



— R I S E O F T H E —
Global Startup City

The New Map of Entrepreneurship
and Venture Capital

Richard Florida and Ian Hathaway



OCTOBER 2018

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Foreword

In 2012, I detailed my experiences as a leader in the Boulder, Colorado startup community in the book *Startup Communities: Building an Entrepreneurial Ecosystem in Your City*. I moved to Boulder in 1995, and though I had no pre-existing business relationships, I found it to be a collaborative and inclusive place where connections could easily be made—something that was critical for me as a young entrepreneur. I’ve since invested in or helped build hundreds of companies in Boulder, including Foundry Group and Techstars.

My motivation for writing *Startup Communities* was simple. As I began to think about places that consistently produced high-growth entrepreneurship around the United States, such as the San Francisco Bay Area, New York City, Austin, and Boston, I quickly realized that Boulder—a city of just over 100,000 residents (325,000 in the broader metropolitan area)—was unlike the others. I wanted to better understand what it is that makes Boulder so successful as a startup community, and if I could, formalize and share those findings with others.

Without a doubt, Boulder has many advantages that other places don’t, such as a major research university, a highly educated workforce, three national labs, flagship companies in computing and life sciences, and rich cultural, social, and natural amenities. But these factors alone don’t explain Boulder’s ability to consistently produce high-growth companies at a per capita rate that is unparalleled. Ultimately, I determined that what makes the Boulder startup community so special is its inclusive nature, the willingness of people to help others without the expectation of something in return, and above all, a shared understanding to put founders first.

I have long believed that in the modern era, you can start a scalable, high-growth company almost anywhere, and every metropolitan area with over 100,000 people should have a thriving startup community. Ian’s and Richard’s research demonstrates that this vision is quickly becoming a reality, as empirically verifiable startup activity is taking shape in many corners of the planet. What’s remarkable is both the pace and breadth of this global startup revolution, as an impressive number of startup communities are taking hold throughout Europe, Asia, and elsewhere.

As a citizen of the world, I am delighted to see so many communities participating in the startup economy. A sizable body of research demonstrates the importance of entrepreneurship to innovation, job creation, and economic growth, and it is encouraging to see that a broad set of cities worldwide are benefiting. It’s also heartening to see that a growing number of entrepreneurs are able to stay close to home and live out their dreams in the places where they grew up or have chosen to live their adult lives.

However, as an American who was born in this country and spent most of my life here, I am concerned that, as a nation, we are losing our competitive edge. American business and government leaders should read this report with alarm. The rest of the world is showing that the United States doesn’t have a monopoly on innovation, and we must take seriously the threat that a key historical source of our economic prosperity—the many foreign-born entrepreneurs who have built iconic American businesses—will increasingly build their companies elsewhere. As a nation, being casual about a historical leadership position in high-growth startup creation is no longer an option for America going forward.



A handwritten signature in black ink, appearing to read 'B. Feld'.

Brad Feld
Managing Director,
Foundry Group
Co-Founder, Techstars

Introduction

The United States is both the birthplace of and the dominant location for modern, high-tech startups, and the funding model that helps support them. What we think of today as venture capital originated in Boston in the mid-1940s, and later came of age alongside Silicon Valley's young high-tech companies in the 1950s, 1960s, and 1970s.¹

While the Valley has long been the undisputed global leader for high-tech entrepreneurship, other startup hubs have developed around Boston's fabled Route 128 corridor; the suburbs of Seattle, where Microsoft is located; Austin, Texas; North Carolina's Research Triangle; and New York City, among others.

For decades, venture capital was an almost exclusively American phenomenon, and as late as the mid-1990s, nearly all global venture capital investments went to U.S. companies.² However, things have changed significantly in recent years. During the second half of the 1990s and throughout the 2000s, venture capital slowly began to flow into locations outside the U.S. The last five years have seen a dramatic rise in startup and venture capital activity in locations in Europe, Asia, and elsewhere. In short, the geography of startup activity and venture capital investment is undergoing a rapid and profound period of globalization.

To assess the changing global map of startups and venture capital investment, we analyze more than 100,000 venture capital deals across more than 300 global metropolitan areas between the years 2005 and 2017, which includes the period before the economic

crisis, the Great Recession, and the subsequent recovery. To make our data as sharp as possible and reduce any year-to-year variations, we cluster metro-level deals into three distinct periods: 2005-2007, 2010-2012, and 2015-2017. Our data is from PitchBook, a leading source of information on venture capital investments.

Several key findings flow from our analysis.

The Global Expansion of Startup Activity: Since 2009, the world has seen a massive expansion of startup and venture capital activity. As many nations pulled themselves out of a deep global recession, a new era of technological innovation came into force. Global venture capital investment surged from \$52 billion in 2010 to \$171 billion in 2017—an increase of more than 200 percent. Venture deals grew from around 8,600 deals in 2010 to more than 14,800 in 2017, which is an increase of nearly 75 percent.

1 See Andrew Metrick and Ayako Yasuda, *Venture Capital and the Finance of Innovation*, 2nd ed. (Hoboken: John Wiley & Sons, 2010) and John R. McLaughlin, Leigh A. Weimers, and Wardell V. Winslow, *Silicon Valley: 100 Year Renaissance*, 2nd ed., Santa Clara: Santa Clara Valley Historical Association, 2008.

2 See Joshua Aizenman and Jake Kendall, "The Internationalization of Venture Capital and Private Equity," *National Bureau of Economic Research* 39, 5, 2012, pp. 488-511.



The New Global Players and the Relative Decline of the U.S.:

While the U.S. continues to generate the largest amount of startup and venture capital activity, its share of the global total has fallen significantly, from more than 95 percent in the mid-1990s to more than two-thirds in 2012 to a little more than half today. Among other nations, China has gained the most ground, attracting nearly a quarter of global venture capital investment in recent years. India and the United Kingdom together account for another nine percent of global venture capital investment, while Germany, France, Israel, Singapore, Sweden, and Japan collectively contribute another nine percent to the global total.

The New Global Startup Cities: The recent expansion of global venture capital investments has been driven by cities—many of them outside the United States. The San Francisco Bay Area, which spans the San Francisco and San Jose metropolitan areas, remains the world’s dominant location for startup activity, with roughly a fifth of global venture capital investment. But a growing list of global cities are rapidly gaining ground, including London, Berlin, Paris, and Stockholm in Europe; Beijing, Shanghai, Bangalore, Delhi, Mumbai, and Singapore in Asia; and Tel Aviv in the Middle East.

Startup Globalization Is Spiky: The globalization of startup cities and venture capital is geographically uneven. Just 24 cities account for three-quarters of global venture capital investment, despite housing just four percent of the world’s population. The top six cities alone attract more than half of all global venture capital investment, despite housing just one percent of the global population. The numbers are even more concentrated when looking at these cities’ contribution to global growth in activity—just four cities accounted for half of the global increase in venture capital investment in the last half-decade, and the top thirteen were responsible for three-quarters.

A NEW MAP OF GLOBAL STARTUP HUBS

Our research identifies two main types of Global Startup Hubs: Established and Emerging Hubs. Together, they consist of seven individual categories or tiers.

