ENTREPRENEURSHIP & ACCELERATION

Questions from the Field

Photo by John-Michael Mass/Darby Communications

Startup Financing by Sector and Geography | September 2017

At the Global Innovation Fund, we are focused on supporting entrepreneurs and innovators in markets where individuals earn less than $5 per day. What sectors/verticals and what geographies are typically getting funding in the data that you're seeing?

—Jocelyn Cheng
Investment Director, Global Innovation Fund

Thanks for the question, Jocelyn.

Access to capital is one of the many challenges faced by small and growing businesses throughout the world.[1] As such, various stakeholders aspire to increase the flow of capital into the most promising of these early-stage ventures, in the form of equity, debt, or grant investments. While we know that emerging market ventures face heightened barriers when it comes to attracting investment,[2] it is worth exploring in greater detail which types of ventures are receiving investment support, and where there are the biggest gaps. In this data brief, we explore financing for ventures working in different regions and sectors around the world using data from the Entrepreneurship Database Program.

[1] Aspen Network of Development Entrepreneurs, "State of the Small and Growing Business Sector 2016 Impact Report," June 2017.

[2] Global Accelerator Learning Initiative, "Accelerating Startups in Emerging Markets: Insights from 43 Programs," May 2017.

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About the sample

Since 2013, the Entrepreneurship Database Program (EDP) at Emory University has been systematically collecting data from entrepreneurs who apply to one of many participating accelerator programs. The data used in this analysis come from 8,612 ventures that applied to 99 programs run between 2013 and 2016.[3] These data represent early-stage businesses (average age of 2.3 years) whose founders applied to a participating accelerator program, seeking to scale their business through technical assistance, network development, and sometimes direct investment. The ventures represented in the EDP data operate in 149 different countries.

From surveys administered to entrepreneurs when they apply to participating accelerator programs, we learn about the primary country of operations for each venture, as well as the primary sectors being impacted by its activities. The list of sectors comes from the IRIS catalog of generally accepted performance metrics and is meant to identify the sectors targeted by the organization's products and services, rather than the specific product or service being offered.[4] The EDP application survey also includes questions about the amount of funding ventures have already received, including outside equity investment, debt financing, and philanthropic support. In the following tables and figures, we explore how funding sources and levels differ for early-stage ventures working in different sectors and regions.

Startup Financing by Sector

Figure 1 shows the percent of ventures with any outside funding (equity, debt, or philanthropic) for sectors with at least 200 ventures in the current sample.[5] Ventures working in the energy and environment sectors were most likely to report some outside financing at the time of application, at roughly 50%. Ventures in the information and communication technology (ICT) and tourism sectors were among the least likely, at just over 30%. For the ICT sector, this may reflect the fact that its ventures are the youngest on average (1.4 years, compared to more than 2 years for most other sectors).[6]

[3] The full dataset includes 8,666 ventures. Fifty-four responses were removed from the calculations presented here due to financing information that was irreconcilable with the rest of the sample.

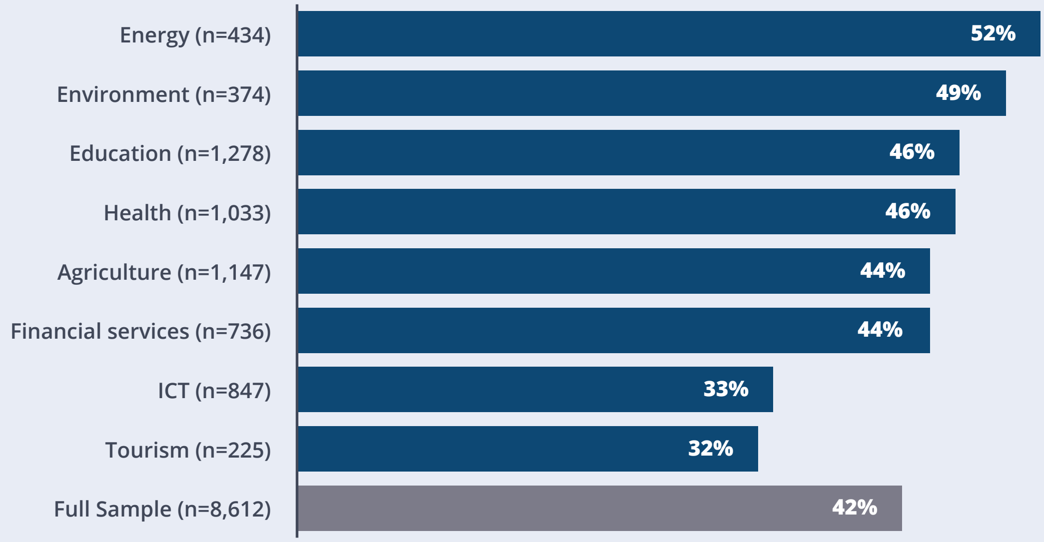
[4] The IRIS metrics are listed online at www.iris.thegiin.org/metrics.

