Senator Jeff Sessions
Questions for the Record
"Immigration Reforms Needed to Protect Skilled American Workers"
Professor Ron Hira and Professor Hal Salzman

--For q's 1-4, I've provided the summary of education and age that we have from our analyses; we haven't done analysis at the detail requested.

1. Based on publicly available information, please provide the following statistics as they pertain to H-1B recipients:

    a. The percentage of H-1B recipients who have a PhD, or equivalent.
    b. The percentage of H-1B recipients who have a Master's Degree, or equivalent.
    c. The percentage of H-1B recipients who have a Bachelor's Degree, or equivalent.
    d. The percentage of H-1B recipients who have less than a Bachelor's Degree.

The population of IT workers with a college degree (bachelor's and above) who started their jobs during 2011 is 483,692. Of these, the 160,755 guestworkers represent approximately a third of all new IT jobs (specifically, we estimate the number of guestworkers to range from a low of 28 percent to a high of 47 percent of the number of all IT jobs in 2011 that were filled by a college graduate hired in that year). One-third (34.3 percent) of workers who began their IT jobs in 2011 were under the age of 30; among guestworkers approved for H-1B visas for initial employment in 2011, the under-30 share was 57 percent (DHS 2012). An even higher share of F-1/OPT guestworkers are likely to be under the age of 30, since it is a benefit extended to recent college graduates. A more detailed analysis of the age distributions of U.S. workers beginning their IT jobs during 2011 and H-1B guestworkers approved for initial employment shows striking differences: more than half (52 percent) of new U.S. IT hires were over the age of 35, compared to only 18 percent of H-1B new workers. If we examine IT new hires and IT guestworkers under the age of 30—the population of entry-level and early-career workers—we find that the number of new guestworkers in 2012 was equal to nearly two-thirds (64%) the number of *all* new hires under age 30 in the United States (Figure 7).

2. Based on publicly available information, please provide the average age of an H-1B recipient.

3. Based on publicly available information, please provide the average number of years an H-1B recipient has been employed in the field prior to coming to the United States.

4. The Department of Labor's official Labor Force Participation Rate shows a steady decline in the number of Americans participating in the workforce over the last two decades. What impact, if any, has the H-1B program had on the Labor Force Participation Rate in the United States?

5. Can H-1B recipients start new businesses in the United States while in H-1B status?

    No, they are not permitted to be self-employed (so the argument that they start jobs is, obviously, not relevant for H-1B workers; and thus the studies making that argument re:

entrepreneurship, reference immigrants not guestworkers). Also see David Hart study that found:
"About 16% of the companies in the sample, for instance, number at least one immigrant entrepreneur among their founding teams, while about 77% of the immigrant entrepreneurs are U.S. citizens. Three multivariate analyses are carried out that compare high-impact, high-tech firms that count at least one immigrant in their founding teams with those that were founded by native-born entrepreneurs. It is found that the two groups of firms are similar with respect to economic and technological performance. Immigrant-founded firms are more likely to report that they have a strategic relationship with a foreign firm."
http://edq.sagepub.com/content/25/2/116.abstract

And, important to note, that the "immigrant-founded" firms are defined as those with at least one immigrant founder but may also have non-immigrant founders.

Additionally, they describe their findings:
http://www.brookings.edu/~/media/research/files/papers/2011/2/immigration-hart-acs/02_immigration_hart_acs

The vast majority of the immigrant entrepreneurs in our sample are strongly rooted in the U.S. [1] The average duration of their stay in this country is more than twenty-five years. Only about 25 percent were reported to have been in the U.S. for less than fifteen years. About 77 percent are U.S. citizens. They came to the U.S. from all over the world. Fifty-five countries of origin are represented in the sample.[2] India tops the list, accounting for about 16 percent of the founders. (See Table 1.)
The immigrant entrepreneurs are well-educated. Roughly 55 percent of them hold a masters degree or doctorate. Immigrant founders are more than twice as likely as native-born founders to hold a doctorate and are much more likely to hold a masters degree as well. One important reason for this difference is that many of the immigrant founders came to the U.S. for graduate education. Two-thirds of them received their highest degree in this country.
Like most successful entrepreneurs, the immigrant entrepreneurs in our sample had significant work experience. More than half of them had been in the U.S. at least ten years before founding their companies.

It is clear that the guestworker labor force is a very different profile from those who are immigrant entrepreneurs. Applying findings from these studies to guestworker programs is inaccurate.

6. Do the top H-1B employers generate large numbers of patents and new technologies?

   The best evidence on this (on H-1B rather than on "immigrants") has been conducted by Norm Matloff who finds that

7. Although testimony at the hearing indicates that the total number of H-1B recipients in the United States is unknown, can you please provide your best estimate as to how many H-1B recipients are currently in the United States?

Our calculations of the H-1B workforce in the key IT occupations is they comprise about 42% of the computer systems analyst and programmer workforce.

Table 1: U.S. and H-1B wages and workforce

	% Masters	Annual Average Salary	Number of Workers		
Domestic Workforce					
Computer scientists and systems analysts	25%	$79,895	234,239		
Computer programmers	21%	$79,185	225,292		
Average (combined occupations)	23%	$79,547	459,531		
H-1B workforce			**1st & 3rd Year Approvals**	**Estimated 6 Year Population**	**Est. Percent of Domestic IT Workforce**
Computer Sci/Systems Analyst & Programmers (combined)	45%	$75,873	78,113	195,283	42.5%

Source: DHS H-1B data; calculations by authors (Lowell and Salzman, forthcoming).

8. How does the H-1B program affect the racial and gender diversity of the STEM workforce?

Although we have not studied the impact, it would be reasonable to conclude that if a large share of the workforce and new hires are guestworkers it is reducing the opportunities for US workers and would particularly disadvantage those workers who are already struggling to enter this industry, namely women and underrepresented minorities (e.g., African-Americans, Latinos).
Importantly, a large supply of lower-cost workers, and offshoring of work, reduce the incentives for firms to devote the effort and potential cost to recruit and train workers who are outside of their typical hiring pool.

9. How would "stapling a green card" to the diploma of every foreign STEM student who graduates from a U.S. university affect the domestic workforce and student population?

Any expansion of foreign student entry into the U.S. labor market in IT is likely to exacerbate rather than remediate the current, negative impacts of large guestworker flows on the labor market. Further, and very importantly, it is likely to exacerbate what appears to be growth of a college and university business model of providing entry into the U.S. labor market that would otherwise be difficult to obtain; the provisions of the I-Squared legislation could expand the numbers of master's degree programs that are primarily offering degrees as the cost of obtaining a green card, easy entry into the U.S. labor market, and perhaps a moderate level of skill and education. The evidence suggests the impact would be depressing wages, as is currently reflected by the lack of a wage premium for H-1B master's degree holders and growth of degree programs that exclude U.S. students, either indirectly (as evident in the colleges with high concentration of F-visa graduates) or directly, as in the case of California State University-East Bay,

which stopped admitting state residents into its graduate programs and admitted almost exclusively international students into its computer science program (which is about 90 percent international students; Jaschik, 2012,Matloff, 2012). This was the University's explicitly stated strategy to increase revenue to make up for budget deficits by excluding state residents who would pay lower tuition rates than out-of-state and international students. As the chart above suggests, this appears to be a "global services" business model pursued by a number of colleges and universities across the country.

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