Established Global Startup Hubs:

Our research identifies 62 Established Startup Hubs around the world. These Established Hubs account for the lion’s share of global startup activity, with nearly three-quarters of venture capital deals and almost 90 percent of venture capital investment, while housing less than seven percent of the world’s population. American cities make up fewer than half (40 percent) of these hubs, with Asia and Europe each housing roughly a quarter.

Among the Established Global Startup Hubs, our research identifies four tiers:

1. **Superstar Global Startup Hubs:** There are six Superstar Global Startup Hubs. The San Francisco Bay Area is the undisputed leader, followed by New York and London. Rounding out the pack are Beijing, Los Angeles, and Boston. Together, these six hubs account for more than half of all global venture capital investment.
2. **Elite Global Startup Hubs:** The second tier of Elite Global Startup Hubs consists of 13 cities: Austin, Chicago, San Diego, and Seattle in the U.S.; Bangalore, Delhi, and Mumbai in India; Berlin, Paris, and Stockholm in Europe; Shanghai and Singapore in Asia; and Tel Aviv in Israel. These 13 cities account for nearly a fifth (18 percent) of global venture capital investment.
3. **Advanced Global Startup Hubs:** The third tier of Advanced Global Startup Hubs consists of 20 cities. The list includes eight U.S. hubs (Atlanta, Dallas,



Denver, Houston, Miami, Philadelphia, Raleigh-Durham, and Washington), seven cities in Asia-Pacific (Hangzhou, Hong Kong, Jakarta, Seoul, Shenzhen, Tokyo, and Sydney), four European cities (Amsterdam, Barcelona, Dublin, and Helsinki), and one Canadian city (Toronto). These 20 cities account for 11 percent of global venture capital investment.

4. **Distinguished Global Startup Hubs:** The fourth tier of Distinguished Global Startup Hubs consists of 23 cities. This group includes nine U.S. metros (Baltimore, Boulder, Charlotte, Minneapolis, Phoenix, Pittsburgh, Portland, Provo, and Salt Lake



China has gained the most ground, attracting nearly a quarter of global venture capital investment in recent years.

City), six European cities (Cambridge, Copenhagen, Milan, Munich, Oxford, and Zurich), four Asia-Pacific cities (Chennai, Guangzhou, Kuala Lumpur, and Sydney), two Canadian cities (Montreal and Vancouver), one Middle Eastern city (Dubai), and one South American city (Sao Paulo). These 23 hubs account for five percent of global venture capital investment.

Emerging Startup Hubs: Thirty additional cities qualify as Emerging Startup Hubs. These include the U.S. cities of Cincinnati, Columbus, Detroit, Indianapolis, Las Vegas, Nashville, and Orlando, as well as smaller college towns such as Ann Arbor, Charlottesville, Madison, Santa Barbara, as well as Waterloo, Canada. The list also includes the Indian cities of Pune, Hyderabad, Ahmadabad, and Calcutta; the Asian cities of Bangkok, Ho Chi Minh City, and Manila; the European cities of Basel, Galway, Moscow, Oulu, Reykjavik, and Sofia; the African cities of Nairobi and Lagos; and Mexico City, Mexico. Thirteen of these Emerging Startup Hubs, or roughly 43 percent, are located in the U.S. About a quarter are located in Asia, and 20 percent are located in Europe. Together, these Emerging Startup Hubs account for two percent of global venture capital investment, while also housing around two percent of the world's population.

Overall, our findings identify a substantial globalization of startup activity and venture capital. America's once-singular dominance is now being challenged by the rapid ascent of potent startup cities in Europe, China, India, and elsewhere. While the U.S. remains the clear global leader, the notion that successful startups must launch and scale in Silicon Valley or another leading American city no longer holds true. Increasingly, the world's high-tech entrepreneurs are choosing to stay in their home city or nation—a pattern that may accelerate if the U.S. government fails to create an entrepreneur visa or attempts to limit the immigration of highly-skilled individuals.

To set the stage for our analysis, the first section of our report looks at the U.S. national picture for startups and for venture capital investment across the world. This section shows the relative decline of U.S. venture capital activity in comparison to the rest of the world.

We next examine startup and venture capital activity across global cities. The second section examines the global geography of startup activity, measured by venture capital deals. The third section turns to global venture capital investment, which measures dollar amounts of capital investments in startup cities around the world.

We then dig more deeply into the changing geography of specific types of startup activity and venture capital investment. The fourth section focuses on what is typically considered to be the most critical stage of startup activity: the launch of companies from angel and seed-stage investments. The fifth section looks at the global geography of venture capital "mega deals" (very large investments of \$500 million or more), which have increased dramatically in recent years.

Because larger cities and metro areas tend to have more venture capital and startups by virtue of their size, the sixth section looks at the geography of startup activity and venture capital investment as a ratio of the population. This section documents the role of small but vibrant startup hubs, including in well-known college and university towns in the United States, United Kingdom, and other parts of Europe.

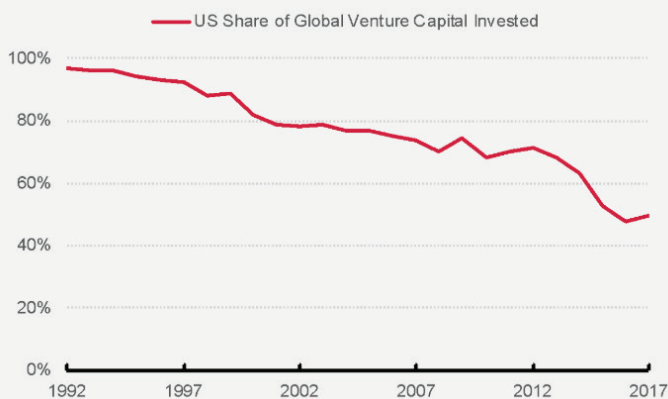
The penultimate section presents a new typology for global startup hubs. Here, we use our data to identify the various types and tiers of startup hubs across the globe. We summarize our key takeaways and recommendations in the concluding section. The Appendix details our methodology and presents additional data tabulations.

The Globalization of Startups and Venture Capital

While the U.S. has long dominated global startup activity and venture capital investment, other nations are quickly catching up.

Figure 1 charts the U.S. share of global venture capital investment over the past two and a half decades. In the early 1990s, the U.S. accounted for more than 95 percent of global venture capital investment. This share slowly declined to about 80 percent by 2000 (the height of the dotcom boom), and gradually trended down to more than two-thirds by 2012. Since then, the U.S. has seen an even more dramatic drop in its share of global venture capital investment—to a little more than half by 2017. This means that the U.S. share of global venture capital investment fell by about the same amount (in percentage points) during the last five years as it did in the previous twenty.

