



AUGUST 22, 2007, 4:26 PM

## A Solution to the High-Tech Immigrant Challenge

By STEVE LOHR

TAGS: [DUKE](#), [H 1B](#), [HARVARD](#), [IMMIGRATION](#), [NEW YORK UNIVERSITY](#), [VISAS](#)

No one really doubts the “immigrant dividend” to America’s high-tech economy. But [a new academic study](#) — the third in a series — details the benefits and the threat of a “reverse brain drain.”

Yet one of the authors of the new study has a solution that is not in step with the high-tech lobby. He advocates getting rid of the H-1B visa, the temporary work permit for skilled workers.

Vivek Wadhwa, a fellow at the Harvard Law School and executive-in-residence at Duke University, said today that the H-1B program is “wonderful for technology companies and employers. They have a captive audience.”

The H-1B, he explained, allows the sponsoring company to control employees, and often underpay them, as critics of the visa program contend.

Instead, Mr. Wadhwa said the United States should simply grant skilled immigrant workers permanent residence visas, so-called green cards. The new report says that more than 1 million skilled workers — scientists, engineers, doctors and researchers — are competing for 120,000 permanent residence visas each year. The surging backlog, the study adds, is starting to fuel a “reverse brain drain” as skilled workers return to their home country.

Mr. Wadhwa is an Indian immigrant, who came to the United States in 1980, got his green card within 18 months and went on to found his own company and become an American citizen. Today, he estimates, the wait for a green card would six to ten years, and the worker is tied to the same employer all that time.

The three-study series also found that one in four engineering and technology companies founded between 1995 and 2005 had an immigrant founder. Foreign nationals residing in the United States were named as inventors or co-inventors in 26 percent of international patent applications filed in America last year. That compares with 8 percent in 1998.

“If these people stay, we win,” Mr. Wadhwa said. “If they work with our brightest people and learn American ways and go back, we have a big problem. The risk is they leave and compete with us.”

The new report, published today, was conducted by researchers at Harvard, Duke and New York University. It was supported by the Ewing Marion Kauffman Foundation, which sponsors research on entrepreneurship and innovation.

**37 comments so far...**

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1. August 22nd, 2007 5:27 pm

The high-tech lobby is exactly why we won't get the large number of skilled worker green cards the authors of the study advocate. Similarly, I think that many agribusiness companies support keeping the current immigrations status quo for unskilled workers. It allows large companies to drastically underpay and under-insure (un-insure?) their workers.

How about this. Increase the visa numbers drastically in all categories. Give an easy path to citizenship to people who have strong employment records after moving to the U.S. Our biggest strength as a country is our unending ability to absorb and assimilate immigrants into our national fabric. Immigrants keep America's birth rates above replacement level, they are one of the driving forces of our economy, and I'd say that the vast majority of them really want to be here.

In three generations the progeny of today's immigrants will be as American as you, me, or Arnold Schwarzenegger. Good.

<http://thehmologist.blogspot.com>

— Posted by Chris Jacques

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2. August 22nd, 2007 5:53 pm

Absolutely ... agreed !

first time someone made sense regarding H-1B visas . we need smart people to stay and work here without them feeling like they are being used by big companies. That's the only way we are going to stay ahead of rest of the world not by fighting futile wars over oil .

— Posted by Andy

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3. August 22nd, 2007 7:02 pm

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Totally Agree.

This limited number of visas per country force long wait time and uncertain future for bright folks (H1B). Family struggle and long time to come to real market makes bright folks to go to places where it has easier immigration headache e.g Canada OR their own country e.g India/China.

Some lawyer well said that we need to start worrying the day bright folks stop migrating to this country as they see brighter prospect outside.

Microsoft also moved/expanded s/w development center in Vancouver,BC for this reason. So Which country will benefit ? There are thousands of companies moving/starting centers outside US for the very same reason.

I read and listen so many talkshows around US Immigration but All are based on illegal immigration. There is certainly something wrong with this. No one talks/care about legal immigration compare to illegal. Is this the way our country wants to go ? May be this is what encouraging illegals.

