The Hill

April 19, 2016

Keeping skilled PhD and Masters graduates in America is smart economic policy

By C. L Max Nikias

During the primaries, the national debate on overhauling America's immigration system has once again been ignited. To be sure, it is a complicated debate with few areas of universal consensus. But there is one initiative with broad support that is consistently lost within the greater discussion. Democrats, Republicans, Big and Small Business alike and Labor all agree that we must allow foreign graduate students at American universities, particularly those in STEM (science, technology, engineering, mathematics) disciplines, to remain in our country to create jobs, innovate, and enhance our global competitiveness.

Today, where economic competitiveness is global in nature, the whiz kids that American universities produce are sent packing upon graduation. Instead of a "brain gain," we are left with a "brain drain" resulting in their innovations and jobs being created abroad—and not in America.

America's top research universities are still the envy of the world and a magnet for the best and brightest minds. Almost everywhere in the world, you will find that the aspirational family dreams of seeing its children educated at an American research university. Rightly recognized as a pipeline to success, immigrant graduate students are driven, hard-working, and competitive - leading to more innovations. The results speak for themselves. A Kauffman Foundation <u>study</u> found that 25.6 percent of patent applications listed foreign nationals residing in the United States as either inventors or co-inventors.

Indeed, immigrants are an important part of America's historic and current business and entrepreneurial success. In <u>The Coming Jobs War</u>, Gallop CEO Jim Clifton argues that America's amazing growth in the 20th century can be traced back to approximately 1,000 "rainmakers" - an astounding 60 percent of whom were immigrants, educated in America. This trend continues to persist event today. <u>A recent study by the National Foundation for American Policy</u> concluded that 51 percent of new U.S.-based startups with a valuation of at least \$1 billion were launched by immigrants. A further 70 percent of these companies were led by senior managers or product developers who had come from abroad.

Amongst the recent rainmakers who migrated to the U.S. are a number of familiar names - Elon

Musk (PayPal, Tesla, SpaceX), Andy Grove (Intel), Pierre Omidyar (eBay), Jerry Yang (Yahoo), Jensen Huang (Nvidia) and Ming Hsieh (Cogent Systems) - just to name a few. What binds these great minds together is their ability to create jobs, economic growth and prosperity far beyond the laboratories or programming suites. In fact, a recent economic <u>study</u> found that for every high tech job, four more are created in non-STEM fields like marketing, accounting, administration, or sales. There is one other commonality of course - they were all able to build massive success here in the U.S. despite an immigration system that is not streamlined to support their aspirations. The critical question then, is: how many of these innovators has America lost?

For PhD candidates in particular, this issue has an ironic twist. In the U.S., universities, the government and private philanthropy participate in these students' education through research assistantships. A PhD thesis, especially in a STEM discipline, is a demonstration of an ability to create new intellectual property. In other words, these students are ready to make meaningful contributions right out of the gate. We jointly educate, train and develop new intellectual property, but if these graduates subsequently leave our country, we are missing a chance to realize a return on our investment.

Other countries understand this formula for success. Nations in Europe, Asia, and South America are actively looking to poach our top talent. China provides bonuses of up to \$150,000 to highly skilled, American University-trained entrepreneurs who start a business there. The Chilean government offers up to \$40,000 in capital, free office space, and a quick visa through its "Start up Chile" program. Spain recently created a new foreign entrepreneur visa to lure more of our brightest minds. In the U.S., these sorts of financial incentives are redundant because many of our international graduate students would choose America over any other country—if only they could.

There are approximately 188,000 international graduate students currently in the U.S. who will graduate with advanced STEM degrees. This represents a fraction of the overall immigration issue, but it comes with significant economic upside. At the University of Southern California, we have about 4,500 such students. I have spoken with many of them and consistently hear how they wish to remain in our country and pursue the American Dream.

It is a sentiment that carries personal resonance. I too came to America as a graduate student and was fortunate to stay and pursue the dream of a better life through the education I received here. It led to a career as an engineer, researcher and educator. A career, that eventually allowed me to become president of one of America's top research universities, which today is the No. 1 private employer in Los Angeles.

To spur economic and intellectual growth, the federal government must embrace foreign graduate students. The solution is simple: within six months of graduation, all international Masters and PhD students from STEM disciplines should be eligible to receive a green card. The six-month window would allow for all standard background checks, an examination for any potential abuses of the program - and would give graduates time to secure employment or create a start-up. This is not automatic citizenship however - they would still be required, like all others, to reside in the country for at least five years before an application for citizenship could be made. However, a green card would allow us to eschew the creation of additional work visas or

expansion of existing and often complicated programs. To solve this problem, let's cut the red tape and go green.

I have discussed this idea with congressional leaders on both sides of the aisle – and there is near-unanimous agreement that this proposal makes sense. It is time for the President and Congress to do the right thing and come together for the sake of America's global economic competitiveness.

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