

**EMPLOYERS OF FOREIGN TEMPORARY WORKERS (H-1Bs)  
IN INFORMATION TECHNOLOGY\***

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by

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## ABSTRACT

Last year the United States admitted 137,000 temporary foreign workers on the Specialty H-1B visa. Little has been known until recently about the characteristics of these workers, and nothing has been known about their employers. This paper describes the characteristics of the leading or “top” 100 employers of H-1Bs by marrying the company names provided by the Immigration and Naturalization Service with data obtained from Dun and Bradstreet’s U.S. Marketing Lists. We find that these top users of H-1Bs are not typical of the U.S. economy or the information technology industry in particular.

- 80% of these top users are in the information technology industries.
- Top IT users are large companies, compared to the average, small IT company:
  - they employ a significantly large number of employees,
  - they have a large volume of annual sales.
- Top IT users are found disproportionately in California and New Jersey, compared to the average IT company that is found in California, Texas, or New York:
  - over one-fifth are located in New Jersey,
  - over one-tenth are located in Massachusetts.
- Top IT users are predominantly dominated by a single ethnicity, compared to the average IT company that draws primarily on European, as well as Asian surnamed CEOs and top management:
  - nearly two-thirds of CEOs have South Asian surnames.

## **EMPLOYERS OF FOREIGN TEMPORARY WORKERS (H-1Bs) IN INFORMATION TECHNOLOGY**

The New Economy, this lengthy period of recent economic growth, is fueled largely by the rapid development of the information technology (IT) sector. Although making up only 8 percent of GDP, the IT sector generated 35 percent of U.S. productivity growth from 1995 to 1998 (DOC 1999). In turn, the IT sector is fueled by many things, far too many for this paper to address: but certainly the supply of foreign scientists and engineers ranks among one of the more significant advantages enjoyed by the IT industry. From the innovators and entrepreneurs of Silicon Valley, to the programmers hammering out code, foreign workers are widely recognized for their contributions.

Employers have been particularly keen to hire foreign workers who use one of a handful of visas that permit them to work in the United States. The so-called temporary Specialty “H-1B” visa has been one of the most significant sources of foreign workers since the upsurge in IT in the mid-1990s. An average of 77,000 H-1Bs have been issued yearly between 1995 and the year 2000; during which time the core IT workforce grew from about 1.5 to 2.5 million. On average, new H-1B visa workers contributed about one-quarter of year-to-year growth of the core IT workforce.<sup>1</sup> Clearly, these workers are in demand.

Surprisingly little is known about the H-1B workforce, but even less is known about the characteristics of their employers. We have already shown our main card—though it will surprise few observers of today’s policy debates—the H-1B workforce is most in demand by IT employers. A recent survey of new H-1Bs finds that 53.3 percent are employed in core IT occupations, and another 3.4 are hired in computer-related occupations (INS 2000a). But other than this fact, nothing is known about whether or not IT employers are large or small, whether or not they specialize in some particular service or manufacture,

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<sup>1</sup> Estimates made by the author, see the following for relevant components of the estimate (Ellis and Lowell 1999; Lowell 2000; INS 2000a).

whether or not they are found in the same locations as other employers, and so on. Are they at all typical of employers at large?

Answers to these questions about employer characteristics have ramifications beyond the obviously intriguing theoretical speculations. For example, Congress is considering raising the fee paid by employers to obtain H-1B workers, from as little as \$500 to as much as \$3,000 or more. These costs would be more burdensome to small employers, given that employers already pay immigration lawyers at least \$500 to \$1,500 to do the paperwork for getting an H-1B visa. In addition, there are the usual head hunting and human resource costs, and the extra costs often incurred in helping foreign workers find housing, transportation, etc. If H-1Bs are a key supply of labor, high fees could well create an uneven playing ground for small companies—especially if small companies had a predilection for hiring H-1Bs.

This paper addresses the lack of knowledge about the employers of H-1Bs. Our sample, as will be discussed below, is a good but limited one. It best describes the most frequent or “top” users of H-1Bs, not the large number of employers who may infrequently use the foreign H-1B worker to perform a particularly pressing task. At the same time, this is both a limitation and strength. While our findings do not represent “the average” employer of H-1Bs, they certainly capture the essence of “the typical” employer, e.g., the subset of employers who are known to hire a large share of H-1Bs and who recreate demand for H-1Bs year after year. In this sense, this analysis is a strong foundation for making general observations and for further research.

The first section of this paper describes in some detail the employer/worker “H-1B petitions” data that serve as our sample of companies, and the private-sector data on company characteristics that we marry to this sample. We find that these top users of H-1Bs are predominantly in the IT industry. We then go on to describe, for the IT industries alone, the state and metropolitan locations of these companies, the number of employees (size) and sales of the companies, and the likely-ethnicity of the companies’ Chief Executive Officers. These are essentially all the readily available characteristics

that we were able to obtain that have to do with the structural attributes of companies that hire H-1Bs.

## **PETITIONS DATA ON TOP EMPLOYERS OF H-1B WORKERS**

Our analysis draws upon special government data releases on H-1B employers and marries their company names to a private-sector database that has all U.S. companies. The resulting sample is representative of a small number of H-1B employers who, nonetheless, employ a very high proportion of all H-1Bs in the country. The characteristics we discuss are limited to those available on the proprietary Dunn and Bradstreet database.