But this require Out of Box (Illegal Immigration) thinking and at present we can't do that. I hope it will not be toooo late for us to let bring/keep these bright legal folks to USA.

— Posted by DJ

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4. August 22nd, 2007 8:22 pm

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This article is not completely true. I do H-1B visas. Most of my work is filing cases where H-1B workers are leaving one job for another. It's not impossible to work elsewhere. They just need to find a sponsor.

I agree the process shouldnt' be so time consuming.

— Posted by Synta K.

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5. August 22nd, 2007 8:39 pm

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I agree completely with Vivek Wadhwa. I am a graduate student in a physics lab at a major university, and about half of my fellow grad students are from abroad.

Most of them are very enthusiastic about being in America and many would love to stay here after getting their PhDs. I encourage all my friends to stay here. Every time someone graduates and can't find a job to keep them in the USA, I think, "What a waste for our country."

The US government is happy to spend hundreds of thousands of dollars to make foreign students into highly skilled scientists, and then we make it frustrating and uncertain for them to stay here and contribute to our economy. Totally counter-intuitive...

— Posted by Dan

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6. August 22nd, 2007 8:47 pm

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Mr. Wadhwa forgets the last step of his reverse-brain-drain equation: After the HIBs return to their home countries, they compete with us — specifically, with US jobs; at cut rates that US employers eagerly replace their domestic staff with. His argument is telling: the situation is not helpful to US workers needing to pay US living expenses, but great for employers who tire of paying them. His argument isn't likely to sway our business-oriented leaders, which as a businessman he should recognize easily.

— Posted by Keith T.

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7. August 22nd, 2007 8:48 pm

What makes the current situation even worse is that the USCIS, the branch of government charged with issuing the green cards, actually WASTES from the allotted quota of 120,000. For the last two years, there have been green cards available, and people waiting for them, but the two could not be put together because of bungling by USCIS. Law prohibits using one year's quota in the next year, exacerbating this annual waste.

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— Posted by SS

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8. August 22nd, 2007 8:53 pm

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I reserve judgment on this issue until I hear Mark Klein, MD's opinion.

— Posted by KS

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9. August 22nd, 2007 8:56 pm

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It'll never happen. Employers aren't looking to bring about a bright new America by retaining its immigrants. The only reason immigrants are here is because they work for peanuts. Why would an employer hire an immigrant with a green card and pay a competitive wage, social security, unemployment insurance, medical benefits and a host of other costs when he doesn't have to? More green cards will bring about the exact same situation that caused the outsourcing boom in the first place. If we give the immigrants green cards as Mr. Wadhwa proposes, their employers will lay them off and look to outsource in another country for even cheaper labor. There's no higher motive here, just money.

— Posted by COBOL Steve

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10. August 22nd, 2007 8:56 pm

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The article is great...with the exception of the bit about H1b's being underpaid. As a former H1b (now greencard), who's been a manager, senior manager, and executive at several large technology firms, this seems to be little more than "lore" put forth by those with a vested interest in the perception. In my years of experience, I never once saw someone pay an equivalent H1b less than market rate. The reason? There is simply too much competition for great employees (H1b or otherwise). Too much to risk losing a great person because they were underpaid and found another employer (here willing to take on the immigration paperwork, or back home) to save a few bucks.

— Posted by Peter

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11. August 22nd, 2007 9:00 pm

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If the market paid the going price, our youth would flock to a well paying job. What is the motivation for our kids to look at these jobs that get outsourced?? I deal with H1s everyday, they are no brighter or better skilled, they have no compelling experience, just admit it, the H1 program makes them cheap, cheap. cheap. Level the playing field, train our kids to compete.

— Posted by Chris

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12. August 22nd, 2007 9:16 pm

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Immigration laws of this country are extremely antiquated. Getting a green card requires one to go through three arcane steps. Apparently even after getting a "visa" (Step 2), you are still not

allowed to enter US until your “status is adjusted” (Step 3). This “adjustment of status” takes several years. Security checks require only a few months, so national security is not an excuse for how slow this process is. Another ridiculous aspect is the requirement of getting immunization shots for several largely irrelevant diseases in the process, which is utter nonsense considering an overwhelming majority of green card applicants have already been living the US for several years. Apparently these rules are still modeled for immigrants arriving enmasse on ships and landing on US soil for the first time.