[5] Excludes the Artisanal, Culture, Housing development, Infrastructure/facilities development, Supply chain services, Technical assistance services, and Water sectors (for information on these sectors, visit www.galidata.org/publications/2016-data-summary).

[6] The Financial services sector also had an average venture age of less than 2 years, at 1.6 years.

PERCENT WITH ANY OUTSIDE FUNDING AT APPLICATION, BY SECTOR

figure 01



When looking at funding amounts, we see that energy ventures also reported the highest average levels of equity, debt, and philanthropy, while tourism and ICT reported some of the lowest levels (Table 1).

AVERAGE OUTSIDE FUNDING AT APPLICATION, BY SECTOR

table 01

SECTOR	N	TOTAL	EQUITY	DEBT	PHILANTHROPY
Energy	434	$209,799	$115,084	$59,584	$35,130
Health	1,033	$113,034	$56,438	$28,924	$27,672
Environment	374	$85,070	$40,626	$14,974	$29,470
Financial services	736	$84,793	$59,110	$15,364	$10,319
Education	1,278	$83,743	$37,737	$12,812	$33,194
Agriculture	1,147	$81,173	$37,705	$21,783	$21,685
ICT	847	$30,268	$16,783	$4,573	$8,912
Tourism	225	$20,098	$6,464	$2,370	$11,265
Full Sample	**8,612**	**$78,673**	**$37,066**	**$19,177**	**$22,430**

Startup Financing by Region

Next, we break down the sample into the regions with at least 100 ventures in our sample.[7] Ventures working in North America and East Asia & Pacific were most likely to have received outside funding, at around 50%. Those in South Asia and Latin America & Caribbean were least likely, at closer to 35% (Figure 2).

PERCENT WITH ANY OUTSIDE FUNDING AT APPLICATION, BY REGION

figure 02

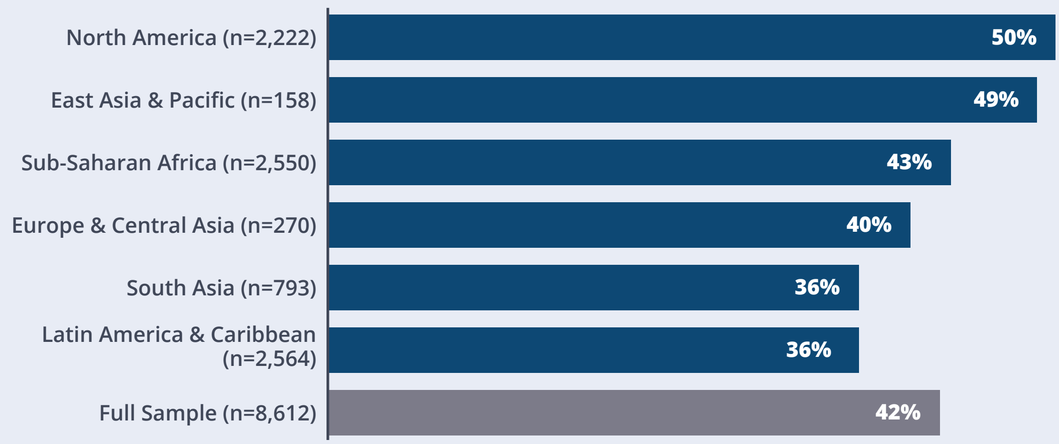


Table 2 shows that ventures in North America reported the highest amounts of equity funding, averaging $85,000, while Sub-Saharan African ventures reported the least at less than $10,000. When looking at the mix of financing, philanthropy is relatively important in Sub-Saharan Africa while debt plays a markedly small role in East Asia & Pacific.

