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H-1B Visa Workers: Lower-Wage Substitute, or Higher-Wage Complement

BY ROBERT D. ATKINSON | JUNE 9, 2010

Over the last decade U.S. policy makers have debated the issue of high skill immigration in general, and the H-1B visa program in particular. The H-1B visa program is a temporary work visa for high skill immigrants and is used extensively by the technology industry.

Defenders of the H-1B visa program argue that it is needed to help U.S. technology companies fill critical scientific and technical positions in the United States and enable companies to be more globally competitive. Opponents of the program, principally unions representing professional technical workers, argue that the H-1B program is used by companies as a way to lower the wages they have to pay to American workers and that additional H-1B visa slots come at the expense of American jobs. Largely because of the concerns raised by opponents, since 2004 Congress has limited H-1B visas to 65,000 per year (with an additional 20,000 for foreigners graduating from U.S. universities with a master's or higher degree.) It should be noted that each year since then the cap has been reached, with applications significantly outnumbering available slots.

Much of this debate was informed by anecdotes and arguments marshaled by both sides. Each side would provide what they considered to be compelling arguments about why the program was either critical to U.S. competitiveness or a corporate ploy to undermine American worker's wages. But until now, little objective analysis was available to inform the debate. However, a scholarly, peer reviewed study of the H-1B program and its impacts on the labor market published in May sheds new light on this debate. The study, "Are Foreign IT Workers Cheaper? U.S. Visa Policies and Compensation of Information Technology Professionals," was written by Sunil Mithas and Henry Lucas, of the Robert H. Smith School of Business and appeared in the May, 2010 issue of the journal *Management Science*.

In the study, Mithas and Lucas examine the largest segment of H-1B visa entrants, those taking jobs in IT occupations (which account for an estimated 60 percent of H-1B visas). There are close to 3.5 million IT jobs in the United States, and of these approximately 300,000 are in the H1-B category. The authors use salary surveys conducted from 2000 to 2005 of more than 50,000 IT professionals. Moreover, they use a number of variables such as education level, gender, size of the employer, years of experience to control for possible differences between immigrant and non-immigrant IT professionals.

In contrast to those who argue that H-1B visas are used as a way for companies to avoid paying higher wages to American citizens or permanent residents, the study in fact finds just the opposite. After controlling for differences, they find that IT professionals with an H-1B or other work visa earn on average 6.8 percent more

annually than IT professionals who have U.S. citizenship. When they add additional controls for the state in which the IT professionals work and for job titles, the premium declines, but is still significant at 2.6 percent. Moreover, they also note that H-1B visa IT workers earn less than foreign IT workers with a green card, who make 12.9 percent more than workers with U.S. citizenship. But in either case, their evidence suggests that at least for their sample, H-1B visa workers are not being used by U.S. firms as a way to undercut the wages of domestic workers.

While it is true that their sample size is relatively small relative to the entire population of IT workers and that there is a possibility that some lower wage IT workers are not fully represented in the sample, it does suggest that the reflective notion that H-1B visa workers are low-wage substitutes for does not appear to hold up. In fact, the authors' findings are in direct contrast to the claims of opponents that U.S. companies use H-1B visas to undercut the salaries of U.S. workers. In fact, the authors find that in years when Congress has expanded the number of visas available to companies, the wage premium for H-1B visa workers actually decreases. As they state, "the yearwise results on salary premium for foreign professionals do not provide support for the notion that firms are misusing U.S. work visa provisions to pay less to foreign professionals. The presence of a significant salary premium for H-1B and other visa holders in 2000 when the H-1B cap was 115,000, but insignificant premium in 2001 when the H-1B cap went up to 195,000, appears to vindicate the IT industry's plea for raising the H-1B cap to make it easier to hire foreign professionals to overcome 'tightness' in the IT labor market."

Why do H-1B visas not appear to negatively impact American IT workers? As the authors argue, the H-1B salary premium "lends support to foreign IT professionals as being complements rather than substitutes for American professionals." In other words, these high skill immigrants do not substitute for or directly compete with U.S. tech workers. Rather, they complement them so that hiring foreign workers increases demand for domestic workers. A major reason for this is that firms that are able to attract and retain talented workers from overseas may be able to be more competitive and expand more domestically, thus creating even more demand for American high-skilled technology workers. Foreign high-skilled workers may have unique skills that make the U.S. firm more competitive in global markets. These skills may be quite narrow (an H-1B visa worker with deep expertise in cybersecurity in health information technology, for example), or may be broader (IT skills supplemented by a knowledge of foreign business practices and linkages to global professional networks). Likewise, foreign IT workers may be more willing to travel internationally. If U.S. firms only competed nationally, then additional immigrants in one occupational category like IT professionals might in fact reduce wages for domestic workers in that occupation. But when the economy is global and the occupations in question are in firms that are in global markets (e.g., as opposed to occupations like nurses or truck drivers that serve the domestic market), then high-skill foreign immigrants can expand jobs and opportunity for American workers by making U.S. firms more competitive.

The authors go on to note that "policies that restrict the supply of highly skilled professionals for U.S. firms may force U.S. companies to hire professionals overseas, thus defeating the very rationale invoked for reactive policy responses." In other words, when Congress imposes strict limits on H-1B visas, well below levels of demand, they may actually be hurting not just overall U.S. technology job growth, but employment growth of U.S. citizens. This suggests that a key component of a robust national innovation and competitiveness policy needs to include a more liberal approach to high skill immigration so that America can attract and retain the world's best and brightest.