A very sensible solution would be a points-based selection system to determine who can become a permanent resident. Criteria such as specific skill set, education, nationality etc can be used. UK, Canada and Australia already use such a system. Its fast, cheap, sensible and rational.

— Posted by Cynic

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13. August 22nd, 2007 9:17 pm

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Could Not Agree More.

These people who are the smartest and the brightest of the whole world , want to come to our country and make it their home , start technology and other companies , provide MORE jobs for OUR people and generally keep American Economy growing and healthy and what are we doing to them , strapping them in bureaucratic red tape so they spend ten years(the most productive of their life)waiting for green card. Mind you , it only takes 6 months for a technology idea to get old . If you dont start right now , some guy in japan would.

which leaves these people with no choice. How do I know, speaking from personal experience.

— Posted by HKD

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14. August 22nd, 2007 9:41 pm

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I agree. The United States of America should scrap H-1B visas in favor of increasing legal immigration quotas high enough so that there is virtually no waiting period for the talented immigrants who are now trying to get H-1B visas. We need these people. One wrinkle I might add is to require that immigrants entering under a talent quota acquire U.S. citizenship within a reasonable period of time in order to stay in the country.

Under the same logic, why not allow a high enough quota of legal immigrant agricultural workers so that we have enough agricultural labor to harvest our crops. I would also require agricultural workers to become citizens within a reasonable period of time in order to attain permanent resident status.

— Posted by Chester Lewis

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15. August 22nd, 2007 9:42 pm

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I absolutely agree! People who immigrate to the United States under any of our rules are not slaves.

— Posted by Tom

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16. August 22nd, 2007 9:44 pm

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It's obviously that in the new century there is a fierce competition between different countries.

I am a Chinese and I am a post-graduate now. I want to go to U.S. for a further study. But I will return to my country and make contributions to my own country. So what I want to say is that it's not a long term policy for U.S. to stay the High-Tech Immigrants.

— Posted by cinderella\_zxj

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17. August 22nd, 2007 9:52 pm

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Absolutely correct. I have been working with Indian IT H1B workers for last few years and I have no doubt in admitting that they are smart folks.

They work hard and complete tasks fast. We should encourage these guys instead of making illegals legal.

— Posted by Kevin

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18. August 22nd, 2007 9:52 pm

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It is amazing to me how members of Congress get it so wrong...so many times. Are our elected representatives even thinking for themselves or just following the orders of the party leaders? Are they thinking about their Country or only about their local constituents? Do they not have the intelligence or ability to explain to the locals their particular votes that support the Country and its values? I guess not. I think the reason is that they are nearly all DEMOCRATS or REPUBLICANS...but not necessarily AMERICANS.

— Posted by Ted

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19. August 22nd, 2007 10:17 pm

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I totally agree to Vivek and Chris. The Chinese Govt is acting up to prevent further brain drain from China after conducting a survey where 1 in 4 Chinese scholars do not return home. (<http://news.bbc.co.uk/2/hi/asia-pacific/6374301.stm>)(<http://www.china.org.cn/english/BAT/192808.htm>)India, too, is moving even faster than China regarding stemming the brain drain (<http://www.indiadaily.com/editorial/1639.asp>). In these 2 cases, along with the passage of time, the US is just being a nanny or boarding school to these students who transit here for a degree or work experience. We want and hope that these skilled workers contribute to the development of the US, whether in terms of R&D, Technology, Financially or Socially. As a matter of fact, focus by the political candidates should re-allocate resources and re-align their focus on to retaining skilled immigrants. The only attraction for these people are a sense of belonging. Look towards Australia, skilled workers are able to settle there as immigration policies are made to accommodate their existence. Canadians have a far relaxed policies than US, there is little reason for skilled workers to stay in the states. We need a motivation for them. A target to look for. Planning the whole transition of planting their roots into American soil. It shows a lot on the side of the US Govt that it respects and yearns these talents. And in turn, skilled workers will show their gratitude and see how their families are doing well here.