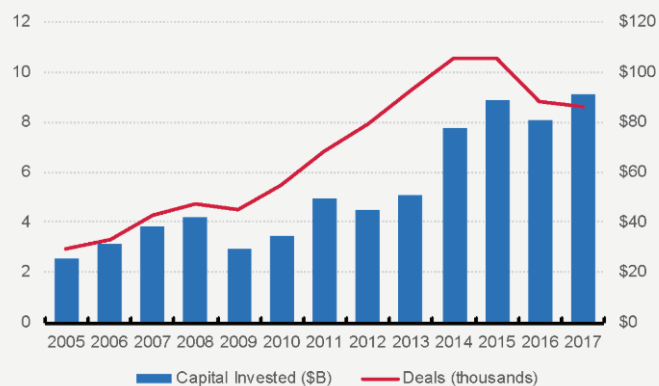
FIGURE 1: AMERICA'S DECLINING SHARE OF GLOBAL VENTURE CAPITAL INVESTMENT



Source: Authors' analysis of PitchBook and VentureSource data. **Note:** Figures here are slightly different from those in the rest of the report. This is because we fuse two data sources—PitchBook, our main data source, and VentureSource, another provider that has a longer historical record—in order to estimate the longer-term trend, while staying relatively consistent with our primary data source.

That said, America remains the most dominant country for startup activity and venture capital. Though its relative share of global venture capital investment has declined, America's absolute levels of venture capital investment have increased substantially (Figure 2). There is more venture capital investment in the U.S. today than ever before, with the exception of 2000 at the height of the dotcom boom.³ Indeed, U.S. venture capital deals were nearly 60 percent higher in 2017 than in 2010, while venture capital investment was more than 160 percent higher.

FIGURE 2: U.S. VENTURE CAPITAL ACTIVITY



Source: Authors' analysis of PitchBook data. **Note:** Deals (left-axis) are in thousands; capital invested (right-axis) is in billions of nominal U.S. dollars.

Figure 3 charts the globalization of startup activity and venture capital investment. Across the world, venture capital investment increased from \$52 billion in 2010 to \$171 billion in 2017—an uptick of more than 200 percent. The number of global venture capital deals rose by nearly 75 percent during that same time frame, from roughly 8,600 deals to more than 14,800.

This means that the growth in startup activity and venture capital investment has been far greater outside the U.S. than within it. Between 2010 and 2017, venture deals and venture capital investment outside the U.S. increased by 100 percent and 374 percent, respectively. Although the U.S. accounted for more than two-thirds of

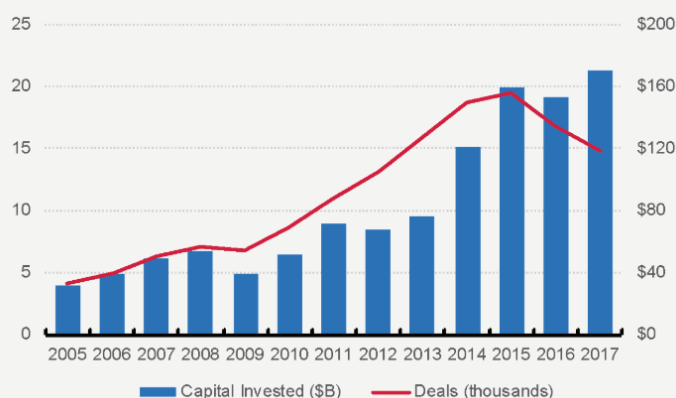
³ Historical estimates of venture capital activity vary slightly by source. For example, Thomson VentureXpert places U.S. venture capital investment in 2000 at nearly \$90 billion, as per Aizenman and Kendall, "The Internationalization of Venture Capital and Private Equity", 2012. The National Venture Capital Association, on the other hand, places this figure the 2000 figure at \$104 billion, as per Andrew Metrick and Ayako Yasuda, *Venture Capital and the Finance of Innovation*, 2nd ed. (Hoboken: John Wiley & Sons, 2010)

WHERE EXACTLY IS THIS GROWTH OCCURRING?

the rest of the world accounted for less than one-third of global venture capital investment in 2010, but was responsible for more than half of global growth.

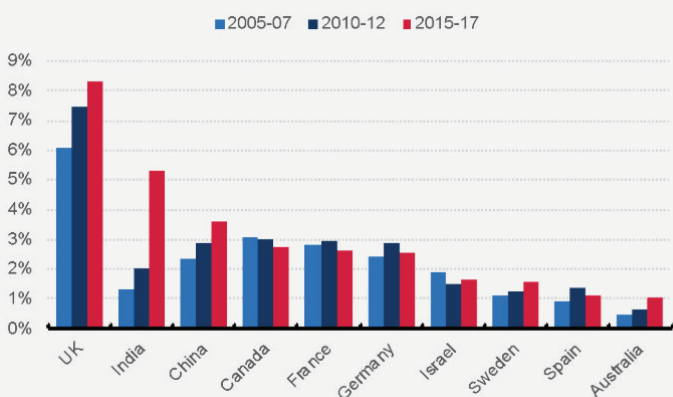
global venture capital investment in 2010, it accounted for less than half of global growth in venture capital investment through 2017. By contrast,

FIGURE 3: THE RISE IN GLOBAL VENTURE CAPITAL



Source: Authors' analysis of PitchBook data. **Note:** Deals (left-axis) are in thousands; capital invested (right-axis) is in billions of nominal U.S. dollars.

FIGURE 4: SHARE OF GLOBAL VENTURE DEALS IN LEADING NATIONS OUTSIDE THE U.S.

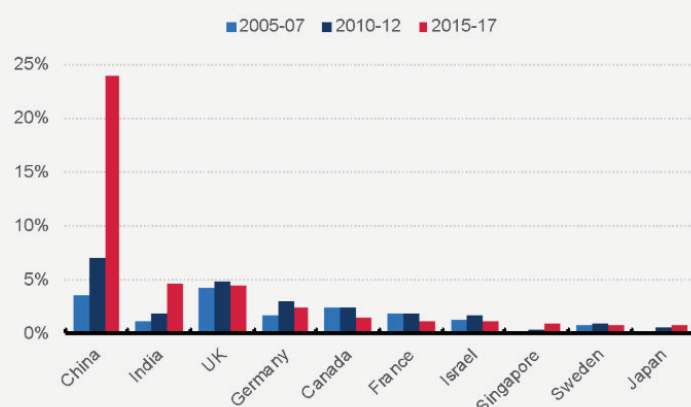


Source: Authors' analysis of PitchBook data. **Note:** Values are the country share of global activity spanning each of the three-year periods.

As Figure 4 shows, the leading nations outside the United States for startup activity (measured as venture capital deals) are the United Kingdom, India, China, Canada, France, and Germany.

This globalization of startup activity and venture capital becomes even clearer when we look at the major nations for global venture capital investment (Figure 5). Outside the U.S., China is by far the leader in this metric, accounting for nearly a quarter of global venture capital investment. Other countries that top the list include India, the U.K., Germany, Canada, France, and Israel, which together account for less than a fifth of all venture capital investment worldwide.

FIGURE 5: SHARE OF GLOBAL VENTURE INVESTMENT IN LEADING NATIONS OUTSIDE THE U.S.



Source: Authors' analysis of PitchBook data. **Note:** Values are the country share of global activity spanning each of the three-year periods.