Employers obtain the H-1B worker after (a) first receiving approval on a labor condition application (LCA) with the U.S. Department of Labor (DOL); and after (b) petitioning and receiving approval from the Immigration and Naturalization Service. This is not the place to describe all the steps involved, suffice it to say that the employer “attests” on the LCA that the *job(s)* they seek to fill will meet a number of conditions that protect the wages and working conditions of domestic workers. The INS’s subsequent approval of the employer’s petition for a *worker* requires that the named individual is qualified. The INS’s petition data includes the names of employers who ultimately hire foreign H-1B workers. Unfortunately, other than the special data releases used in this analysis, the INS petitions data is problematic and has not been publically available.

In 1998, the INS provided two lists of U.S. companies ranked according to the number of petitions for H-1B workers each company made, e.g., the “Top 20” and the “Top 100” list.<sup>2</sup> The Top 20 list reported the percent of all H-1Bs who were hired that year in the employ of each company on the list. Critics quickly noted that the percentages implied

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<sup>2</sup>The Top 20 list includes companies whose petitions were filed and approved in fiscal year 1998. The Top 100 list includes companies with petitions approved from the first half of fiscal year 1998, which had been filed in fiscal year 1998 or earlier. See Appendix Table 2 for a the companies in the top 20 listing.

wildly exceeded what seemed likely.<sup>3</sup> On the other hand, while ultimately conceding an error in the calculation of the percentages—they were too large as the wrong denominator was used—the INS Statistics Branch reports that the Top 20 list; nonetheless, accurately represents the biggest users of H-1Bs. The Top 100 list has proved to be sound.

In order to say something about these companies we next turned to data obtained from Dun and Bradstreet's (D&B) U.S. Marketing Lists. It would be very useful if the INS petitions data included other than the company name and location, but they do not. Although there are several duplicates between the Top 100 and the Top 20 lists, those companies appearing on the Top 20 List but not the Top 100 List have been added, provided there was a corresponding record in the D&B database. The goal has; therefore, been inclusion of as many companies on both lists as possible, as well as the inclusion of one and only one D&B record for each company on the INS lists. The result is a sample of 80 company records that refers to 71 individual companies.

The first difficulty we encountered using the INS data concerns a small number of “double entries” on the Top 100 List. Some companies are listed more than once under the same address. This could refer to multiple petitioners within the same corporation (for example, a branch and a headquarters office applying separately). Nonetheless, in order to avoid counting some petitioners disproportionately, each individual company on the Top 100 list is treated only once in our sample.

For some of the companies there was no record in the D&B database. For other companies, there was a record match for the company name, city, and zip code indicated on the Top 100 List, although the street address did not correspond with the records returned from the D&B database. We considered this a close enough match for inclusion in our sample. For still other companies, there were multiple records returned from the D&B database. This required a best-judgement adjudication on our part concerning

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<sup>3</sup> The reported percentages imply that these 20 companies employed two-thirds of all H-1Bs that year. Assuming a cap of 65,000 the percentages are easily converted to numbers hired, but when the companies were contacted the H-1B numbers exceeded what the companies said they had hired in the past year (personal communication, Renée Winsky of the Information Technology Association of America).

which records to include in our sample. In particular, we took account of the number of employees at each site relative to the number of petitions lodged and the principal areas of activity at each site to determine the most suitable records for inclusion in the sample.

In some cases, we determined that a branch location returned by D&B data most closely corresponded with a company name and address contained on one of the INS lists.

Because the D&B U.S. Marketing Lists does not include sales records of branch locations, we inserted a record for a headquarters location to obtain information on that company's sales. We have been careful not to include those headquarters records in any other determinations, including those based on the primary Standard Industrial Code (SIC), on the number of employees, and on geographic location of the petitioner.

Dun and Bradstreet's U.S. Marketing Lists provides data on specific industries using the Commerce Department's Standard Industrial Code (SIC). From the individual company profiles, we were able to obtain an aggregate list of 18 primary SICs. Using these codes, U.S. Marketing Lists returned data on annual sales and numbers of employees for each industry. These data have been compared with corresponding data for each company in that particular industry.

## **INDUSTRY PROFILES**

The industry profile of the INS's top H-1B companies clearly demonstrates the domination of information technology companies as key users of the H-1B program. There are two topics that emerge from this analysis. Importantly, what more can we learn from the types of industries in terms of their economic function? This is, of course, one of the key purposes of this particular analysis. And secondly, what can we infer about the relationship between H-1B occupational data and industry data?

**Key Industry Groupings.** As Figure 1 shows, the INS's top H-1B companies fall into 18 industrial four-digit categories, of these, 10 are in the IT sector. Fully 80 percent of the INS's top H-1B companies are classified as IT industries, the balance being non-IT. We

can further classify the proportion of the companies that fall into broader industrial sectors (e.g., collapse the 18 four-digit categories). Among the non-IT companies there is no large, single sector but there are clear lines of business: 7 percent of the top H-1B firms are in business/management consulting, another 4 percent are in executive/temporary placement services, and nearly 6 percent are in accounting/engineering services.

— FIGURE 1 ABOUT HERE —

Using the U.S. Department of Commerce’s (DOC) broad definition of the “emerging digital economy,” we can place the INS companies within IT industry classifications. The DOC identifies four super categories of information technology producing industries: hardware, software/service, communications service, and communications equipment industries (DOC 1999).<sup>4</sup> Software/Service industries dominate the INS top users with some 76 percent of all companies falling into this broad sector, the remaining 4 percent of companies being split between hardware and communication services. Not all of the software/service industries necessarily involve programming jobs, but it is likely that many are programming jobs with the rest falling into arenas such as LAN construction and management, customer support, and other such jobs. Perhaps, the IT hardware industries requires fewer workers generally being less labor intensive, and perhaps the domestic supply of these types of engineers is more plentiful.

