“Discovery consists of seeing what everybody has seen and thinking what nobody has thought.”

KAUFFMAN Thoughtbook 2009

Fourth in an ongoing series, the Kauffman Thoughtbook 2009 captures what we are thinking, learning, and discovering about education, entrepreneurship, and advancing innovation. This collection of more than forty essays is written by the talented Kauffman Foundation associates, partners, and experts who are pursuing the principles and vision set by our founder, Ewing Kauffman.

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Foreign-Born Entrepreneurs: An Underestimated American Resource

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Although immigration in the United States has been the subject of hot policy debates in recent years, one group of immigrants has been virtually absent from those discussions—skilled immigrants who become entrepreneurs. I have led a series of research studies that show that this group has brought enormous economic benefits and innovations to the United States—further reinforcing the fact that the United States provides a fertile environment for spawning entrepreneurship.

The genesis of our research was a 1999 report by AnnaLee Saxenian of the University of California at Berkeley that showed that Chinese and Indian engineers ran a growing share of Silicon Valley companies. They were at the helm of 24 percent of the technology businesses started from 1980 to 1998. Saxenian concluded that foreign-born scientists and engineers were generating new jobs and wealth for the California economy. Even those who returned to their home countries to take advantage of opportunities there were building links to the United States and spurring California’s technological innovation and economic expansion.
With support from the Kauffman Foundation, we decided to expand on Saxenian’s study and focus on engineering and technology firms started in the United States from 1995–2005. Over a two-year period, we completed several research projects that surveyed thousands of companies and interviewed hundreds of company founders.

Boosting Jobs and Output

We found that the trend Saxenian documented had become a nationwide phenomenon. According to the studies, in a quarter of the U.S. science and technology companies founded from 1995 to 2005, the chief executive or lead technologist was foreign-born. In 2005, these companies generated $52 billion in revenue and employed 450,000 workers. In some industries, the numbers were much higher; in Silicon Valley, the percentage of immigrant-founded startups had increased to 52 percent. Indian immigrants founded 26 percent of these startups—more than the next four groups from Britain, China, Taiwan, and Japan combined.
These immigrant founders tended to be highly educated—96 percent held bachelor’s degrees and 74 percent held graduate or postgraduate degrees, with 75 percent of these degrees in science, technology, engineering, and mathematics-related fields. The vast majority of these company founders didn’t come to the United States as entrepreneurs—52 percent came to study, 40 percent came to work, and 5.5 percent came for family reasons. Only 1.6 percent came to start companies in America.

Even though these founders immigrated for other purposes initially, they typically started their companies just 13.25 years after arriving in the United States. And, rather than settling in well-established immigrant gateways, such as New York or Los Angeles, they moved to a diverse group of tech centers across the country and helped fuel their growth.
Visa Backlog Creates Brain Drain

We uncovered some puzzling data in the World Intellectual Property Organization database, which is the starting point for obtaining global intellectual property protection. In 2006, foreign nationals residing in the United States were named as inventors or co-inventors in an astounding 25.6 percent of patent applications filed from the United States, a substantial increase from 7.6 percent in 1998. Foreign nationals also contributed to a majority of some U.S. companies’ patent applications, including Qualcomm—72 percent, Merck—65 percent, GE—64 percent, and Cisco—60 percent. More than 40 percent of the U.S. government-filed international patent applications had foreign authors. These numbers did not include immigrants who had become citizens at the time of filing.

The question was: Why were these numbers increasing so dramatically—337 percent over eight years? Did the United States have an influx of potential immigrants and, if so, why weren’t they becoming U.S. citizens and filing patents as Americans?

We found that, as of September 30, 2006, 500,040 individuals in the main employment-based visa categories and an additional 555,044 family members were in line for permanent-resident status in the United States. Another 126,421—who already had job offers—were waiting abroad, a total of 1,181,505 educated and skilled professionals waiting to gain legal permanent-resident status.

Thus, far more skilled workers are waiting for U.S. visas than can be admitted under current law. Only around 120,000 visas are available for skilled immigrants AND THE BEST FOREIGN STUDENTS IN THE UNITED STATES, WHO TYPICALLY HAVE STAYED AFTER GRADUATION AND CONTRIBUTED TO U.S. ECONOMIC GROWTH . . . ARE CHOOSING TO RETURN HOME.
in the key employment categories. These numbers are particularly troubling when you consider that no more than 7 percent of the visas may be allocated to immigrants from any one country. So, immigrants from countries with large populations like India and China have the same number of visas available (8,400) as those from Iceland and Mongolia. We estimate that more than one-third of the million workers in line for permanent resident visas are from India.

This means that immigrants from the most populous countries who file for permanent resident visas today could be waiting indefinitely. In the meantime, they can’t start companies or lay deep roots in American society.

While those immigrants wait, both India and China are racing ahead as centers of research and innovation. Further research may confirm what seems likely—that returnees from the United States are increasingly fueling this growth. Our interviews reveal these returnees typically went home because they saw tremendous opportunity in their home countries. And the best foreign students in the United States, who typically have stayed after graduation and contributed to U.S. economic growth, are growing increasingly frustrated with visa delays and are choosing to return home.

We are on the verge of a reverse “brain-drain.” If the United States doesn’t fix its policies and keep these highly skilled immigrants, India and China will welcome them home. So will countries like Singapore, Canada, Dubai, and Australia, which are opening their arms to skilled immigrants. They will start their ventures in Bangalore or Shanghai instead of Silicon Valley and Research Triangle Park. Our loss will be their gain.