While such a broad shift in startup activity and venture capital is telling, the real source of startup activity and venture capital occurs at the local level—in startup hubs that are organized in global cities and metropolitan areas. A sizable body of literature documents how innovation and entrepreneurship are fundamentally urban processes that require the density, diversity, and scale of large cities. In today's knowledge and creative economy, the city has replaced the industrial corporation and suburban office park as the fundamental platform for innovation and startup activity.⁴ We now turn our attention to documenting the globalization of the world's leading startup hubs.

⁴ See, Aaron Chatterji, Edward L. Glaeser, and William R. Kerr, "Clusters of Entrepreneurship and Innovation," *Innovation Policy and the Economy*, 14, 2014, 129-66; Richard Florida, Charlotta Mellander, and Patrick Adler, "The City as Innovation Machine," *Regional Studies* 51, 1, 2017, pp. 86-96; Richard Florida and Charlotta Mellander, "The Rise of the Startup City: The Changing Geography of the Venture Capital Financed Innovation," *California Management Review*, 59, 1 November 2016, pp. 14-38; Richard Florida and Karen King, "Urban Startup Districts: Mapping Venture Capital and Startup Activity across Zip Codes," *Economic Development Quarterly*, 32, 2, April 2018, pp. 99-118.

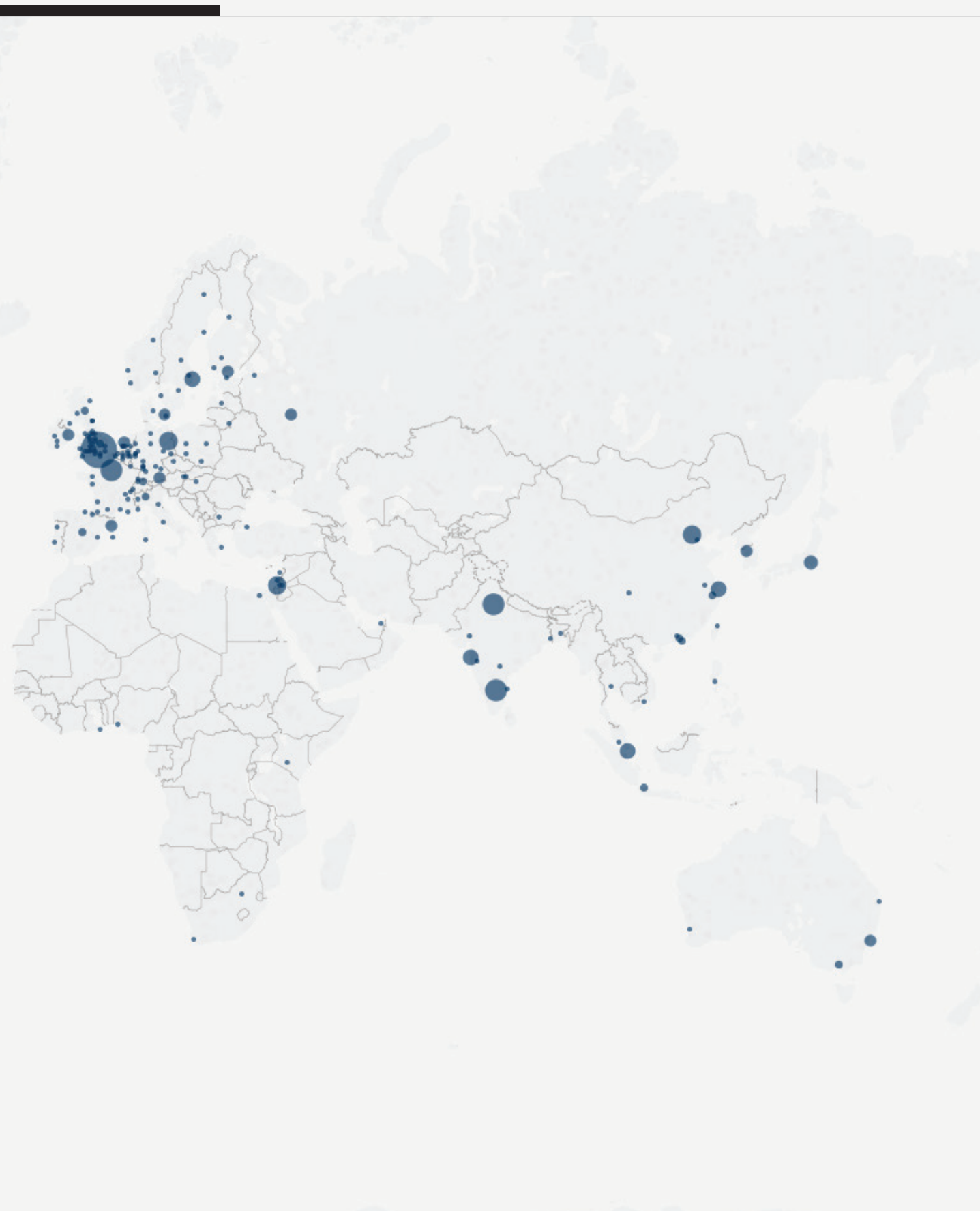
The New Map of Global Startup Activity

We begin by mapping the geography of venture capital deals across the world's leading metro areas.

The maps here array three key measures of startup activity: venture capital deals, the percentage growth of these deals in the last half decade, and each city's percentage contribution to the growth of venture capital deals globally during the same period. In all three cases, we see a broad expanse of startup activity spread across the globe.

FIGURE 6: VENTURE CAPITAL DEALS FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook data.
Note: Values are the levels of activity spanning the three-year period 2015-17. Dot sizes reflect value magnitude.