**Industry and Occupation.** Although a bit tangential for the general reader, there are some interesting insights to be gleaned from considering the relationship between H-1B data on industry and occupation. How well does occupation inform us about industry, and what does divergence between the two imply?

Until very recently our only insight into the composition of H-1B workers came from the Labor Department’s LCA data that captures information only at the stage of clearance prior to the actual employment of an H-1B. Those records indicate that 52 percent of the

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<sup>4</sup>There are 30 four-digit industries within the four sectors.

jobs that employers seek to fill are in computer-related and information technology occupations, another 24 percent are therapists, and the balance of the occupations have no more than 1-4 percent of the total each (DOL 1999; see also Lowell 1999b).

Interestingly, two recent INS reports based on petitions data find a corresponding 54 percent of H-1Bs are actually hired in computer-related and information technology occupations, with the balance having no more than 1-4 percent of the total (INS 2000a, 2000b).<sup>5</sup>

Yet, the data here on the INS's top H-1B employers indicates that fully 80 percent are in the IT *industry*. Of course, occupations do not map perfectly to industries, but given the way in which the H-1B occupations cluster one would expect a similar and parallel clustering of industries. Admittedly, it is possible that the divergence here may be because of the nature of the sample of "top H-1B employers," e.g., a fuller "random" sample of petitions might generate a set of industries that is closer to the occupational data.

But it is also possible that certain industries are more motivated or successful in following up on an approved job LCA with a petition for a foreign worker. Clearly, the information technology industry is successful in hiring IT workers. In contrast, the INS petition's data shows that the medical field is not as successful in hiring therapists given the relative number of LCAs approved by the Labor Department. Twenty-four percent of LCAs filed with Labor were for therapists, but the INS reports that only 1 percent of H-1Bs take therapist occupations, and our analysis of top H-1B industries finds none were in the medical field.<sup>6</sup>

More research will have to be done in order to tease out the relationship between occupations and industry. Yet another explanation may be that IT firms are hiring not

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<sup>5</sup> Both sets of data are for fiscal year 1999.

<sup>6</sup> Just why the IT companies are more successful in converting their initial DOL approval into an actual petition for an H-1B worker is uncertain. It may reflect relatively greater demand pressures in IT. Then again, the rapid growth in this sector may lend an edge to the growing human resource departments in fledgling IT companies over slower growing non-IT companies so their success is a simple by-product of

just foreign H-1B workers with IT credentials, but various engineers, accountants, or managers as well. Such an analysis goes beyond what we can accomplish with our limited data, although access to the full INS or DOL databases would permit a researcher to address this relationship. It could help answer more precisely questions of shortages and demand.<sup>7</sup>

## **GEOGRAPHIC LOCATION OF TOP IT EMPLOYERS OF H-1Bs**

The geographic distribution of the IT employers of H-1Bs is quite unlike that of all other IT companies.<sup>8</sup> We compare first the distribution of all IT companies across States and the top IT companies employing H-1Bs (e.g., the average IT company location compared with the distribution of the top H-1B companies). Data from D&B on metropolitan locations of all IT firms are not readily available, thus we show the metropolitan distributions just for top H-1B companies.

Figure 2 rank orders *all* IT firms among the seven leading states. Not surprisingly, the greatest number of IT companies are found in California, 17 percent of all IT companies in the United States. The top H-1B companies are yet more concentrated in California where 23 percent are located. Here the similarity stops, 21 percent of top H-1B companies are found in New Jersey which only ranks as the fifth leading state in the IT industry overall. Then the third ranked state for top H-1B companies is Massachusetts that ranks only seventh among all IT companies.

— FIGURE 2 ABOUT HERE —

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organizational growth. More prosaically, it may be that employers for therapists are small and have a penchant for filing multiple LCAs for more workers than they actually intend to hire.

<sup>7</sup> Clearly, the INS petitions data would be superior for such a study. Yet, the rough correspondence between occupations reported on Labor's LCA and the INS petitions suggest that the more readily available Labor data could serve the purpose. With appropriate filtering, the LCAs might provide a reasonable picture of both worker occupation and employer industry.

<sup>8</sup> We restrict our analysis to the IT industry at this point because there are sufficient cases to analyze, whereas the non-IT employers of H-1Bs comprise too small a sample to be reliable.

It is not immediately clear why the distribution of top H-1B firms differs so markedly from the industry at large. To be sure the first four leading IT states overlap with the leading states of immigrant concentration. However, with the exception of California, the top H-1B firms are less concentrated in these “prototypical immigrant” states. At the same time, the H-1B companies are much more concentrated in New Jersey and Massachusetts than either immigrant or IT company concentrations would lead us to expect.

Figure 3 shows the metropolitan concentrations of only the top H-1B firms. The greater Middlesex-Somerset Hunterdon metropolitan area of New Jersey ranks together with San Jose, California as the leading locations for the top H-1B firms (14 percent each). These two sites are followed distantly by Detroit and Pittsburgh. San Jose should be expected to rank high as the site of the famed Silicon Valley, heartland of the information technology revolution. The greater Middlesex metropolitan area is part of the “Route 1” concentration of software firms sandwiched between Princeton on the south and New York City on the north. These concentrations mirror the divergence of the state wise distribution of the top H-1B firms from other IT firms.

