

Getting Schooled

The Role of Universities in Attracting Immigrant Entrepreneurs

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Immigrants play a vital role in innovation activities and entrepreneurship. Given the substantial contribution of immigrants in these areas, a set of natural questions arise: What are the pathways that high-skilled immigrants take to arrive in the United States, and how has the importance of these pathways changed over time? What are important institutions that serve as gatekeepers for high-skilled immigrants, and do they affect the types of immigrant founders that come to the United States? Do certain parts of the United States benefit disproportionately from high-skilled immigration, and if so, what are some factors that contribute to these benefits? The answers to these questions have important implications for designing immigration policy and regulation, which have become increasingly acrimonious topics in public discourse. They also have important implications for firms and universities

that recruit talent from abroad and for the communities that hope to promote vibrant entrepreneurial ecosystems.

To answer these questions, we study immigrant entrepreneurs backed by venture capital (VC). The VC ecosystem plays a crucial role in the macroeconomy, with VC-backed firms contributing disproportionately to firm size and innovation in the U.S. economy. VC-backed firms are also substantial job creators for the U.S. economy; focusing on the contribution of immigrant founders of VC-backed firms illustrates the job-creating role that immigrants play in the economy, helping address concerns that immigrants primarily take jobs away from natives. Finally, various policymakers have endeavored to design policies that promote and foster entrepreneurship with high growth potential. Accordingly, understanding the contribution of immigrants to this important part of the economy is of interest in its own right.



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As we discuss further, the detailed data set we assemble on immigrant entrepreneurs yields insights that are likely to be generalizable to high-skilled immigrants in general.

We begin our empirical analysis by documenting several facts about immigrant entrepreneurs in our sample. We estimate that approximately 20 percent of the founders in our sample are immigrants, broadly in line with estimates in other work on the immigrant share in other entrepreneurial and innovation activities. Consistent with overall immigration trends, we find that the proportion of East Asian and South Asian founders has increased substantially over our sample. We also find that immigrant founders are just as likely as native founders to start firms that have initial public offerings or are acquired at valuations greater than \$100 million, markers of success for VC-backed firms. Moreover, relative to natives, immigrants disproportionately tend to start information technology (IT) firms. On a relative basis, venture-backed firms founded by immigrants also tend to be established in coastal states, most notably California, Massachusetts, and New York, as opposed to smaller states in the southern and middle parts of the country. Thus, even relative to their overall greater share of VC-backed companies, these coastal states have higher proportions of founders who are immigrants. This last fact indicates that the benefits associated with firms with high growth potential founded by immigrants have been especially geographically concentrated in certain parts of the country.

Having established these broad facts about immigrant entrepreneurs and their firms, we move to leveraging our unique data on the educational and work history of immigrant entrepreneurs to better understand immigrant pathways toward entrepreneurship. We categorize each of the immigrant entrepreneurs in our sample into one of three categories: those that came to the United States first for college, those that came to the United States first for post-graduate education, and those that came to the United States after receiving their education elsewhere. This classification allows us to more closely explore how the different pathways of high-skilled immigration to the United States contribute to the pool of entrepreneurial talent. This classification reveals a striking fact: more than 75 percent of immigrant entrepreneurs that we have education information for received some form of schooling in the United States. Of this 75 percent, more than half the entrepreneurs received an undergraduate

degree in the United States. The substantial portion of immigrant entrepreneurs educated in the United States is one of our key novel findings and suggests the extent to which universities play an important role in importing global entrepreneurial talent to the United States.

More closely focusing on entrepreneurs across the different groups, we find that immigrant entrepreneurs that come to the United States for college tend to have similar educational backgrounds to native entrepreneurs. In contrast, entrepreneurs who come to the United States for graduate education or for work tend to be substantially more likely to have studied a science, technology, engineering, and mathematics discipline; consistent with this fact, these groups of entrepreneurs are also responsible for the disproportionate representation of immigrants among founders of IT firms in our sample. Interestingly, while the share of immigrant entrepreneurs has stayed relatively constant over our sample, we find that the relative share of U.S. college-educated immigrant entrepreneurs has been rising, while the share of immigrant entrepreneurs that came to the United States for graduate school and work has been falling.

Lastly, we study the locations in which immigrant founders across the different groups start their companies to unpack some of the drivers behind which geographic areas tend to benefit from immigrant entrepreneurs. We find that more than 40 percent of founders in our sample establish firms in the same state where they were educated. This fact is not simply driven by Berkeley- and Stanford-educated entrepreneurs founding companies in the Bay Area or Harvard- and MIT-educated entrepreneurs founding companies in Massachusetts. Instead, it captures a more general phenomenon that applies to non-VC hubs as well. The evidence suggests that the presence of top universities has likely been an important determinant of which areas have benefited most from receiving high-skilled immigrants that go on to start firms. More generally, this result provides additional evidence for the role that universities play in local agglomeration economies. Universities are known to contribute to local economies in a variety of ways—for example, by training a skilled labor force or by knowledge diffusion from innovation activities. Our results suggest that this agglomeration benefit extends to attracting skilled immigrants, some of whom end up starting firms with high growth potential.

From a policy perspective, our results emphasize the importance of immigrant entrepreneurs as founders of startups with high growth potential. While a substantial focus in the current public discourse revolves around work visas, including the H-1B visa, our evidence suggests that student visas may deserve almost as much attention, given the role of universities in bringing talented foreign students into the country. Policy proposals in the past few years have sought to place restrictions on student visas for foreigners. Given the substantial contribution of immigrant entrepreneurs educated in the United States, our results suggest that such policies likely carry significant costs for the country by restricting the supply of talented potential entrepreneurs. Our results also suggest that there

is a substantial lag between when immigrant entrepreneurs enter the country and when they found their firms. Accordingly, policies that increase or decrease the flow of immigrants may have persistent effects on immigrant entrepreneurship that only show up decades after those policies are implemented.

NOTE

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