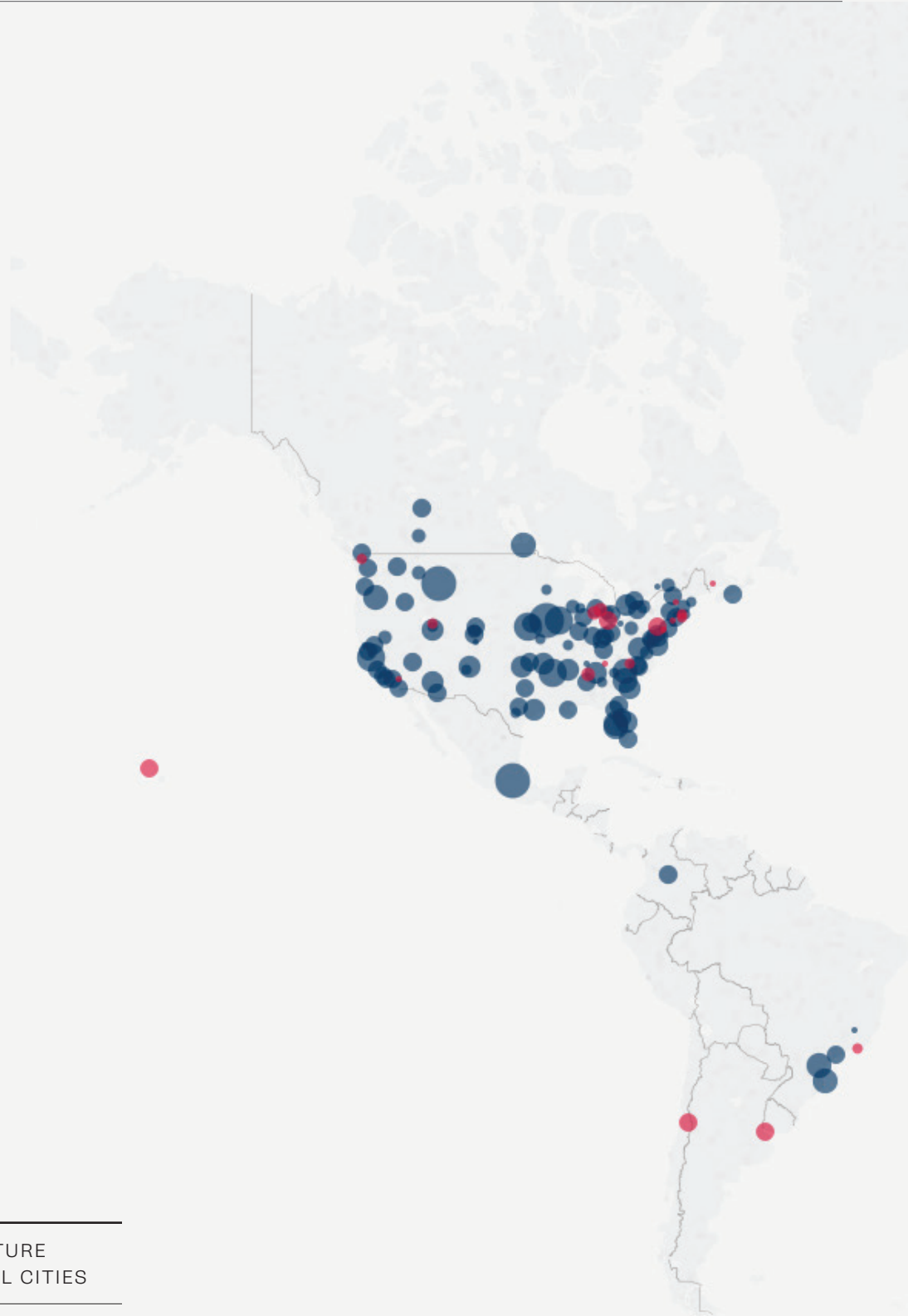
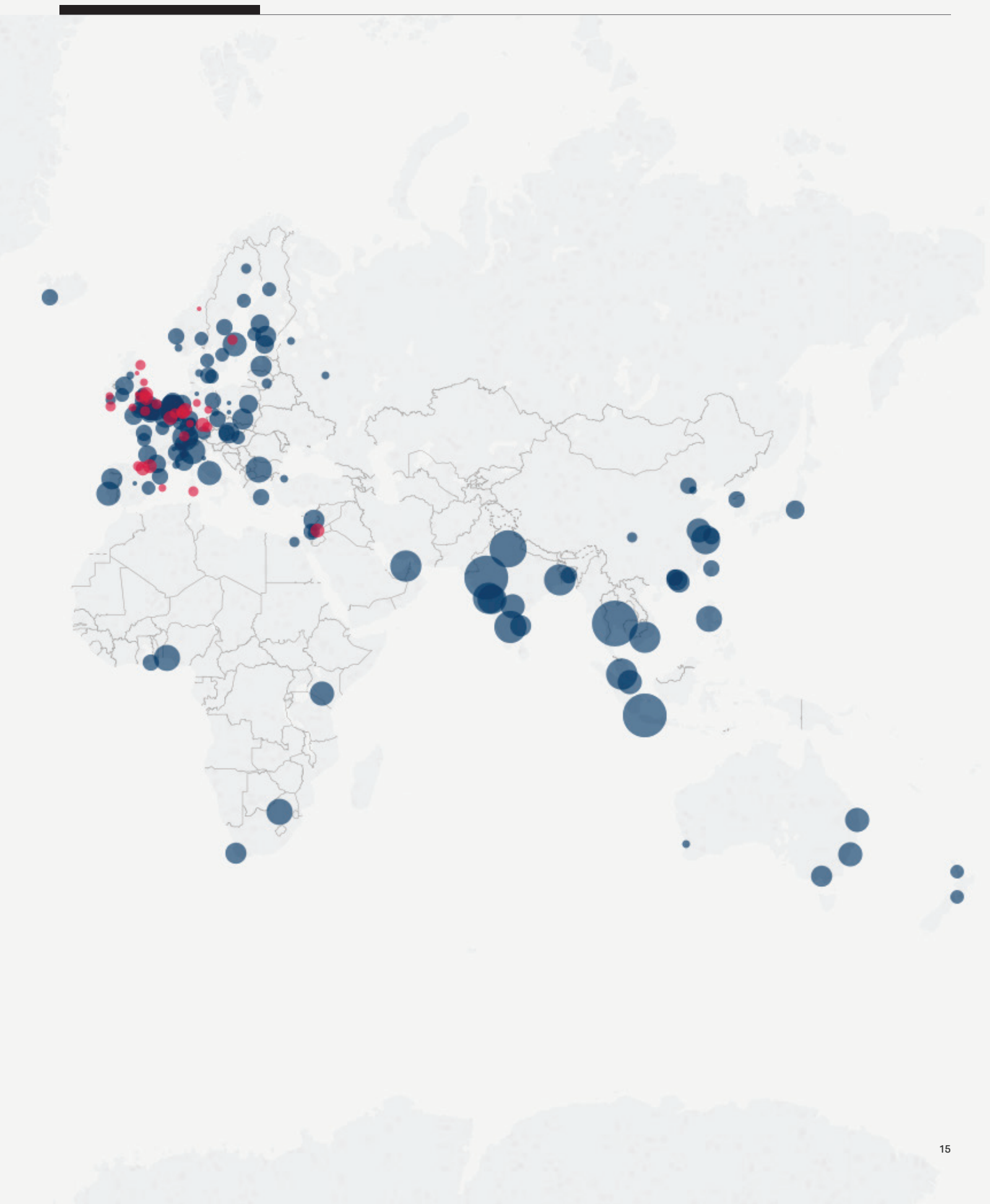


FIGURE 7: GROWTH IN VENTURE CAPITAL DEALS FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook data.

Note: Values are the percentage change between the three-year periods 2010-12 and 2015-17. Dot sizes reflect value magnitude. Blue dots indicate positive values while red dots indicate negative values.



