Immigration Facts on Foreign Students

By: Neil G. Ruiz

U.S. policymakers have put forth various immigration reform proposals to improve retention of foreign students obtaining advanced degrees in science, technology, engineering, and mathematics (STEM) from American universities. These students are considered particularly desirable because they, like their American counterparts, offer the types of skills critical to building a vibrant “knowledge” economy—whether in the United States or elsewhere. Around the world, many nations have adjusted their immigration policies in recent years to better attract highly-educated foreigners. Yet, some fear that an accelerated inflow of newly minted foreign workers may depress wages and crowd out opportunities for Americans. This preliminary analysis offers some evidence on the possible effects of those proposals by examining the size, characteristics, and geographic distribution of foreign students in the United States. Additional material from author Neil G. Ruiz on “America’s Foreign Students and Immigration Reform” is available here.
The United States is the global hub of higher education, attracting 21 percent of all students studying abroad

International students range from students studying for language and certificate programs, K-12, associate, bachelor's, master's, professional, and doctoral degree programs. An estimated 684,807 international students attended tertiary-level education programs in the United States in 2010, versus about 389,958 international students in the United Kingdom, the next-largest destination. Within the United States, foreign students account for about 3.5 percent of total higher education enrollment—a share that has remained relatively constant over the past 60 years.

Source: UNESCO Institute for Statistics.

Footnote: International students data include students enrolled in tertiary-level education programs, specifically levels 5 and 6 in the 1997 International Standard Classification of Education (ISCED), or the equivalent of bachelor’s degree programs and above.
The number of all international students studying at U.S. higher educational institutions has grown exponentially in the past 60 years. Since 2000, the United States witnessed a 49 percent increase in the number of foreign students. This spike is primarily due to increased students from Asia. Sixty percent of the growth can be attributed to students from China, and 23 percent from India. In 2012, 64 percent of international students in the United States hailed from Asia, 11.2 percent from Europe, 8.4 percent from Latin America, and 7.4 percent from the Middle East. The leading sending nations were China and India, comprising 25.4 percent and 13.1 percent of all foreign students, respectively.

Source: Institute of International Education.
Footnote: This figure includes bachelor’s, master’s, professional, and doctoral degree international students in all types of visa categories.
Slide 3a. Large U.S. metropolitan areas have the highest number of incoming foreign students

The F-1 visa program is a non-immigrant student visa that allows foreign students to enroll full-time in academic or language training programs in the United States. There were 342,968 incoming F-1 students in 2010 studying toward bachelor’s, master’s, or doctoral degrees, accounting for 51 percent of all F-1 visas issued that year. Of the 100 metropolitan areas that received the greatest number of undergrad and graduate foreign students admitted on F-1 visas, 65 were among the top 100 metro areas in population size. The 35 metro areas with the highest number of foreign students not among the largest 100 metro areas are home to only 2.7 percent of U.S. population but attracted 15.3 percent of all incoming foreign students.

Source: Brookings analysis of FOIA F-1 visa data from Immigration and Customs Enforcement
Smaller metro areas in the middle of the country have the greatest number of incoming foreign students relative to their total undergraduate and graduate student population. If immigration policy changes to make it easier for foreign students to stay and work in the United States after graduation, these metro areas could experience the greatest impact in terms of access to a new labor pool from foreign students residing in their local economies.

Source: Brookings analysis of FOIA F-1 visa data from Immigration and Customers Enforcement and 2010 American Community Survey.
Students from Asia comprise an overwhelming share of all foreign students studying STEM.

Chinese and Indian students not only make up about half of all incoming international students in the United States (49 percent), they also provide a significant pool of students studying the STEM fields (64 percent of all foreign students studying STEM)—critical knowledge for economic growth in the coming years. Indians make up the largest share of foreign STEM master’s students (65 percent), while Chinese account for the greatest share of STEM doctoral students (38 percent).

Source: Brookings analysis of FOIA F-1 data from Immigration and Customs Enforcement (ICE).
Slide 5. The current U.S. visa system makes it challenging to retain foreign students, but new proposals could change that.

Under the current visa system, if an employer wants to hire a foreign student to work in the United States, they are most likely to rely on the H-1B visa program, which permits work for up to six years after graduating. If an employer eventually sponsors an H-1B worker for a green card to stay permanently in the United States, the wait time can be longer than 10 years, especially for individuals from highly backlogged countries such as India or China. In 2010, only 26,502 of all new H-1B visas approved went to U.S. foreign students, of which 19,922 held advanced degrees from American universities. If legislation is passed to give green cards to foreign students who graduate with advanced degrees in STEM fields from American universities, the number of foreign graduates working in the United States could increase dramatically. About 96,200 incoming foreign students in 2010 would be qualified for a green card after graduating under this proposal.

Source: Brookings analysis of FOIA F-1 Data from Immigration and Customs Enforcement (ICE) and FOIA H-1B data from US Citizenship and Immigration Services (USCIS).