Bottomline (Yo! Politicians, take this as your idea), shift focus and resources away from stemming the mexicans and other illegal immigrants and start doing productive work by giving the skilled workers a reason to stay and assimilate.

— Posted by Leonard

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20. August 22nd, 2007 10:23 pm

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And let's just mention that 50 % of all PhDs in science and engineering are issued to non-nationals. The current policy seems designed to provide foreigners with a first-class education and encourage them to compete with us - because we won't keep them here.

— Posted by Brian

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21. August 22nd, 2007 11:59 pm

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“The high-tech lobby?” Are you cracked? Silicon Valley runs on smart workers from all over the world; there's no reason for the technology industry to restrict immigration of knowledge workers. If anything, restrictive immigration policies have encouraged technology companies to offshore jobs, which means that the money that those workers earn is flowing out of our economy. Give them permanent visas, and let a thousand technology companies bloom.

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— Posted by Jeffrey McManus

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22. August 23rd, 2007 12:26 am

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It's great for America to keep all these bright innovative people in the States, and to pay them handsomely. Sure! But what about the rest of the world where these people are from originally. Is not that, in a way, the stealing of human resources by the 1st world from the 3rd world. Perhaps that's worse than stealing their natural resources.

— Posted by Mike Schoenberg

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23. August 23rd, 2007 12:35 am

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I know that some professional engineering societies are uncomfortable about opening the flood gates to foreign engineers because of questions concerning their competency, and concerns of flooding the engineering job market, which could lowering wages.

There should not be a problem of competency with foreign born engineers who were educated in the US and have engineering degrees from accredited US universities. Having studied engineering in an American University, it is obvious that probably half of the engineering students in the US are foreigners. So, if we are going through the trouble and expense of educating them, I think that we should make every effort to keep them in the US. Otherwise, as Mr. Wadwha points out, they will simply go back to their home country to become our foreign competitors. It is likely that many of them will receive out-sourced work from the US.

As far as flooding the engineering job market, well with the dwindling number of engineering graduates that the US is producing and large percentage of baby-boomer engineers that are retiring or about to retire, and considering all of the infrastructure that will need to be either renovated or replaced in the next 50 years, I do not think that the engineering job market will become flooded any time soon.

As far as lowering wages, I think Mr. Wadwha's assessment of the H-1B visa does lower wages by keeping them like indentured servants, which I have seen happen to some of foreign-born acquaintances.

If foreign engineers are starting technical firms and inventing new technologies in the US, then it is likely that they would be creating new jobs, creating wealth, and increasing wages, or at the least stabilizing technical jobs.

So, I would be in favor of opening more permanent visas to foreigners with degrees from accredited US universities, especially to the ones with advanced degrees. Perhaps to as many of these people as we can keep.

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— Posted by H Nakayama

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24. August 23rd, 2007 1:25 am

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” The new report says that more than 1 million skilled workers — scientists, engineers, doctors and researchers — are competing for 120,000 permanent residence visas each year.”

Yep, just what America needs, one million more foreigners each year. And each one will want to bring in a spouse and relatives, so we would have MILLIONS more per year.

I guess we aren't populated enough, or diverse enough or consuming resources enough unless we open the door to these indispensable folks.

Keep 'em coming as we make strides for the U.S. Census Bureau projected ONE BILLION by 2090.

— Posted by Wanda Gomez-Berger

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25. August 23rd, 2007 4:21 am

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This person has his own perspective based on being an immigrant himself. What is never considered in these articles is the perspective of Americans born in this country, who at the least more represent average voters. The fact that their views are intentionally shut out makes this current wave of immigration more like an invasion than any integration. The media plays a major role in this and has betrayed the people. No wonder their influence is rapidly eroding.