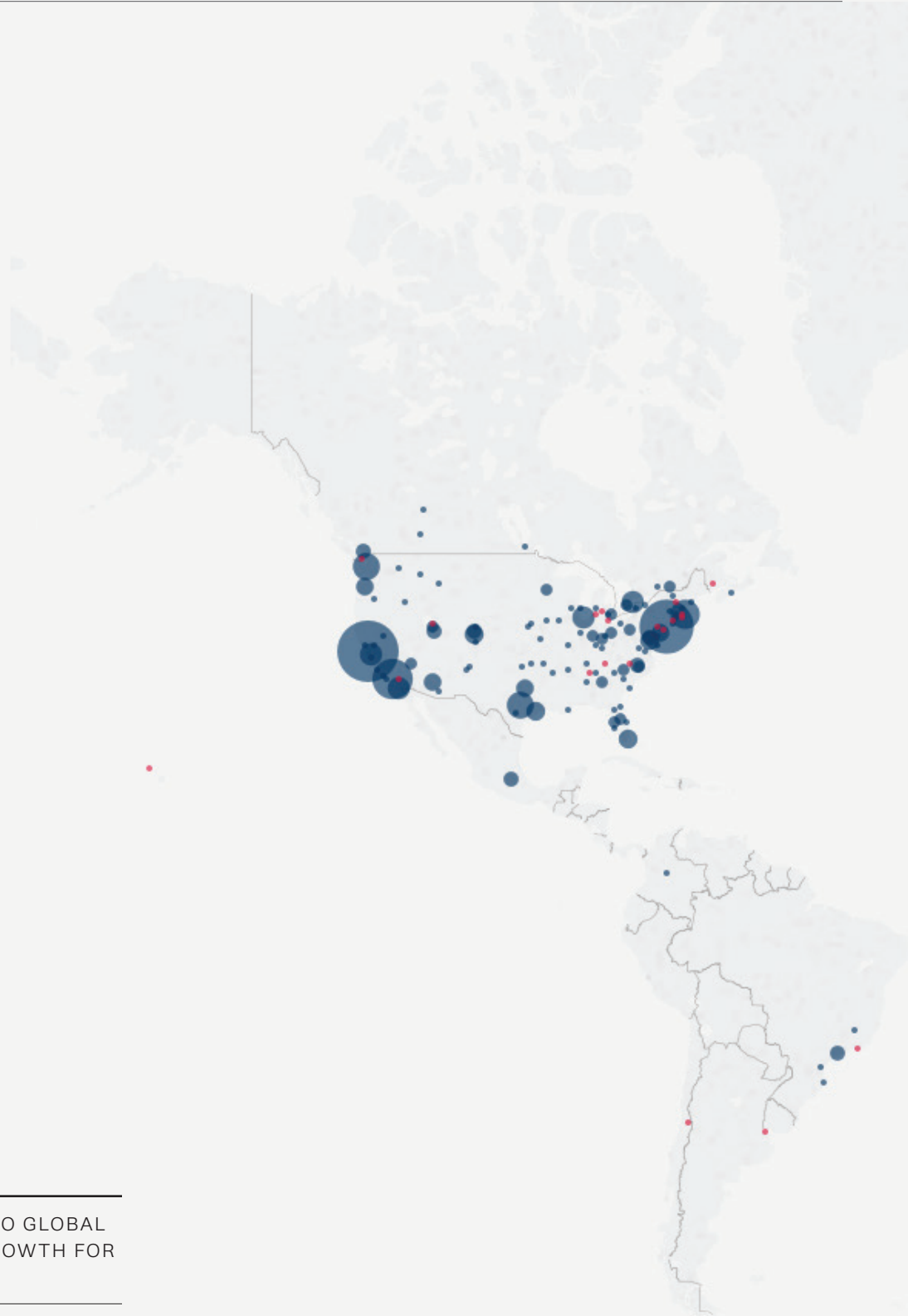
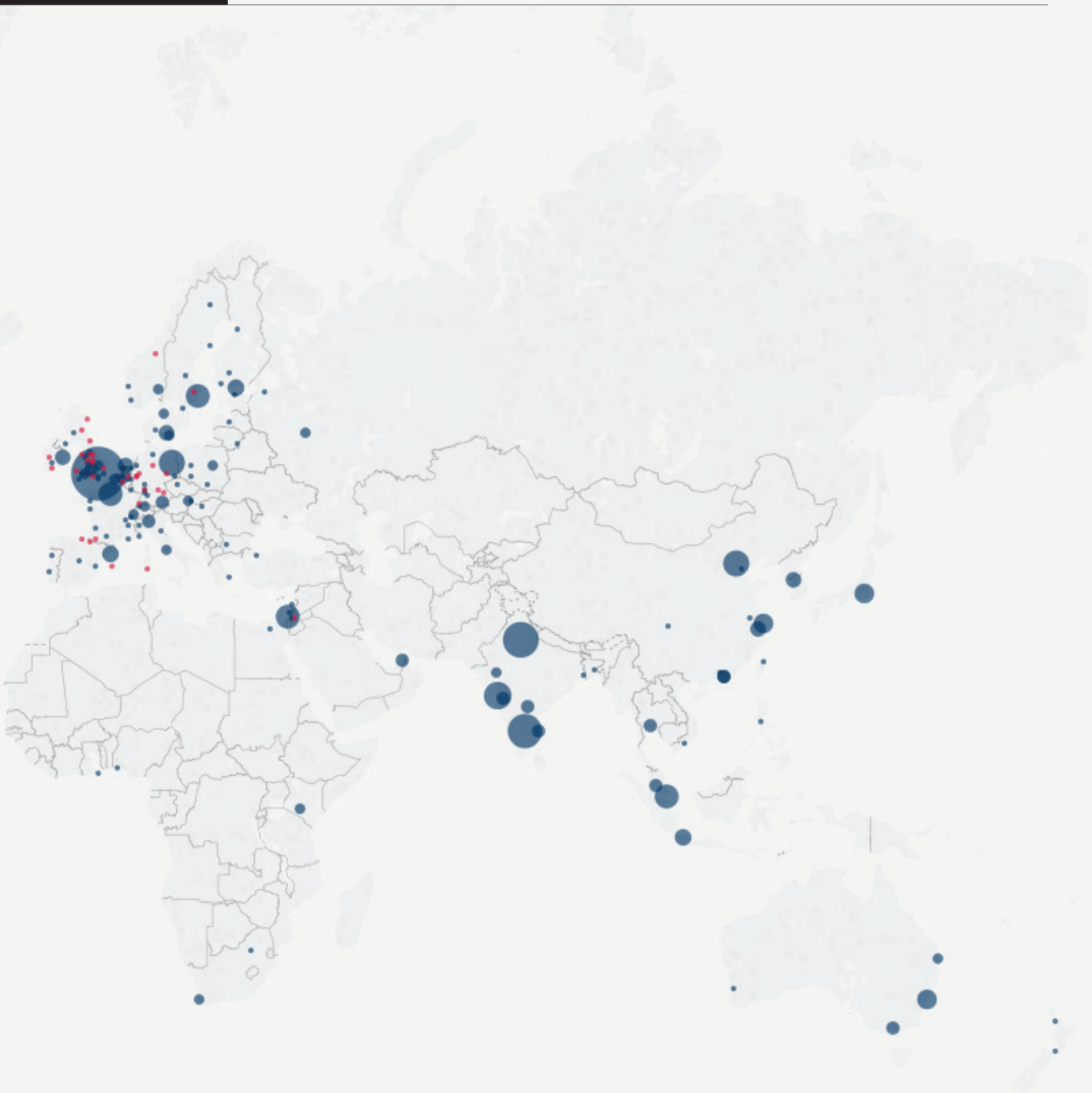


FIGURE 8: CONTRIBUTION TO GLOBAL VENTURE CAPITAL DEAL GROWTH FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook data.

