

Obviously, there is a well-known flow of startups towards the United States (driven in large part by the availability of venture capital and higher valuations at IPO), but does your data show any movement of entrepreneurs to and from developing countries?

—Chris Haley Head of New Technology and Startup Research, Nesta

Thanks for the question, Chris.

The mobility of entrepreneurs is a topic of increasing interest among researchers and policymakers alike. Recent research suggests that immigrant-owned enterprises are more likely to engage in transnational activities, 1 supporting the hypothesis that immigrants have wider international networks. The Kauffman Foundation has also found that, in the United States, immigrants play a disproportionately large role in entrepreneurship.²

This begs the question: what does this picture look like on the international stage? In this data brief, we explore the mobility of entrepreneurs using data from the Entrepreneurship Database Program.

- Wang, Q., and Liu, C. Y. (2015) Transnational activities of immigrant-owned firms and their performances in the USA. Small Business Economics, 44 (2): 345-359.
- Sunan Tareque, I., Jackson, C., & Morelix, A. Want to be like Silicon Valley? Welcome Immigrant Entrepreneurs. Ewing Marion Kauffman Foundation Growthology Blog. October 7, 2016.











About the sample

Since 2013, the Entrepreneurship Database Program at Emory University has been systematically collecting data from entrepreneurs who apply to one of several participating accelerator programs. The data used in this analysis come from 55 programs run between 2013 and 2015. Each venture reported data on up to three of its founders, and we limit our analysis to founders for whom we have data on country of birth, most recent job, and venture's main operations. From our initial sample of 4,125 ventures, the following observations are based on 2,942 early-stage ventures and 5,913 individual founders.

The surveys we administer to entrepreneurs as they apply to accelerator programs include questions about where their venture operates, as well as the primary founders' countries of birth and most recent full-time job. In our sample, 18% (1,076) of founders were born outside their venture's main country of operations, and 13% (774) worked their pre-founder job outside the venture's main country of operations. Nearly 40% of founders launched a venture that operates in a High Income country, while roughly 20% each operate ventures in an Upper Middle, Lower Middle, or Low Income country. The global representation and considerable mobility within our data provide an opportunity to dig deeper. First we examine the different combinations of local and foreign experience among founders and how this differs based on ventures' locations. We then take a look at the interaction between founder mobility and various early indicators of venture performance.

Founder Mobility Types

While recent immigrants may have better access to international networks, they may also face difficulties navigating a new business environment.⁴ To capture both immigrant status and recent career experience, we use founders' countries of birth and most recent job to divide the sample into four founder mobility categories (Table 1). "Local" entrepreneurs were born in and worked their most recent job in their venture's country of operations, while "transplants" have experiences that are entirely foreign. In between these two extremes are founders who are "local with recent foreign experience" and "transplants with recent local experience."

FOUR TYPES OF FOUNDER MOBILITY

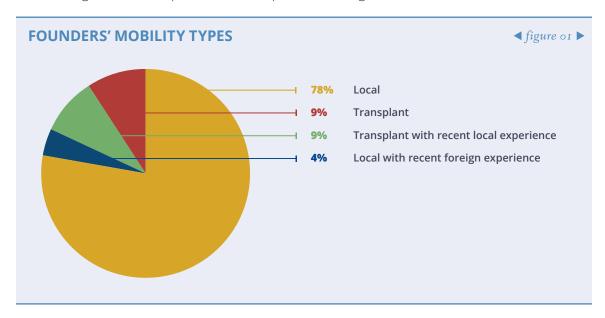
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	WAS BORN IN VENTURE'S COUNTRY OF OPERATIONS	WORKED MOST RECENT JOB IN VENTURE'S COUNTRY OF OPERATIONS
Local	Yes	Yes
Local with recent foreign experience	Yes	No
Transplant with recent local experience	No	Yes
Transplant	No	No

³ We use the 2013 classifications developed by the World Bank to match this 2013-2015 data.

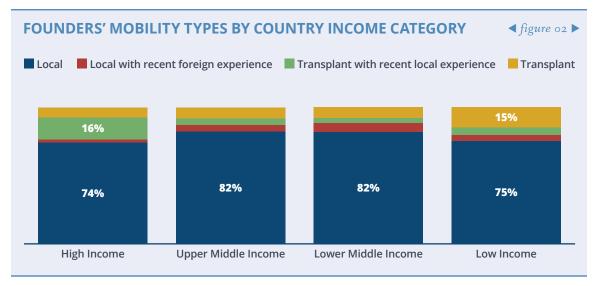
⁴ Neville, F., et al., (2014) Do young firms owned by recent immigrants outperform other young firms? Journal of Business Venturing, 29(1): 55-71.