— Posted by Frank

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26. August 23rd, 2007 5:04 am

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A time has come for the mighty Supreme World power to empower its own existing citizens to pursue science and technological education making these more affordable even for those families whose income is somewhere near forty or forty five thousand dollars per annum. A country cannot depend upon a swarm of skilled underpaid personnel hired by profit hungry companies, who are hiring in India and China and Poland and even establishing research centres there, mainly because it costs much less to do so. Why is the fine infrastructure built over the post war decades in the U.S. be allowed to go to waste by not attracting young talent to do science and technology. This needs serious thinking. Short cuts like Wadhwa's are no good for a Supreme World Power if it wants to remain so.

— Posted by dr,s.divakaran Ph.d

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27. August 23rd, 2007 6:59 am

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It is difficult to distinguish between a “smart” person that “deserves” preferential treatment and a “street smart” person with fake documents “proving” higher education and achievements. Companies that bring in H1B people select them and make them useful for economy. I do not think that they would be useful otherwise. I was accepted to this country as a refugee for which I am eternally thankful to the US government and all people who helped me along the way. I had a University degree and I could speak and communicate in English. Presumably, I was an ideal candidate for preferential treatment. It required 4 years of college education and practical experience of being a low level, low paid employee to upgrade my knowledge to what was required to practice my profession here. It took 2 additional years to gain advance knowledge to function at a top level of my profession. Do you think that a lot of families will volunteer for this kind of sacrifice? I do not think so. And the second example. One of my friends and colleagues complained that he could not hire an engineer. He interviewed multiple recently LICENSED engineers that arrived from different foreign countries and COULD NOT solve simple engineering problems. We had a good laugh about that. But I was such an engineer at the time that I came here. Conclusion: do not oversimplify the situation with selection of “smart” people. In most cases (except political, national and persecution or other special situations) really smart people are well established in their countries and they do not need to move here unless one pays really well to them. A number of these people is very small and 120,000 visas/year is more than adequate. There is huge difference between being “educated” and being a professional. Just look at high school graduates and the inflated grades. A college where I teach part-time had to introduce exam to check if these graduates can read. The same is true for college diplomas. Do not break a system that somehow works (H1B). There is nothing bad in reverse emigration. We need smart partners and competitors. They make us stronger. We need home grown smart people. Let market resolve the problem of small numbers. Not enough engineers? I can ask for top money for my services. I tell about that to my students. This encourages them to go into engineering. They will not reverse emigrate. They are the people that can work on sensitive governmental projects. There is a good rule - do not repair that is not broken.

— Posted by Professor

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28. August 23rd, 2007 7:45 am

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The comparative chart on Engineering degree in USA,INDIA -CHINA is a good exercise.Indian universities still follow the study pattern we inherited from BRITISH in 1947.We have the uniformity in Education.My question is that why USA is not making a similar chart with UK

where UNDER GRADUATE ENGINEERING and SCIENCE DEGREE IS ONLY THREE YEARS?

We have to accept the fact that all universities in UK are controlled by UCAS and no fake universities in UK as exists in USA. The Cambridge -A LEVEL standard is really outstanding when compare with USA, INDIAN and CHINA Higher secondary education system. In addition IELTS has a clear edge than TOFEL since the English language assessment is not a remote operation. The three years UG engineer in UK after

Cambridge A-LEVEL is an outstanding one when the UNDER GRADUATE ENGINEERS OF 4 YEARS in INDIA, CHINA and USA. The CALCULATION OF 16 years education for graduation IN USA has no EDGE over 15 YEARS EDUCATION in UK and INDIA. PLEASE GIVE YOUR 16 YEARS SYLLABUS TO INDIAN students as a 15 YEAR PROGRAMME for graduation. They will produce outstanding results. My suggestion is to create a 15 years UG engineering degree of UK ,in USA, INDIA and CHINA. UK, USA and INDIA HAVE BEEN BONDED WITH SCIENTIFIC LANGUAGE-ENGLISH. WHY don't we create a common science and engineering syllabus in these three countries to build up a more competitive scientific community in future.

— Posted by JOTHI NARAYANAN N.R

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29. August 23rd, 2007 8:08 am

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Studies show that the vast majority of H-1Bs are requested by companies seeking entry or near entry level employees. It needs to be restricted to only the most rare, esoteric skill sets. Not doing so has turned the H-1B into the “great American worker displacement visa” and that was never supposed to happen. These ‘bright legal folks’ in many cases displaced bright legal American workers. We have a debt to pay to the workers who made us great in the first place.