— FIGURE 3 ABOUT HERE —

It might be noted that in research using a national-random sample of individual *workers* (the Current Population Survey), the distribution of native versus immigrant workers is also shown to diverge (Ellis and Lowell 1999). But there is no correlation between those distributions and those of the *firms* shown here (other than most IT workers are found in California). Of course, there is no necessary relationship between the number of firms across sites and the number of workers across sites, because firms do not hire uniform numbers of persons. It might be the case, for example, that the many “top H-1B firms” in New Jersey are very small and they hire relatively few workers out of the total native- and foreign-born national IT workforce.

Unfortunately, this analysis cannot offer an explanation for these divergence locations of the top H-1B companies and IT companies generally. The most likely explanation has to do with a unique history of hiring networks that have evolved around these locations. Perhaps companies in these locations began using H-1Bs earlier than other places in the United States. It is quite possible too that there is a special relationship that local U.S. institutions of higher learning have with these companies. But these data do not give us any insights.

### **COMPANY SIZE OF THE TOP IT EMPLOYERS OF H-1Bs**

The top employers of H-1Bs are significantly larger than other employers in the IT industry. Consider Figure 4 that shows the number of employees “on location.” This refers to just the number of workers that are employed at a particular “site” or building out of the many potential sites that a company may own. The typical IT site employs four or fewer workers, e.g., two-thirds of all IT companies fall into this size category. In contrast, only 4 percent of the top H-1B companies are this small. At the other end of the spectrum, less than 1 percent of *all* IT sites employ 250 or more workers. Yet, the greatest share of top H-1B firms, one-third, fall into this the largest size class. That is not to say all top H-1B sites are “big,” note that the second modal size class for top H-1B firms is 20-49 employees.

— FIGURE 4 ABOUT HERE —

Figure 5 also shows that top H-1B firms are larger than other IT firms. In this case, the top H-1B companies concentrate in two of the largest sales categories. Seventy-five percent of top H-1B firms have annual sales volume from \$10 million to \$99 hundred million, while only 3 percent of *all* IT firms have sales volumes this large. At the other extreme, just 7 percent of top H-1B firms have sales of no more than \$500 thousand annually, but 69 percent of *all* IT firms have sales volumes of as little as this. The concentration of top H-1B companies among “large” firms is even more evident in terms of sales volume than it is in terms of the number of employees hired.

— FIGURE 5 ABOUT HERE —

Larger companies in the IT industry are particularly found among the top H-1B petitioning firms. Yet, one suspects, that large company size is likely to be more typical of the average H-1B petitioner than not. Large companies may be unique in a couple of ways. In the first place, fieldwork generally finds that employers report that they would prefer to hire domestic workers. This tends to be easier and less costly than pursuing H-1Bs who incur greater search costs, hiring effort, and who may not stay with the company permanently (because of difficulties in getting permanent residency; see Lowell 1999a). The larger the company, the more likely they are to have individuals who specialize in hiring or human resource departments that can handle the additional burden of hiring foreign workers. They more readily absorb the costs as well.

Further, larger companies tend to have greater internal differentiation, they have a greater need for job specialization to meet a multitude of tasks. Such firms may be the ones most likely to feel the “shortage” of special skills that lead them to the foreign worker as a solution, e.g., the top H-1B companies certainly are large enough to have a degree of job specialization that may necessitate specially-skilled H-1Bs. This observation is further strengthened by the fact that if one looks at total firm employment (i.e., across all sites), 50 percent of the top H-1B companies employ 250 or more workers. But nearly 70 percent of firms in the IT industry at large employ no more than 4 workers (see also Appendix Table 1).<sup>9</sup>

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<sup>9</sup> In other words, the top H-1B companies are even more concentrated in terms of *total* company employment than they are in terms of *on site* employment. These are in most respects reinforcing datum, especially in so far as large companies are likely to have company-wide policies that apply to all workers. Still, it may be that on particular work sites within a given company the number of H-1Bs is actually relatively great. They may comprise a high share of the local workforce, even if they are a small part of the total company’s workforce. In this respect, the impact of H-1Bs may appear to be trivial if one looks at their population relative to *total* size, but it may be somewhat greater if one looks at their local *site-specific* presence.

## **ETHNICITY OF H-1B COMPANIES' CEOs**

The Dunn and Bradstreet data permit us one more insight into the make up of the top H-1B companies. The Chief Executive Officer (CEO) and other leading management persons of each company are listed by name. We classified the surname of the CEOs by whether or not the name appeared to be South Asian (typically Indian or Pakistani). Figure 6 shows that two-thirds of the top H-1B companies are headed by a CEO with an South Asian surname, the balance having a mix of generally European surnames. Unfortunately, it would have been too big a task to do the same analysis for the IT industry at large, but it seems unlikely that South Asian CEOs run as large a share of the IT industry overall as they do of the top H-1B firms. Indeed, of the non-IT companies among the INS's top H-1B petitioners only one-third of the CEOs had South Asian surnames.

— FIGURE 6 ABOUT HERE —

These findings are suggestive that these top users of H-1Bs, being largely South Asian run, may be in part responsible for the large share of South Asians among H-1Bs employed in the United States. The largest share of H-1Bs hired in 1999, about 45 percent, also come from South Asia (INS 2000b). Our data cannot tell whether or not the large share of South Asian H-1Bs is due to their being hired by South Asian-run firms; or whether the large number of South Asian H-1Bs and South Asian-run firms are simply rooted in the same supply of talented South Asian IT workers. South Asia produces a large number of skilled information technologists who have good English ability. Of course, it is likely that both processes would reinforce the demand for South Asian H-1Bs in the IT industry.