Figure 1 shows that 78% of the founders in our sample are "local," while 9% are "transplants." Roughly 13% land in between these two extremes, having some combination of local and foreign experiences. "Locals with recent foreign experience" represent the smallest portion of our sample (4%). These individuals gained work experience abroad prior to starting a venture in their home countries. 6



Founder Mobility Types by Country Income Category

High Income and Low Income countries contain the lowest proportions of local founders (Figure 2). More specifically, Low Income countries have the highest percentage of transplants (15%), while High Income countries have the highest percentage of transplants with recent local experience (16%). Founders have similar backgrounds in Upper and Lower Middle Income countries, with over 80% of founders being local, and the remaining 20% consisting of a fairly even mix of the other three mobility types.



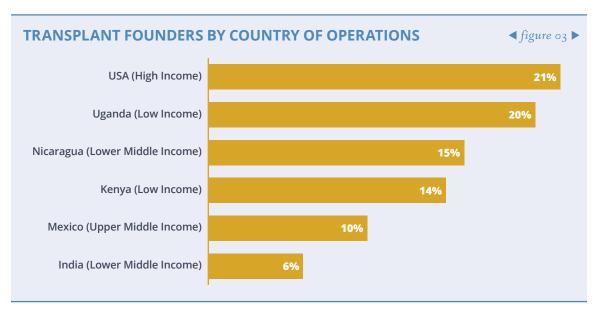
The proportions are significantly different across country groups at the p<.001 level.

⁵ The patterns in Figure 1 might be driven by ventures whose operations and headquarters are in different countries (191 ventures in our sample fall into this category). When limiting the sample to founders whose operations and headquarters are in the same country, 82% are "local," 4% are "local with foreign experience," 9% are "transplants with local experience," and 5% are "transplants." Not surprisingly, this more limited sample includes more local and less transplant entrepreneurs.

⁶ The entrepreneurs who start ventures in their home countries do not necessarily return home, as approximately 550 founders (9% of our sample) actually reside outside their venture's country of operations.

Transplant Founders by Country

We take a closer look at mobility patterns by focusing at the country level. Figure 3 shows the percentage of transplants—with and without local work experience—for countries where at least 200 founders in our sample operate their ventures. The pattern mirrors Figure 2, with the United States (a High Income country) having the highest percentage of transplants (21%), followed by Uganda (a Low Income country) at 20%. Mexico (an Upper Middle Income country) and India (a Lower Middle Income country) have the smallest proportion of transplants, at 10% and 6%, respectively.



One might ask where these non-local founders are coming from. Table 2 lists the top "sending" countries and regions for each of the recipient countries listed in Figure 3. For nearly every country outside the United States, the top sending country is the United States and the top sending region is North America. The exception is Mexico, which receives its largest number of in-bound entrepreneurs from Latin America and the Caribbean.

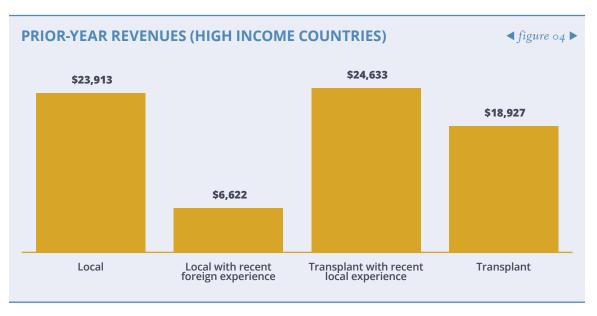
TRANSPLANT FOUNDERS' COUNTRY AND REGION OF BIRTH

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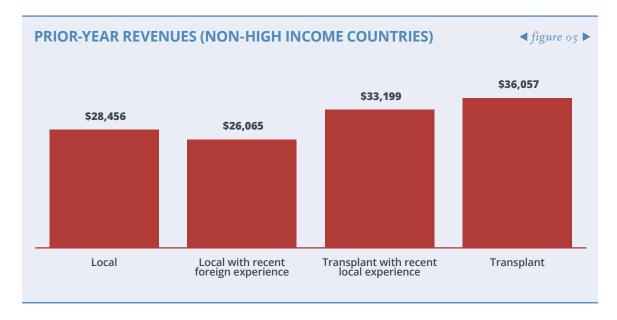
COUNTRY OF OPERATIONS	TOP COUNTRY OF BIRTH FOR TRANSPLANTS	TOP REGION OF BIRTH FOR TRANSPLANTS
United States of America	India	Europe & Central Asia
Uganda	United States of America	North America
Nicaragua	United States of America	North America
Kenya	United States of America	North America
Mexico	United States of America	Latin America & Caribbean
India	United States of America	North America