— Posted by Babs

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30. August 23rd, 2007 8:29 am

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I'm a Canadian who has lived in the US since 1997. I have a Bachelor's of Comp Sci and an MBA. I've worked here on a TN-Visa and an H1-B visa. I'm currently going through the green card process. I had to restart the process because my company moved me from Minneapolis to Stamford, CT. I'm hoping to have the green card by Christmas 2008.

It amazes me how the the US gov't has created so many road blocks for skilled people to live and work in this country. Companies have to setup operations offshore in India, Canada, Ireland, China, etc because that's where the skilled workers are located.

Perhaps the gov't can simplify the green card process and make it more like the H1B process, which for me was pretty simple.

— Posted by Wayne Phillips

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31. August 23rd, 2007 8:42 am

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As an H1B holder, I certainly agree with this. I know a whole swathe of H1B visa holders who were pretty much forced to stay at a company they were not happy with for the sake of their green card applications. If they were to switch jobs, the application 'resets' and the whole process has to restart.

They weren't quite underpaid, but the green card dangling in front of them certainly gave the companies a lot of leverage. In the end, many elected to instead move to Europe where many countries have specific immigration programs for highly skilled workers and a fast track to citizenship/permanent residency.

The US is by far (based on my experiences) the most inept and incompetent country when it comes to handling skilled immigrant workers (even compared to many third world countries). The economy (high tech) demands it, and once someone makes it here it's a great position to be in. However, the government seems to be trying its hardest to prevent these professionals from coming over, and once they're over here to prevent them from naturalizing and staying.

— Posted by Hani Suleiman

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32. August 23rd, 2007 8:52 am

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Qualified IT workers over the age of 45 in this country can not get work in the IT field. Please NOTE I said qualified which means - YES they are current on technology. Until this policy changes cheap imports should stop. Non-citizens can start companies more easily due lessen tax burden and limited liability exposure as compare to that of citizens of this country.

— Posted by M Jackson

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33. August 23rd, 2007 9:27 am

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Sure let them in, but first make them put in a two year stint in the military. Let them earn a right too the wealth that all americans work hard to create.

I bet the number of request for visa would dry up overnight.

— Posted by pogo

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34. August 23rd, 2007 9:46 am

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“Today, he estimates, the wait for a green card would six to ten years, and the worker is tied to the same employer all that time.”

Yes, green cards take way too long; however, people with H1B’s jump employer to employer every 6 months and many times make the “going rate” for salary...5 yrs ago a foreign national could work for an employer who had FILED for their new H1B or in other words BEFORE it issued....paint a fair picture and more people will listen.

— Posted by tell the truth

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35. August 23rd, 2007 9:58 am

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Totally agree!

As China and India expand economically, the demand for scientific manpower will cause worldwide shortage of skilled workers in the next two decades. It is in the interest of USA that it should replace H1B with automatic green cards, say after three years working under H1B. Three years to prove the person has real skills and can hold a job. My proof for my argument comes from observing the declining enrollment of students in Science and Engineering (Except Biomedical field) at graduate and post graduate level.

— Posted by HSM Arjun

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36. August 23rd, 2007 10:07 am

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Yes. It is an artificial number fraught with political overtones. Let the free market reign in high-tech. Just like we do not control the flow of financial capital, we should not control the flow of knowledge capital (which resides in labor). The labor laws including H1-B were crafted during the heights of the industrial revolution and have little bearing on the current global business infrastructure. So, if you restrict H1-B, companies go overseas and hire them. Look at IBM, Microsoft, Google and others—where are they hiring? What’s the impact on US economy—minimal?

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It’s time for serious ploicy debate on this topic.

— Posted by N. Venkatraman

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37. August 23rd, 2007 10:27 am

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I agree.

As a non-citizen who has worked in the US tech industry for a number of years, and is remunerated in the top .5% of US salary levels, my life would be simpler if I was able to approach the job market instead of remaining indentured to my employer.

— Posted by Jenn