## **CONCLUSIONS**

Very little has been known about the characteristics of either H-1Bs or their employers. This paper contributes to our knowledge of the employers of H-1Bs by drawing upon a

sample of the “top” H-1B firms, e.g., the leading 100 firms in terms of the share of H-1B petitions approved in 1998. These are firms then are representative not of the average, but rather of the largest subset of typical H-1B employing companies. And the results are rather intriguing. In some cases the findings appear to have likely explanations, in others cases the findings create curious and unanswered questions.

The top H-1B companies are overwhelmingly in the information technology industry, even more so than we might have anticipated from what we know about the occupations of H-1Bs workers. They are often found in California, as one would expect given that state’s dominance in the IT industry. But these top H-1B companies are also nearly equally concentrated in the state of New Jersey—the later state ranks a distant fifth in terms of the number of all IT firms nationally. These concentrations are picked up in the concentration of 30 percent of top H-1B firms split equally across the greater Middlesex metropolitan area of New Jersey and San Jose in California. Why these top H-1B firms should concentrate in New Jersey is unknown.<sup>10</sup>

These top H-1B companies are significantly larger than the average IT firm. Perhaps this simply reflects the nature of the sample. If so, it suggests that the IT industry is first in the queue to hire H-1Bs, and that the largest IT companies are the most successful in that regard. There seems to be something about the size of these particular IT firms that needs further explanation. It seems rather reasonable that large firms create conditions of job specialization that leads them to H-1Bs, and that they have the internal resources to pursue the unique human resource demands of hiring H-1Bs. This must explain much of what is going on here.<sup>11</sup>

Finally, the CEOs of the top H-1B firms are disproportionately of South Asian origin. We do not know if these are first or second generation managers, or even whether or not

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<sup>10</sup> It seemingly cannot be explained by a concentration of top H-1B South Asian-run firms in New Jersey. In fact, 14 percent of South Asian-run firms are in New Jersey compared with 26 percent of “other” firms.

<sup>11</sup> On the other hand, top H-1B firms in the IT industry employ 2.9 times as many employees as top H-1B non-IT firms (median size, see Appendix Table 1). So size *per se* may not be the only driving factor that generates demand for H-1Bs. Yes, H-1Bs hired in the social sciences, performing arts, or medicine, may

there is direct connection between these South Asian-run firms and the fact that a near majority of all employed H-1Bs are also from South Asia. This confluence does point out that India in particular is a primary source of talent behind the success of the information technology industry in the United States.

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not be employed in large “production” settings. But while it is the largest companies within the IT industry that pursue most H-1Bs, there may be an additional set of forces driving their demand.