Note: Values are the percentage contribution to global change between the three-year periods 2010-12 and 2015-17. Dot sizes reflect value magnitude. Blue dots indicate positive values while red dots indicate negative values.





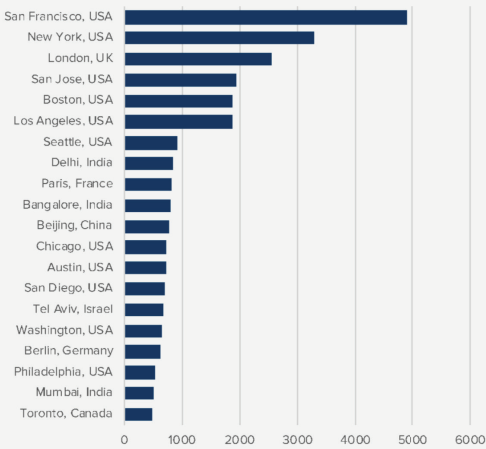
San Francisco tops the list of startup activity with nearly 10 percent of global venture capital deals, followed by New York with 6.5 percent, and London with 5 percent. San Jose—the heart of Silicon Valley—is next, with almost four percent.

Together, San Francisco and the Silicon Valley account for 13.5 percent of global startup deals. Boston and Los Angeles each have nearly four percent of the global total. Another 14 global cities each contribute more than one percent.

Of the top 50 cities for startup deals (see Appendix B), half are located in the U.S. Those outside

the U.S. include 12 cities in Europe (24 percent), nine in Asia-Pacific (18 percent), three in Canada (6 percent), and just one in the Middle East.

FIGURE 9: TOP 20 GLOBAL CITIES FOR VENTURE CAPITAL DEALS



Together, the six leading cities account for almost a third of global venture capital deals, while the top 20 accounts for more than half.

The picture changes when we track the percentage growth in venture capital deals during the last five years (Figure 10). Unsurprisingly, most of the cities on this list had relatively small amounts of venture capital activity to begin with. Bangkok takes first place with a growth rate of more than 600 percent between 2010 and 2017. Many other leading cities also hail from Asia. Of the top eight cities, five are located in India: Ahmedabad, Delhi, Bangalore, Mumbai, and Calcutta. Three of these cities are among the most active for venture capital deals, meaning they are both large and fast-growing. The remaining top 10 cities are Jakarta, Ho Chi Minh City, Dubai, and Kuala Lumpur.

Just five of the top 50 cities (10 percent) are located in the United States. Another 20 cities (40 percent) are located in Asia-Pacific, while 18 cities (36 percent) are located in Europe (see Appendix B).

Source: Authors' analysis of PitchBook data **Note:** Values are the levels of activity spanning the three-year period 2015-17

13.5%

San Francisco and the Silicon Valley account for 13.5 percent of global startup deals.

4%

Boston and Los Angeles each have nearly four percent of the global total of startup deals.

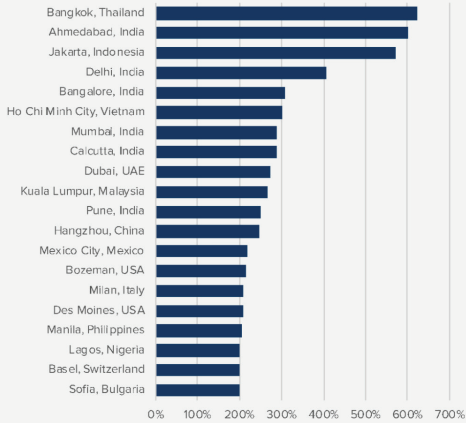
14

Another 14 global cities each contribute more than one percent of the total startup deals.

600%

Bangkok takes first place for global venture capital deal growth with an increase of more than 600 percent between 2010 and 2017.

FIGURE 10: TOP 20 GLOBAL CITIES FOR GROWTH IN VENTURE CAPITAL DEALS



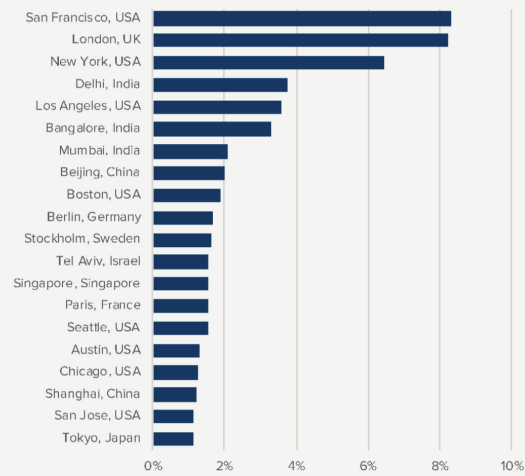
Source: Authors' analysis of PitchBook data.
Note: Values are the percentage change between the three-year periods 2010-12 and 2015-17.

We have now seen the cities with the most startup activity and growth in percentage terms, but which cities are driving the overall change in venture capital deals?

Figure 11 lists the top 20 cities according to their percentage contribution to the overall global growth in venture capital deals. This calculation can be interpreted as a function of both size and growth rate.

Here, again, San Francisco rises to the top, accounting for 8.3 percent of the growth in venture capital deals, followed closely by London (8.2 percent) and New York (6.4 percent). Next in line is Delhi (3.8 percent), Los Angeles (3.6 percent), and Bangalore (3.3 percent). Rounding out the top 10 are Mumbai, Beijing, Boston, and Berlin. Of the top 50 cities with the highest contributions to deal growth, 41 also rank among the top 50 cities with the most venture capital deals (see Appendix B). Twenty of the top 50 are in the United States, 16 in Asia-Pacific, 11 in Europe, two in Canada, and one in the Middle East.

FIGURE 11: TOP 20 CITIES FOR CONTRIBUTION TO GLOBAL VENTURE CAPITAL DEAL GROWTH



Source: Authors' analysis of PitchBook data.
Note: Values are the percentage contribution to global change between the three-year periods 2010-12 and 2015-17.



