

**The H-1B Program and Labor Certification:  
Attestation and PERM  
January 18, 2008  
Executive Summary**

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The Sloan West Coast Program on Science and Engineering Workers held its first seminar January 18, 2008 at UC Davis to discuss the US Department of Labor's role in admitting foreign scientists and engineers as temporary workers and immigrants. The three major sessions dealt with the US Department of Labor's handling of employer attestations and certifying the need for immigrants to fill particular job vacancies and enforcing program rules, the impacts of foreign scientists and engineers on US workers, and the views of employer and worker advocates on the H-1B program.

The next seminar, to be held May 12, 2008 at Stanford, will focus on S & E workers and the IT business cycle, asking what happens to those who enter the industry during booms, such as in the late 1990s, when there is a bust that leads to layoffs? Do laid-off workers return to the IT industry when hiring resumes or stay in other jobs? Those interested in participating should contact Philip Martin at: [plmartin@ucdavis.edu](mailto:plmartin@ucdavis.edu)

There were three major conclusions of the January 18, 2008 seminar. First, the H-1B program is designed to provide easy access to foreign workers, and DOL administers the program to achieve this goal. As a result, there are only computer checks of employer-filed Labor Condition Applications, and over 99 percent are approved soon after being submitted via the internet. DOL's Wage and Hour Division can generally investigate an employer only after receiving a complaint from an "aggrieved party." There are relatively few complaints (173 in FY05), in part because H-1B foreign workers want to be sponsored by their US employers for immigrant visas and the law gives US workers few grounds for filing complaints.

DOL's Office of Foreign Labor Certification, which administers the H-1B program, sees its mission as helping employers to get the "international talent" they need. The OFLC has analysts to review employer requests for certification, which is required before immigrant visas can be issued to foreigners to fill particular jobs, but OFLC does not require the employer to submit the evidence that US workers who applied in response to required ads were not qualified to fill the job. About 85 percent of employer requests for immigrant visas are certified by DOL within 90 days. Employers may fix the issue that caused an initial denial, such as a substandard wage, and immediately resubmit the

application – DOL does not charge application fees for H-1B and immigrant visa requests.

Second, most H-1Bs are not the world's best and brightest, at least according to what employers say about the US jobs they are filling and the wages they are paid. Over half of H-1B jobs are classified by employers as Level 1, entry level, with close supervision required (Level 4 is fully competent). The actual or prevailing wages offered by US employers to fill these jobs are at the low end of the range for the occupation, which means \$50,000 rather than the median \$65,000 in computer-related occupations in FY06.<sup>1</sup> The prevailing wage is tied to the job, not to the worker who fills it, which means that if the job requires a BA, an H-1B worker with an MS degree who applies to fill it can be paid a BA-level wage.

There is disagreement about the lower-than-median wages paid to H-1B visa holders in computer-related occupations. Critics argue that employers prefer H-1B workers because they are cheaper. Most are young, and many work hard to encourage their employers to sponsor them for immigrant visas. Many H-1B visa holders have qualifications that could land them in Level 3 or 4 jobs, but wind up in Level 1 and 2 jobs if employers advertise BA required and MS a plus, which means that employers get highly qualified workers at lower wages.

Third, there are many more US residents with STEM (scientific, technological, engineering, and mathematical) educations, about 15 million, than are employed in STEM occupations, about five million. A higher share of foreign-born than US-born STEM graduates begin STEM careers, about 70 versus 50 percent in recent years, and the foreign-born stay in STEM occupations for 5-7 years before there is a significant decline, while there is an immediate out-migration of the US-born with STEM educations from STEM occupations. After a decade, only a third of those with STEM educations are in STEM jobs.

The H-1B program and the quest for immigrant visas may explain the slower out-migration from STEM occupations among foreign-born graduates. If the share of foreign-born STEM graduates in STEM jobs drops sharply after 5-7 years, one research question is what happens to the wages of H-1B workers as they make the transition to immigrant, that is, is there a penalty for being an H-1B worker compared to having freedom in the US labor market?

The larger question is why the STEM labor market appears to be a revolving door, and what this revolving door means for immigration and education policy.

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<sup>1</sup> The LCA wages may not be the actual wages paid by employers. However, LCA wages are very close to what employers actually report paying on their USCIS petitions.

One hypothesis is that the STEM labor market is cyclical, hiring entry-level young graduates with a very precise skill set during industry booms. Workers laid off during industry downturns may be reluctant to return to entry-level jobs when hiring resumes or not have the precise skill set requested. The combination of a cyclical industry, rapidly changing skill requirements, and significant immigration may give personal and societal investments in STEM education a short shelf life.<sup>2</sup>

Three major areas for further research were identified. First is the need for more detailed analysis of US employers applying for H-1B visas, separating e.g. job shops from outsourcing firms and from direct-hire US employers. It appears that most of the complaints investigated by DOL involve job shops, especially failure to pay the promised wage or misclassifying jobs, as when a worker with Level 3 qualifications is in a Level 2 job. The major penalty on US employers who fail to pay required or promised wages is a DOL order to pay the wages that should have been paid in the first place, a fact that explains why almost no employer appeals a DOL finding that there was an underpayment of wages. Research on incentives that could promote voluntary compliance with wage requirements and promises, and cross-check promised and actual wages, would be useful.

Second is the need for closer examination of jobs versus careers in S & E. There are many occupations that offer jobs rather than careers for most workers, from seasonal farm work to fast food to the military, giving them a revolving door quality. There are occupations that require training in which a majority of those with qualifications are not currently employed in the occupation, including nurses and teachers. STEM occupations require significant investments in education, and the STEM revolving door labor market raises questions that range from whether the education being provided is appropriate to whether there is age discrimination in a cyclical industry.

Third is the need for rethinking the debate over “S & E shortages” and the likely response to the market solution, higher wages. There is no government or economic definition of labor shortage, since wages adjust to bring supply and demand into balance. The major indicator of an “S & E shortage” is the fact that employers request more H-1B visas than are available. The shortage argument is bolstered by a variety of factoids, from higher math scores in homogeneous countries such as Singapore and Finland to the dominance of children of immigrants among winners of high-school science prizes. The distinct message

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<sup>2</sup> It was noted that engineering education used to require about 25 more university credits than other fields, often making engineering a five-year BS degree. The engineering curriculum was revamped in the late 1960s to be a four-year degree.

is that, without more H-1B or immigrant visas, the US will lose economic competitiveness.

What **would** happen if wages in S & E occupations were to rise to market clearing levels, or if the limited supply of H-1B visas were auctioned to US employers? Those who want to raise the H-1B cap say that employers would move the work to the workers, offshoring work now being done in the US, which could have negative multiplier effects on the economy. Those who believe that labor markets adjust to wage signals believe that lower-wage work might move offshore, but that most of the work that depends on the best and brightest would remain in the US.

Advocates of using immigration to bolster the ranks of S & E workers effectively endorse human capital mercantilism. The birth of nation-states in the 17<sup>th</sup> and 18<sup>th</sup> centuries was accompanied by the theory that a nation's wealth was embodied in its stock of gold, so that government policy should promote exports and limit imports. Human capital mercantilism argues that the US should maximize its stock of science and engineering knowledge by importing S & E workers, generating benefits that include patents, innovations, and start ups. Mercantilism was upended by Adam Smith's reminder that the goal of an economy is to maximize consumption rather than the stock of gold. The question is whether human capital mercantilism will speed up the productivity growth essential for 21<sup>st</sup> century wealth.