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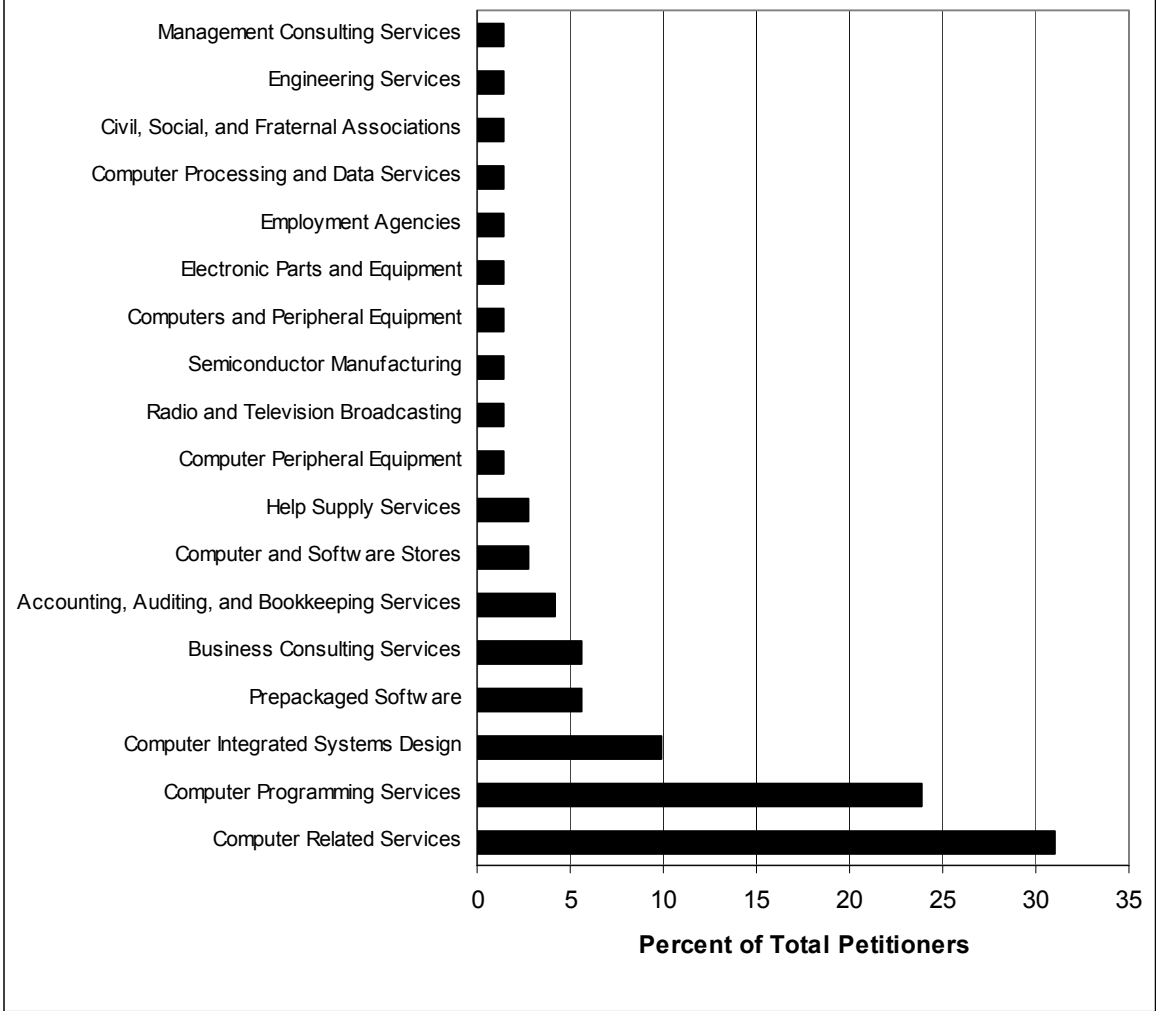
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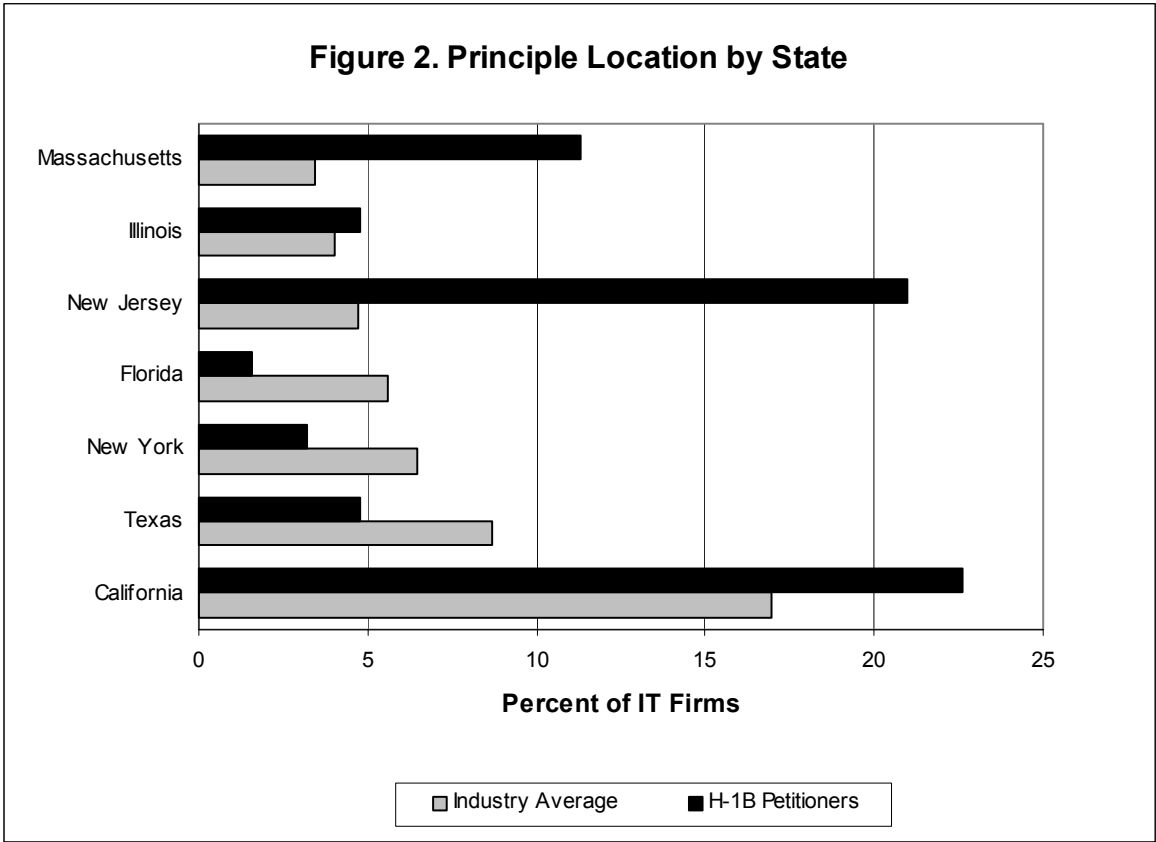
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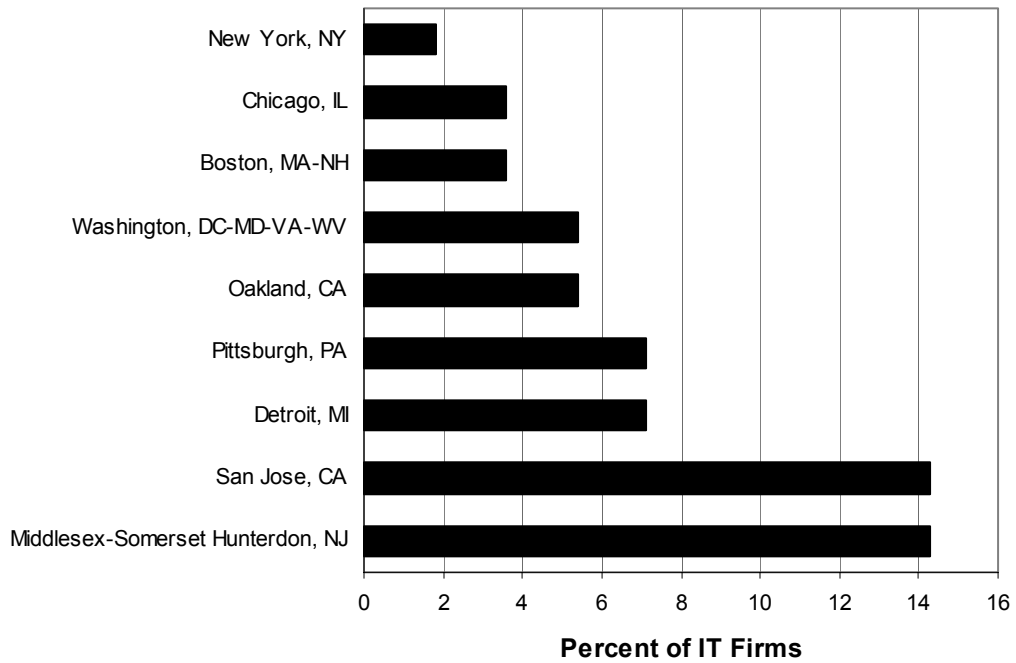
**Figure 1. Principal Industry Activities of H-1B Petitioners**