Early-Stage Revenues by Founder Mobility Type

The next logical step is to ask how founder mobility affects the performance of early-stage ventures. Our surveys asked founders how much revenue their venture earned in the prior year. In High Income countries, transplants with recent local experience and locals earned the most revenue, averaging close to \$24,000 each. Locals with recent foreign experience earned the least revenue, averaging around \$7,000 (Figure 4).⁷



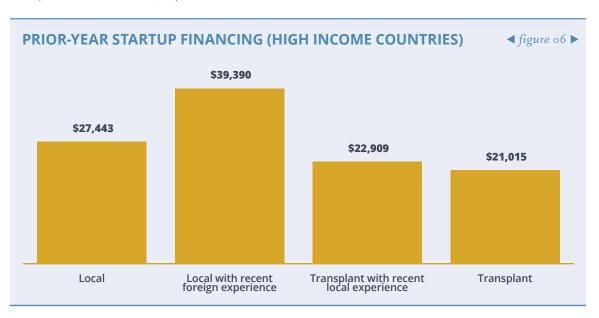
A different picture emerges among founders in emerging markets (Figure 5). Prior-year revenues in general are higher than those in High Income countries, and we see transplants (with and without recent local experience) earning the highest average revenues at \$33,000 and \$36,000 respectively.



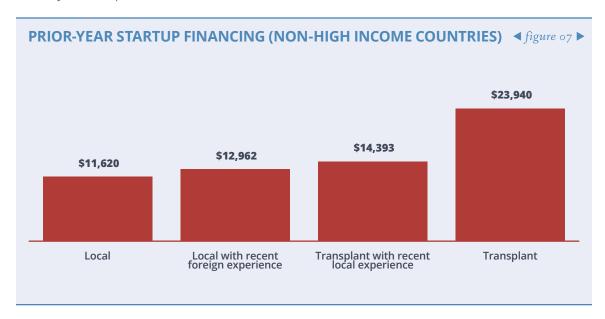
⁷ 220 founders reported prior-year revenues or start-up financing (philanthropy, debt, or equity) that were identified as outliers and excluded for the analysis of Figures 4-7. Figure 7 was the only of these figures with statistically significant differences between means, showing significance at the p<.001 level.</p>

Start-Up Financing by Founder Mobility Type

Another measure of entrepreneurial performance is start-up financing, which we calculate as the sum of equity, debt, and philanthropic capital reported in the prior year. In High Income countries, locals with recent foreign work experience outperformed all other categories, raising nearly \$40,000 on average (Figure 6). Transplant founders (with and without local experience) raised the least, at levels closer to \$20,000.



In emerging markets, founders generally raised considerably less start-up financing. Local founders (with and without recent foreign experience) as well as transplants with recent local experience each averaged under \$15,000 in total prior-year capital raised (Figure 7). Transplants here are the exception, raising \$24,000, which is more on average than their High Income country counterparts.



What does this mean?

As in previous data briefs, our data are revealing some interesting patterns, this time about the mobility of entrepreneurs working in developed versus developing markets. First, there is considerable movement into emerging markets, as well as High Income countries. However, in developing countries, transplant founders tend to perform better than locals in terms of prior-year revenues and start-up financing. A less consistent pattern is revealed in High Income countries.

What does this mean for investors, accelerators, and entrepreneurs? While the patterns in this brief are preliminary, they do raise some important questions:

- 1. In emerging markets, transplant founders are earning slightly higher revenues and attracting significantly more early-stage investment. What can we do to ensure that more capital is going to local entrepreneurs?
- 2. For "transplants with recent local experience," it would be useful to know more about when and why the founder moved into the focal country. Moving out of ambition or necessity, or at younger versus older ages, likely has implications for venture outcomes.
- 3. We have not been able to detect a considerable amount of movement between emerging markets, as most non-High Income countries are largely drawing in entrepreneurs from the United States / North America. This could be a product of our sample, or an indication of a broader trend and would be an interesting topic for further analysis.

We hope these insights allow for a better understanding of entrepreneur mobility. As we continue to collect data, we will address more questions about trends in the field of entrepreneurship and acceleration.

Global Accelerator Learning Initiative

The Global Accelerator Learning Initiative (GALI), a collaboration between ANDE and Emory University, is designed to explore—and answer—key questions about enterprise acceleration such as: Do acceleration programs contribute to revenue growth? Do they help companies attract investment? GALI builds on the Entrepreneurship Database Program at Emory University, which works with accelerator programs around the world to collect and analyze data describing the entrepreneurs that they attract and support. These data also provide an opportunity to explore interesting questions around early-stage entrepreneurship, such as the topic discussed here.



EMORY







Emory's Entrepreneurship Database Program

ANDE Research Initiative

Contact us at info@entrepreneurdata.com Contact us at ande.info@aspeninst.org To learn more about GALI, please visit www.andeglobal.org/accelerators.