AVERAGE OUTSIDE FUNDING AT APPLICATION, BY REGION

table 02

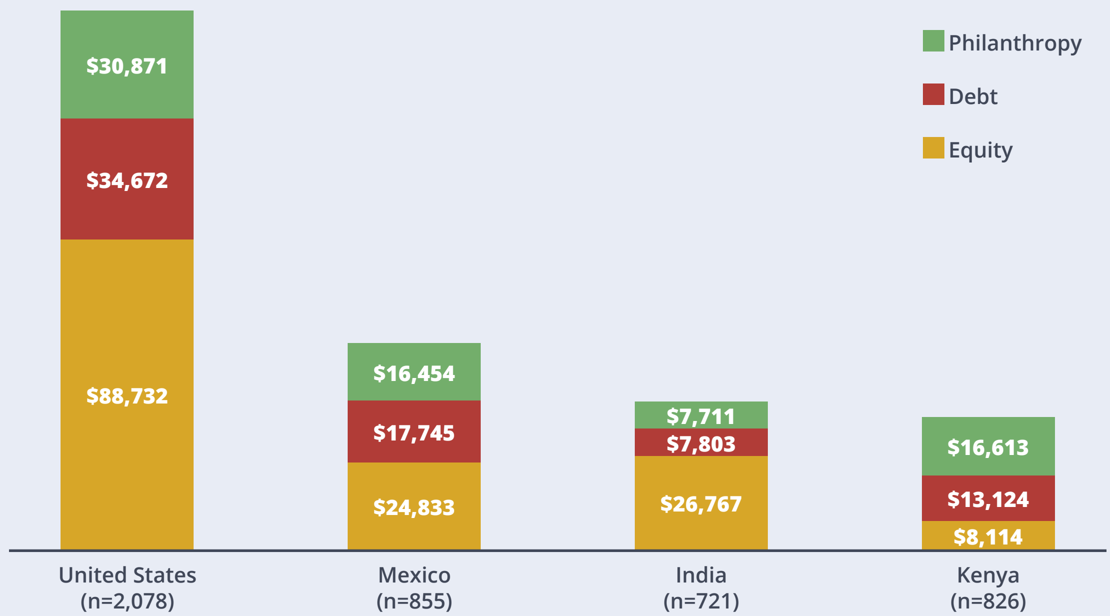
REGION	N	TOTAL	EQUITY	DEBT	PHILANTHROPY
North America	2,222	$148,519	$85,058	$33,470	$29,991
Europe & Central Asia	270	$89,776	$24,939	$28,310	$36,528
East Asia & Pacific	158	$80,579	$41,842	$7,838	$30,899
Latin America & Caribbean	2,564	$68,820	$27,330	$19,997	$21,493
South Asia	793	$42,436	$24,551	$7,648	$10,236
Sub-Saharan Africa	2,550	$36,619	$9,289	$9,616	$17,714
Full Sample	**8,612**	**$78,673**	**$37,066**	**$19,177**	**$22,430**

[7] Excludes Middle East & North Africa (n= 44). For information on all regions, visit www.galidata.org/publications/2016-data-summary.

Startup Financing by Country

We also looked more closely at the countries with the most sampled ventures in our data (Figure 3). We see that ventures in Kenya raised the least equity and relied on higher amounts of philanthropic funding, and those in India raised considerably more equity than debt or philanthropic funding. Ventures in Mexico received a more even mix of funding on average.

AVERAGE OUTSIDE FUNDING AT APPLICATION, BY COUNTRY ◀ *figure 03* ▶



Regional Differences for Most Prominent Sectors

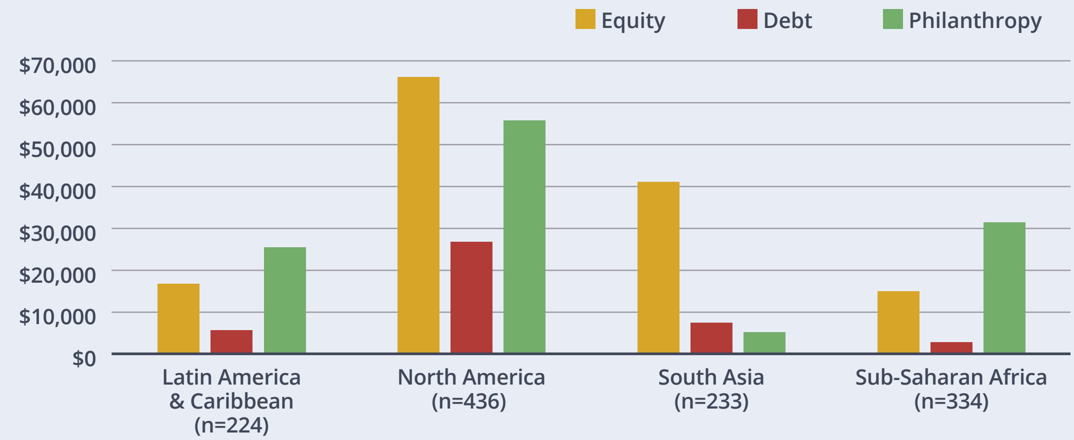
The three figures below examine regional differences for the most prominent sectors in our sample. Major take-aways from these three figures include:

1. **Education ventures** in South Asia relied heavily on equity investment, while those in Latin America & Caribbean and Sub-Saharan Africa received the most funding from philanthropic sources on average.
2. **Agriculture ventures** in North America raised considerably more equity investment than those in other regions, but were matched fairly similarly to Latin America & Caribbean ventures in terms of debt and philanthropy.
3. **Health ventures** relied on debt as a more prominent funding source compared to other sectors. Equity accounted for the largest financing amounts on average in Latin America & Caribbean and North America, while philanthropic support was relied upon the most in South Asia.

More specifically, the most prominent sector in our sample is education, representing 1,278 ventures. Figure 4 shows that education ventures based in North America and South Asia received the highest levels of equity investment, with averages of $66,000 and $41,000 respectively. Education ventures in Latin America & Caribbean and Sub-Saharan Africa relied most heavily on philanthropic funding, and debt was only a prominent source of funding for those based in North America.

AVERAGE OUTSIDE FUNDING AT APPLICATION, EDUCATION VENTURES

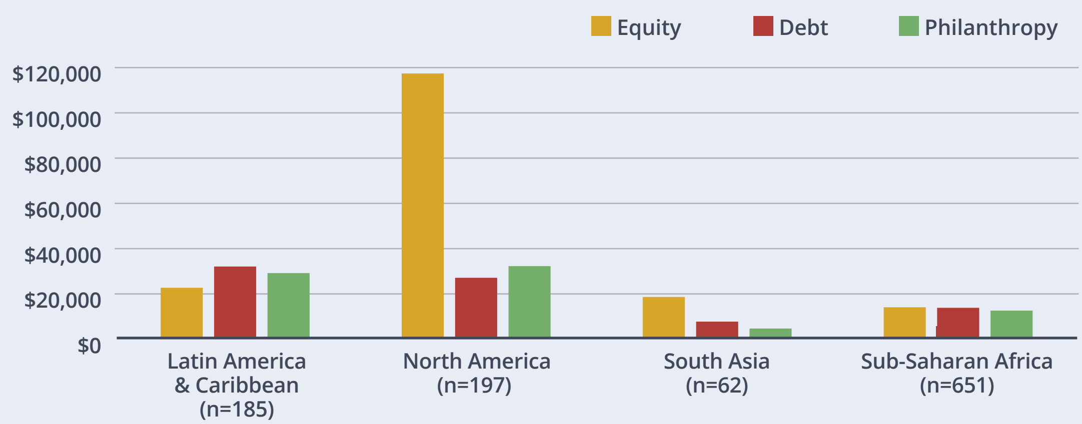
figure 04



Agriculture ventures make up the second greatest proportion of the total sample (n=1,147). Figure 5 shows that agriculture ventures based in North America raised by far the most equity, with an average close to $120,000. Investment levels for agriculture ventures in Sub-Saharan Africa and South Asia (for all funding types) were, on average, below $20,000.