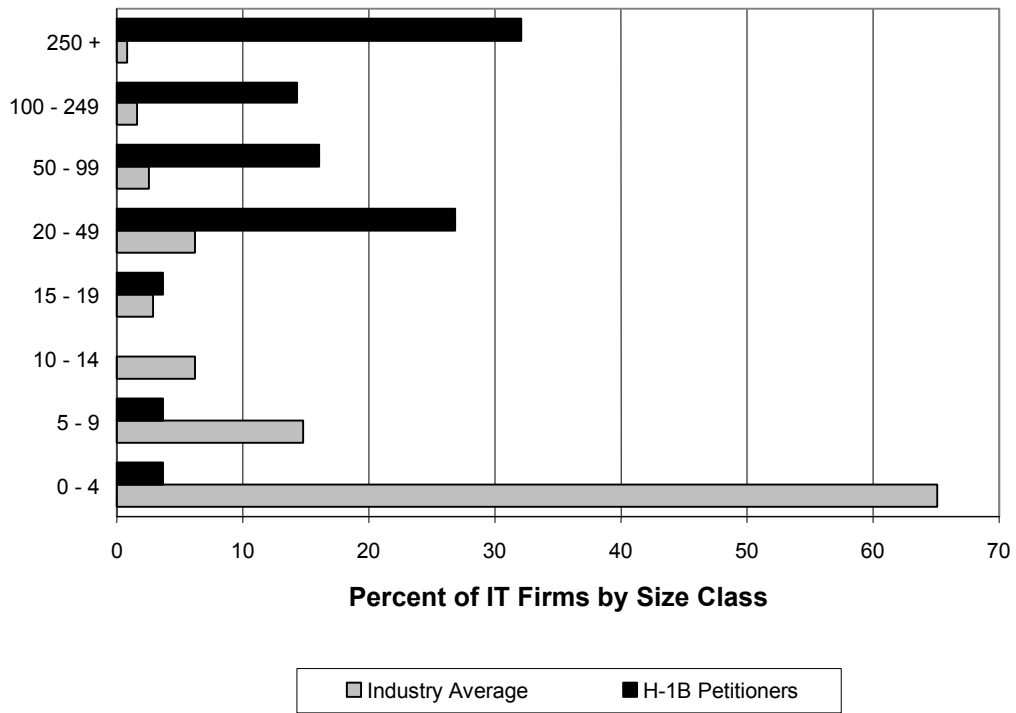
**Figure 2. Principle Location by State**



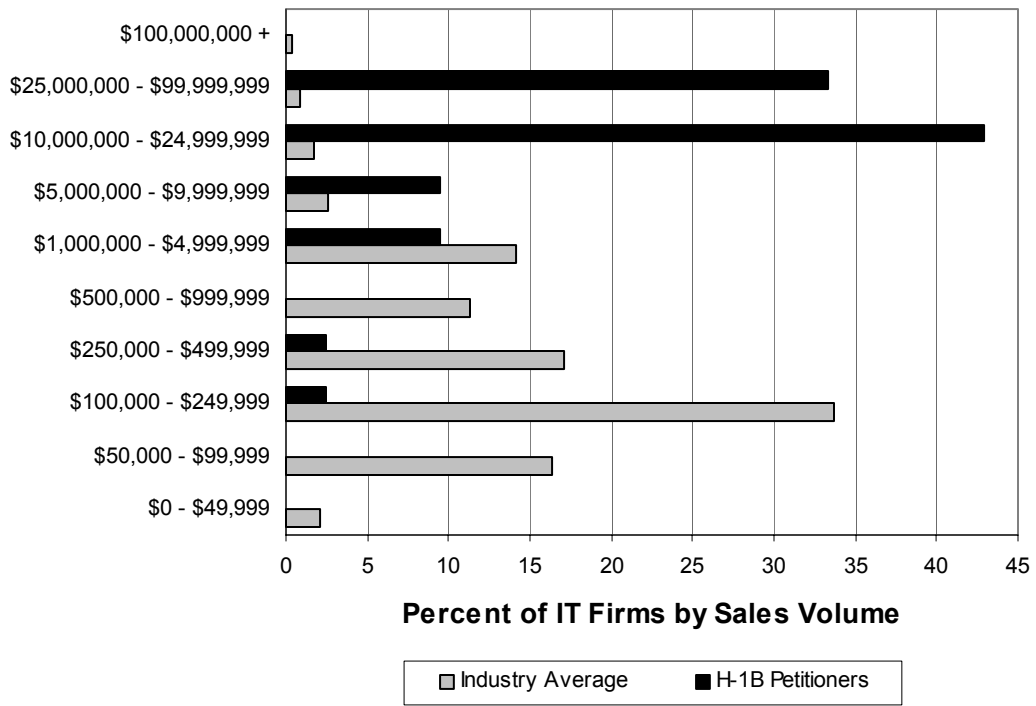
**Figure 3. Principal Metropolitan Locations**



