

America's Foreign Students: Assets for Global Innovation and Entrepreneurship

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Metropolitan America's Challenge and Opportunity

We live in a pivotal decade. In the wake of the Great Recession, the United States needs a new economic vision to grow more high-quality jobs that are more attainable and accessible to workers. This requires a radical shift from the pre-Recession U.S. growth model that focused on consumption, debt and short-term speculation, which contributed in large part to one-third of the nation's population living in poverty or near poverty.

With the federal government mired in partisan gridlock and ideological polarization, cities and metropolitan areas must face these challenges and opportunities largely on their own. The good news is that this inaction has sparked a Metropolitan Revolution. Networks of city and metropolitan leaders are doing the hard work and investing the resources to grow the national economy.

Why Do Foreign Students Matter for Local Economies?

International migration is a global and local-development issue. International migrants link local economies and global destinations through their flows of knowledge, trade, capital and production and their economic, social, and political networks. High-skilled migrants are a source of specialized labor that enables America's advanced industries to evolve with rapidly changing technology and remain flexible as skills demands change. Migrants also serve as valuable bridges between U.S. and global metropolitan areas by facilitating economic activity through exports, imports, foreign direct investment, and the circulation of knowledge and people, especially in fast-growing emerging markets. These international exchanges promote economic activity and indicate a region has "global fluency."

The United States receives the most immigrants of any country – over 40 million. About 28 percent of America's foreign-born population is high-skilled with a bachelor's degree or higher in 2010, mostly coming from emerging economies in Asia, Latin America, and the Middle East. A large proportion of high-skilled foreigners work in the healthcare, high-tech manufacturing, information technology, and life sciences industries. In these and other high-skill industries foreign-born workers are more likely to have a bachelor's degree or higher, as compared to native-born workers.

Most analysts agree that the U.S. economy benefits from the presence of immigrant workers. However, the U.S. faces increasing competition from emerging economies in attracting and retaining these migrants. While considerable debate exists over a potential skills-shortage in the U.S. labor market, maintaining global economic competitiveness in the U.S. requires a sound educational system to supply skilled workers and a robust immigration system to retain foreign skilled labor with work visas.

Viewing migrants as global assets to metropolitan areas requires a new framework, one that recognizes the economic contributions of migrants as innovators, entrepreneurs, and employees in local businesses. It recognizes the valuable economic contributions migrants make through

their familial and professional networks in U.S. and global cities. The Metro Program at Brookings has embraced and cultivated this framework and recognizes the significance migrants can offer to the metropolitan revolution.

As demonstrated in my recent publications, “The Geography of Foreign Students in U.S. Higher Education: Origins and Destinations,” “The Search for Skills: Demand for H-1B Immigrant Workers in U.S. Metropolitan Areas,” “Immigration Facts on Foreign Students,” “H-1B Visas and the STEM shortage,” and “Better Align H-1B Visa Fee Revenues to Local Workforce Needs,” a growing number of U.S. metro areas around the country need access to visas so that high-skilled foreigners can work, study, and contribute to their local labor markets. Numerous policymakers, administration officials, and metropolitan and private sector leaders use my research as a trusted and cited resource in this debate.

What I Propose and Plan of Action

Over the next year, at the Brookings Metro Program I propose to conduct new research on the impact of foreign students on innovation and entrepreneurship. Using government administrative data on foreign students on F-1 visas from 2001-2013 granted to me through a Freedom of Information Act (FOIA) requests, that includes data that connects foreign students origin hometown addresses with their school and metropolitan area of destination, degrees being pursued, subjects/major studied, I will conduct a research project to advanced our knowledge of the relationship between foreign students impact on innovation and entrepreneurship in the following way:

- The relationship between foreign students and entrepreneurship activity in the U.S. metropolitan destination.
- The relationship between foreign students and the innovation activities measured by patents and companies founded in the foreign students’ home regions.
- The relationship between global trade activities and increases of foreign students flows from specific origin communities to and U.S. school destinations.

Initial empirical results using this dataset show that increases in import of goods from a specific locality abroad leads to percentage increases of importing foreign students pursuing business or management degrees into U.S. metropolitan areas. This research will further expand empirical analysis using more detailed trade data and explore specific trade and foreign student increases/decreases between China and South Korea to U.S. cities. It will also utilize a dataset of details of where patents are filed from, and the location of where foreign students received their degrees and originate from.

The \$20,000 budget will be used in the following way:

- Data Acquisition and Data Clean-up by Research Assistants (\$5,000)
- Travel to Interview Localities Abroad (China and South Korea) and in the U.S. destinations to understand how they leverage foreign students for trade activities (\$5,000)
- Brookings Paper Release Event with invited stakeholders in Washington, DC (\$5,000)
- Time of Lead Researcher (\$5,000)