AVERAGE OUTSIDE FUNDING AT APPLICATION, AGRICULTURE VENTURES

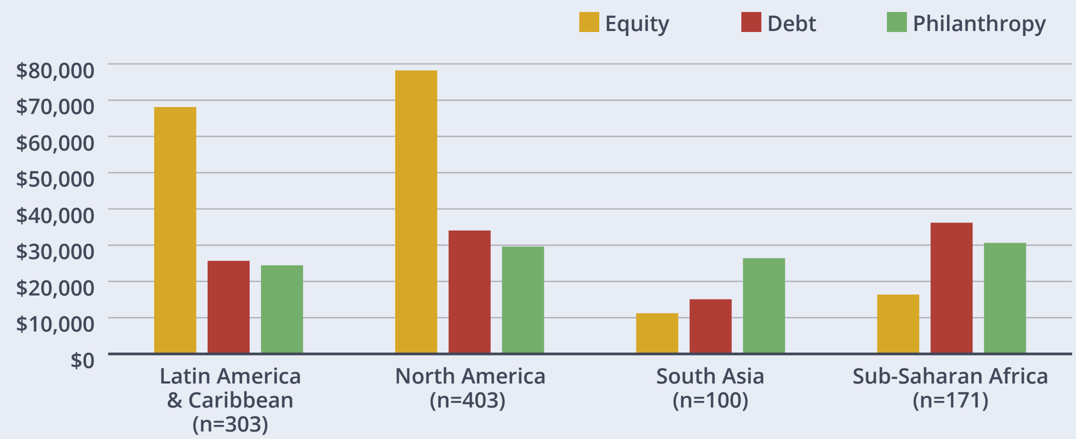
figure 05



Health ventures make up the third largest sector of focus for the ventures in our sample (n=1,033). Figure 6 shows that Health ventures in North America and Latin America & Caribbean raised the highest levels of equity, at $78,000 and $68,000 respectively, while those in Sub-Saharan Africa and North America raised the largest amounts of debt. Philanthropic support was similar in each region, coming in between $20,000 and $30,000.

AVERAGE OUTSIDE FUNDING AT APPLICATION, HEALTH VENTURES

figure 06



Funding Aspirations for Early-Stage Ventures

Last, we shed some light on the demand for investment, as represented by the entrepreneurs' three-year fundraising plans.[8] Table 3 shows that ventures in the financial services sector plan to raise the most total funding (an average of $9.4 million), while those in the environment sector are looking for the least (an average of $1.6 million). In comparison to baseline funding in Table 1, we see that ICT ventures report some the lowest average financing amounts as well as three-year fundraising plans of any sector, while those in financial services and tourism have raised relatively little at baseline compared to their more aggressive future fundraising plans.

TOTAL THREE-YEAR FUNDRAISING PLANS, BY SECTOR

table 03

SECTOR	N	AVERAGE
Financial services	547	$9,427,094
Health	644	$3,991,921
Tourism	106	$3,812,427
Energy	304	$3,592,916
Education	806	$2,382,056
Agriculture	796	$2,341,073
ICT	427	$2,010,152
Environment	245	$1,637,121
Full Sample	**5,331**	**$3,291,068**

[8] Ventures that did not report any three-year fundraising plans are excluded from Tables 3 and 4, so these values should be interpreted as the average among ventures with reported fundraising plans, not the average of all ventures in the sample.

Table 4 shows that ventures based in Europe & Central Asia and North America plan to raise the most funding over the next three years, at $7 million and $5.9 million respectively, while ventures working in Sub-Saharan Africa and East Asia & Pacific plan to raise the least at less than $2 million. In comparison to financing raised to date, South Asian ventures plan to raise relatively large amounts of investment compared to other regions, but to date have raised relatively little (see Table 2). Alternatively, ventures in East Asia & Pacific plan to raise the least of any region but to date are on the upper end of the regional investment spectrum.

TOTAL THREE-YEAR FUNDRAISING PLANS, BY REGION

table 04

REGION	N	AVERAGE
Europe & Central Asia	114	$7,029,517
North America	1,433	$5,866,188
South Asia	469	$5,206,183
Latin America & Caribbean	1,386	$1,976,681
East Asia & Pacific	90	$1,800,436
Sub-Saharan Africa	1,810	$1,620,327
Full Sample	**5,331**	**$3,291,068**

What does this mean?

There is considerable regional and sectoral diversity in our data. Not surprisingly, this diversity reveals systemic variations in funding levels and types. While the patterns in this brief are preliminary, they do raise important questions:

1. North American ventures raise – by far – the most equity. However, South Asian ventures that work in education and Latin America & Caribbean ventures that work in health also stand out as raising high amounts of equity on average. What is causing these sectors and regions to draw in higher amounts of outside equity?
2. Ventures working in the financial services sector have, on average, the most aggressive three-year fundraising plans, yet have raised to date a modest amount of financing in comparison to other sectors. These ventures are younger on average than those in others sectors, with business models that may require higher funding levels to sustain their own on-lending portfolios. It will be interesting to note if over time they accelerate their investment as fast as anticipated.
3. Sub-Saharan African ventures are among the most likely to have received any outside financing upon application to an accelerator program, though they received the smallest amounts of equity and debt on average. What does this say about the investment climate in Sub-Saharan Africa, and does this indicate positive movement in the region?

We hope these insights allow for a better understanding of the early-stage financing climate for ventures in various geographies and sectors. 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.

GALI

To learn more about GALI, please visit www.galidata.org.

The Global Accelerator Learning Initiative has been made possible by its co-creators and founding sponsors, including the U.S. Global Development Lab at the U.S. Agency for International Development, Omidyar Network, The Lemelson Foundation and the Argidius Foundation. Additional support for GALI has been provided by the Kauffman Foundation, Stichting DOEN, and Citibanamex.