Beyond the High-Tech Bubble: 
The Changing Demand for H-1B Professionals

Contrary to popular myth, H-1B professionals represent only a tiny fraction of the total U.S. labor force and do not crowd out native-born workers in industries that are losing jobs. Rather, H-1B workers fill growing labor needs in a variety of fields that continue to add jobs, such as education and healthcare.

A persistent myth in the ongoing debate over H-1B visas for highly skilled foreign professionals is that H-1B recipients swelled the ranks of workers in high-tech industries, such as computer programming, even as these industries shed jobs in the wake of the 2001 recession. However, the available data indicate this is not the case. Not surprisingly, the demand for H-1B professionals in different industries has risen and fallen with the labor demands of those industries. The number of H-1B professionals in the high-tech sector fell dramatically after 2001, while a rising share of H-1B recipients filled growing labor needs in education and healthcare. Moreover, H-1B professionals comprise a small portion of the total labor force, even in those industries where they most commonly work.

Changing Labor Demands

As the U.S. economy lost jobs between 2001 and 2002, the total number of H-1B visa recipients dropped by 40.3 percent. However, the demand for H-1B professionals within particular industries was far more variable and reflected the differing fortunes of different sectors of the U.S. economy. Data from the Bureau of Labor Statistics and the Department of Homeland Security’s Office of Immigration Statistics reveal that, from 2001 to 2002, the number of H-1B professionals decreased in industries that suffered from declining employment, while increasing in industries that continued to add jobs. For instance, declines in overall employment were matched by decreasing numbers of H-1B professionals in computer systems design; architecture and engineering; management and technical consulting; scientific research and development; telecommunications; accounting and bookkeeping; securities and commodity contracts; and semiconductor and electronic component manufacturing. Conversely, growth in overall employment was mirrored by rising demand for H-1B professionals in colleges and universities, elementary and secondary schools, hospitals, and physicians’ offices.
From High Tech to Higher Education

As a result of these changing labor market demands, the occupational profile of H-1B visa holders changed dramatically. For example, as employment declined among computer programmers, the share of H-1B visas going to professionals in computer systems design dropped from 46.9 percent of the total in Fiscal Year (FY) 2001 to 28.2 percent in FY 2002 – corresponding to a 64 percent decline in the number of H-1B professionals employed in this field. At the same time, as overall employment in educational services continued to grow, the percentage of H-1B visa holders who worked in colleges, universities, and professional schools doubled from 5.1 to 10.2 percent of the total.4
A Sense of Perspective

Beyond the rapid changes in market demand for H-1B professionals, it also is important to keep in mind that H-1B workers represent a tiny portion of the U.S. labor force. From 2001 to 2002, the share of H-1B recipients in the U.S. workforce declined from roughly one-quarter of one percent to less than one-sixth of one percent. H-1B visa holders represented only 1.2 percent of professionals employed in colleges and universities in 2001 and 1.4 percent in 2002. Even in the field of computer systems design, long stereotyped as the domain of foreign professionals, the share of H-1B visa holders dropped from 10.9 percent in 2001 to 4.4 percent in 2002.

Conclusion

Contrary to popular misconceptions, the relatively small numbers of H-1B professionals in the U.S. labor force do not crowd out native-born workers in industries that are losing jobs. Rather, as logic would suggest, the demand for H-1B workers in any particular industry varies according to the labor needs of that industry. In the high-tech sector, demand plummeted for workers, be they H-1B or native-born, after 2001. But in industries that continued to grow, such as education and healthcare, the H-1B program continued to provide a vital source of needed talent and expertise.

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Endnotes

4 ibid.