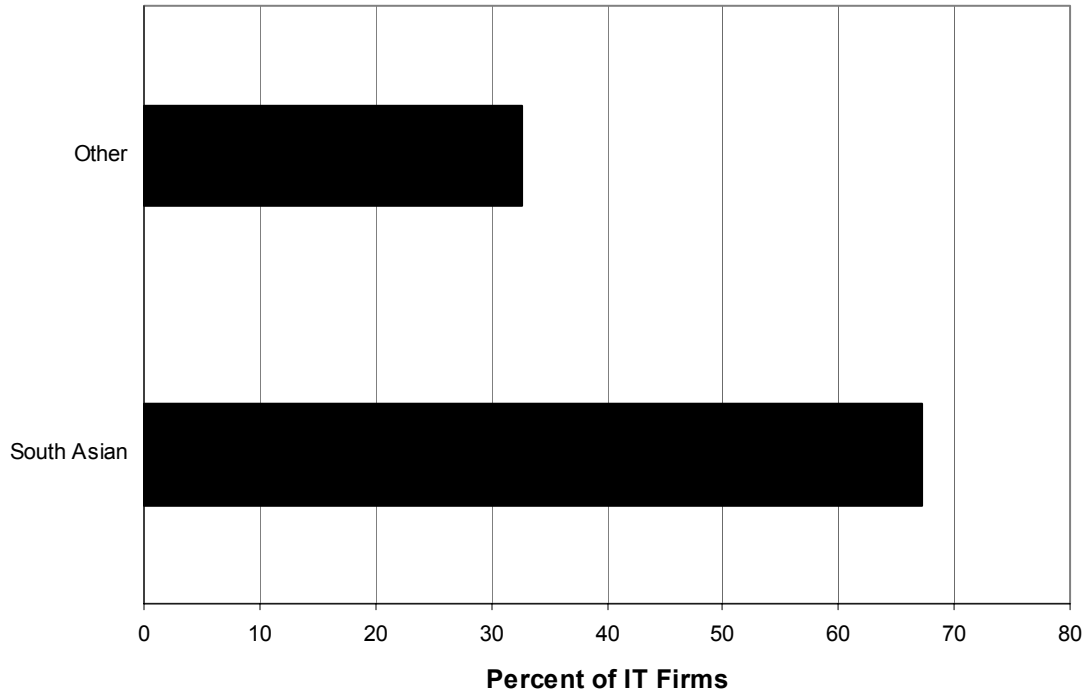
**Figure 4. Employees on Location**



**Figure 5. Annual Sales Volume**



**Figure 6. Ethnicity of Chief Executive Officer**



**Appendix Table 1. Top H-1B Company Characteristics by Information Technology (IT) and Non-IT Industry**

	All	IT	Non-IT
<b>BREAKDOWN</b>			
Number of companies	71	57	14
Percent	100.0	80.3	19.7
<b>INDUSTRIES REPRESENTED</b>			
Number of 4-digit SIC Codes	18	10	8
<b>COMPANY SIZE</b>			
Median Employees on Location	80	73	85
Range	5,697	5,697	1,297
Median Total Employees	228	242	83
Range	132,997	132,997	3,997
Median Sales (Millions)	\$23.8	\$23.9	\$17.5
Range (Millions)	\$29,400.0	\$29,400.0	\$5,500.0
<b>LONGEVITY</b>			
Median Years in Business	7	9	4
Range	70	70	8
<b>PERCENT DISTRIBUTION BY STATE</b>			
California	23.9	22.8	28.6
New Jersey	19.7	21.1	14.3
Massachusetts	9.9	10.5	7.1
Pennsylvania	8.5	10.5	0.0
New York	7.0	3.5	21.4
Michigan	5.6	7.0	0.0
Virginia	5.6	5.3	7.1
Cumulative Percent of Total	80.2	80.7	78.5
<b>ETHNICITY OF CEOs</b>			
Percent South Asian	59.2	67.3	32.7
Percent Other	38.0	32.7	67.3

## Appendix Table 2. Top 20 Specialty H-1B Employers, 1998

Rank	Company Name (as it appears on the petition)
1	Mastech
2	Tata Consultancy
3	Computerpeople
4	Oracle Corp.
5	Price Waterhouse Coopers LLP
6	Lucent Technologies
7	Motorola Inc.
8	Syntel Inc.
9	Intelligroup
10	Comsys Technical Serv
11	Deloitte Touche LLP
12	KPMG Peat Marwick LLP
13	Cisco Systems Inc.
14	Keane
15	Ernst Young LLP
16	Intel Corp.
17	SAI Software Consultants Inc.
18	Indotronix Intl.
19	Complete Business Solutions
20	Computer Horizons

NOTE: See text for discussion.

SOURCE: INS 2000a, refer to INS 2000b to see "top 100" listing.

Note that this list was also published in the New York Times, August 1999.