Household Data Annual Averages, Table 25, "Unemployment Rate by Occupation and Sex," at ftp://ftp.bls.gov/pub/special.requests/lf/aat25.txt. Unemployment rates by detailed occupation are available as annual averages, and the figures refer to the average unemployment rate by occupation in 2007.

Data on the occupations for which employers sponsored H-1B applicants came from analysis of Labor Condition Applications (LCA) that employers must file with the Department of Labor in order to apply for an H-1B worker. Information on LCA forms includes the expected length of employment, wages that the employer will pay, and the employees' occupations. These data were obtained from the Department of Labor, Office of Foreign Labor

Certification, Foreign Labor Certification Data Center Online Wage Library, 2007 H-1B Efile Data, at http://www.flcdatacenter.com/CaseH1B.aspx.

LCA occupational data were aggregated up to the level provided by the Bureau of Labor Statistics in order to facilitate comparison with occupational unemployment rates. Workers in architecture and engineering occupations are those with LCA occupation codes 001–017 and 019. Workers in computer and mathematical occupations have LCA codes 020 and 030–039. Workers in life, physical, and social science occupations have LCA codes 021–025 and 040–059. Health care practitioners and technical occupations have LCA codes 070–074 and 078. Business and financial operations occupations have LCA codes 160–169. Management occupations have LCA codes 180–189.

APPENDIX B HERITAGE TAX MICROSIMULATION MODEL

The Heritage Foundation's tax microsimulation model was used to estimate the revenue that additional workers under the expanded H-1B visa program would generate. The microsimulation model was run to estimate taxes paid by workers, adjusting the model to disallow certain kinds of filing not available to H-1B visa recipients, such as Schedule C business filing. Effective tax rates and revenue from different income sources were then determined for the expected number of workers in different income classes according to the known current distribution of H-1B worker salaries.

The Heritage Foundation's microsimulation model of individual income tax returns is calibrated to Congressional Budget Office (CBO) baseline projections.

The microsimulation model consists of three primary components: the core base-year data; a federal income tax and payroll tax calculator; and an optimizing routine that ages (extrapolates) the core base-year data. The first component consists of individual tax return data and demographic data in

the base year. The second component reads a data file and replicates the process of calculating individual income and payroll taxes in the base year and future years. The third component ages the base-year data to reflect projected changes not only in key demographic and economic aggregates, but also in the distribution of income.

The estimated taxes paid by visa workers were calculated by adjusting the model to disallow certain kinds of filing not available to H-1B visa recipients, such as Schedule C business filing. ¹⁴ Revenue from regular income tax and from payroll taxes was then determined for the expected number of workers in different income classes according to the known distribution of H1B worker salaries. Payroll tax revenue was doubled to reflect the employer as well as the employee portion.

For more information on our microsimulation model, please contact the Center for Data Analysis at The Heritage Foundation.

^{14.} H-1B visa holders are not permitted to be self-employed. An H-1B worker may own a business and receive business income but may not work at the business himself. Given the rarity of an H-1B worker's owning a business for which he does not work while working full-time for another employer, we exclude Schedule C filings in our model.

APPENDIX C INCOME DISTRIBUTION OF H-1B WORKERS

Data on the distribution of income for H-1B workers come from the same 2007 Labor Condition Applications filed with the Department of Labor that were used to generate Table 1 and are discussed in Appendix A. Employers wishing to hire H-1B workers must file LCAs that report how much they intend to pay H-1B employees. The wages of college and university employees (LCA occupation code 090) were not included in this estimated distribution because workers in these fields are not subject to the H-1B cap.

Appendix Table A compares the distribution of wages from the 2007 LCA data used in the tax model calculations to data from the most recent Department of Homeland Security report examining the wages of H-1B workers. Allowing for the effects of inflation and changing labor-market conditions, the two are broadly similar, indicating that LCAs provide a reliable guide to the wages of workers who ultimately receive H-1B visas.

Comparison of 2003 H-1B Workers' Wages with 2007 LCA Data

Percentile	2003	2007
25th	\$39,083	\$48,000
50th	\$52,000	\$58,822
75th	\$72,000	\$76,300
Mean		\$70,766

Source: 2007 data from Heritage Foundation calculations using data from the U.S. Department of Labor: See Appendix B for details. 2003 data from U.S. Department of Homeland Security, Office of Immigration Statistics, "Characteristics of Speciality Occupation Workers (H-1B): Fiscal Year 2003," November 2004, p.17, Table 10, at http://www.uscis.gov/files/article/FY03H1BFn/CharRprt.pdf (April 29, 2008).

Appendix Table A • CDA08-01 Theritage.org

Increasing the cap to 195,000 visas does not mean that 130,000 new workers would necessarily enter the country each year. The number admitted will vary based on economic conditions and business needs. In 2002 and 2003, when the cap was at 195,000, businesses used only 80,000 visas because of the downturn in the high-tech industry following

the collapse of the dot-com bubble. ¹⁵ Congress lowered the cap to 65,000 visas after this occurred. If Congress raises the cap to 195,000 visas again, employers are sure to use all available visas in some years. In other years, the cap will not be reached.

To account for this, we assume that if Congress raises the cap to 195,000, an average of 165,000 H-1B workers will start working in the U.S. each year. These estimates are based on the conservative assumption that raising the cap by 130,000 visas results in an average of 100,000 workers starting work each year. Our model will understate projected tax revenues to the extent that businesses use more visas than this estimate projects.

To determine how long H-1B workers remain in the United States after being admitted, we used data on duration of employment provided in LCA forms. We assume that workers do not stay in the United States after their contract expires unless they are brought on for the full three years permissible under law, in which case they are likely to apply for extensions of their visas for an additional three years. If they are brought on for three years, we assume that they have the same probability of remaining with their employer in each subsequent year that they had of remaining with their employer from year two to year three. This is a conservative estimate of the number of taxpaying H-1B workers, as many of these contracts are probably extended, and many workers who leave their jobs probably find new jobs instead of leaving the country. We assume that all H-1B immigrants either leave the country after six years or make the transition to legal permanent resident status, displacing other immigrants who would have paid taxes. Thus, we estimate income-tax payments only for the first six years that an H-1B immigrant is in the country.

LCA data indicate that 92.5 percent of first-time H-1B employees are hired for more than one year. Of those who remain in the U.S. past one year, 92.1 percent remain with their employers for a full second year. Of those working here for two years, 91.1 percent have contracts lasting for three full years. After three years, employees must reapply for H-1B

^{15.} U.S. Citizenship and Immigration Services, "H-1B Petitions Received and Approved in FY 2003," CIS Fact Sheet, October 22, 2003, at http://www.immigration-lawyer-us.com/images/h1b-fact-sheet-102203.pdf.

visas; we do not have data differentiating their behavior after they first enter the country from their behavior after they renew their visas.

To determine how many H-1B workers remain in the country and pay taxes in the year following their admittance, we multiplied 100,000 by the year-one retention rate of 92.5 percent. For the third year, we multiplied these 92,500 remaining workers by the year-two retention rate of 92.1 percent. For their fourth year in the country and the two subsequent years, we multiplied the number of workers remaining in the previous year by the retention rate of 91.1 percent.