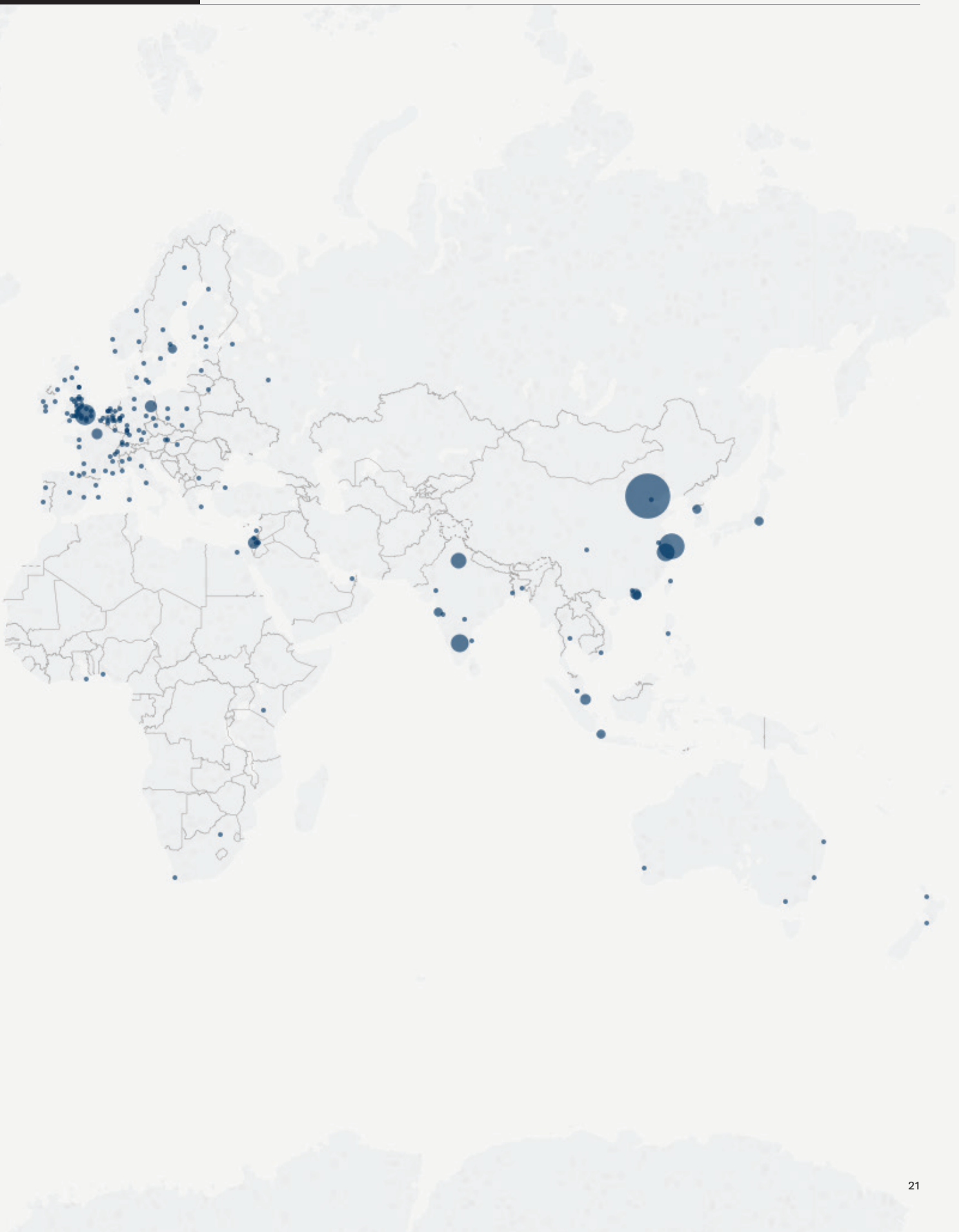
The New Map of Global Venture Capital Investment

While venture capital deals represent a significant portion of startup activity across global cities, they do not show the volume of money associated with this activity.

To get at this, we turn to the changing geography of venture capital investment across the world's startup hubs. The next three maps chart the level of venture capital investment for global cities. The first map looks at the level of investment (Figure 12), while the second shows the percentage change in venture investment (Figure 13). The third map shows each city's contribution to the overall change in global venture investments (Figure 14).

FIGURE 12: VENTURE CAPITAL INVESTMENT FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook data.
Note: Values are the levels of activity spanning the three-year period 2015-17. Dot sizes reflect value magnitude.



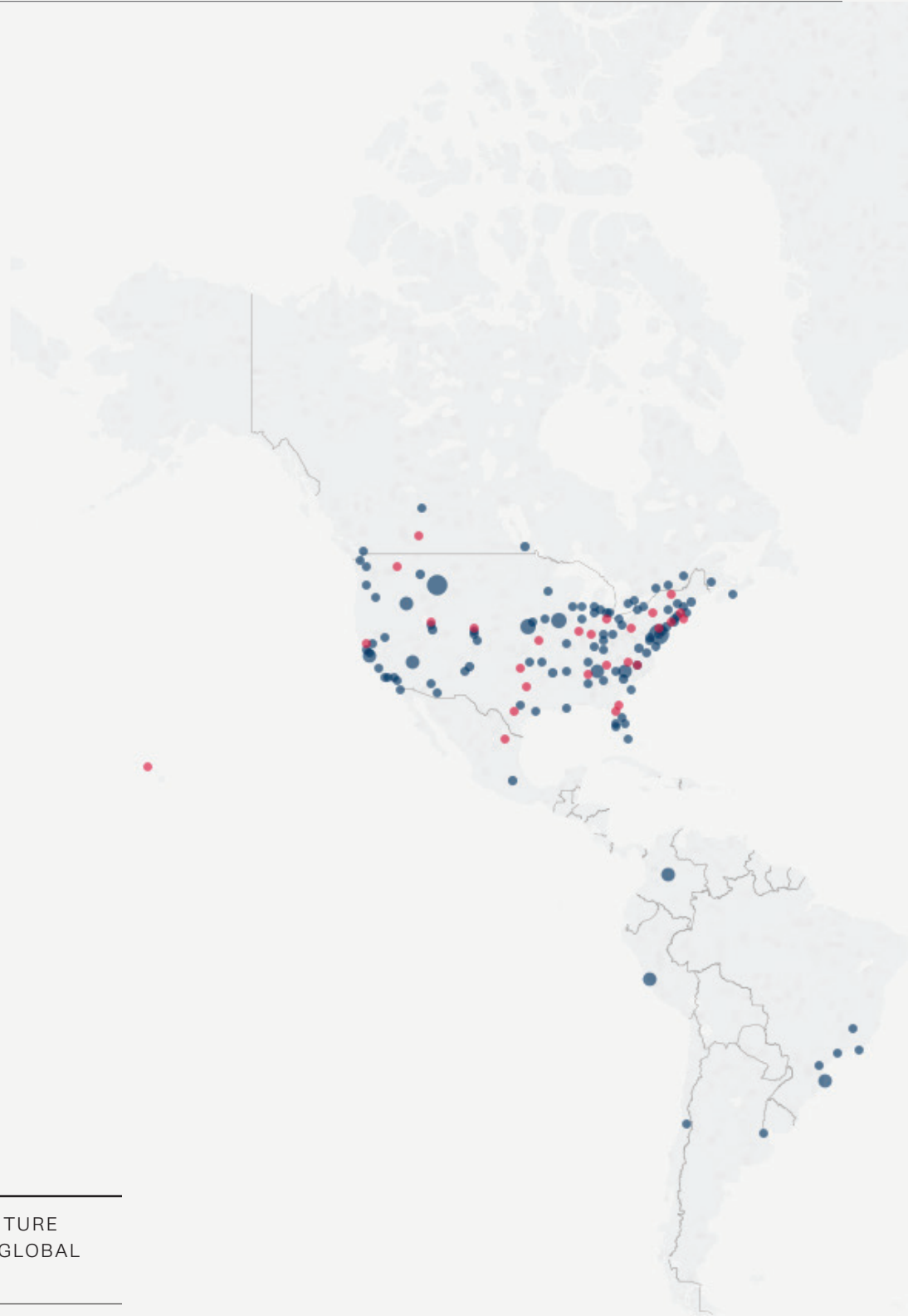
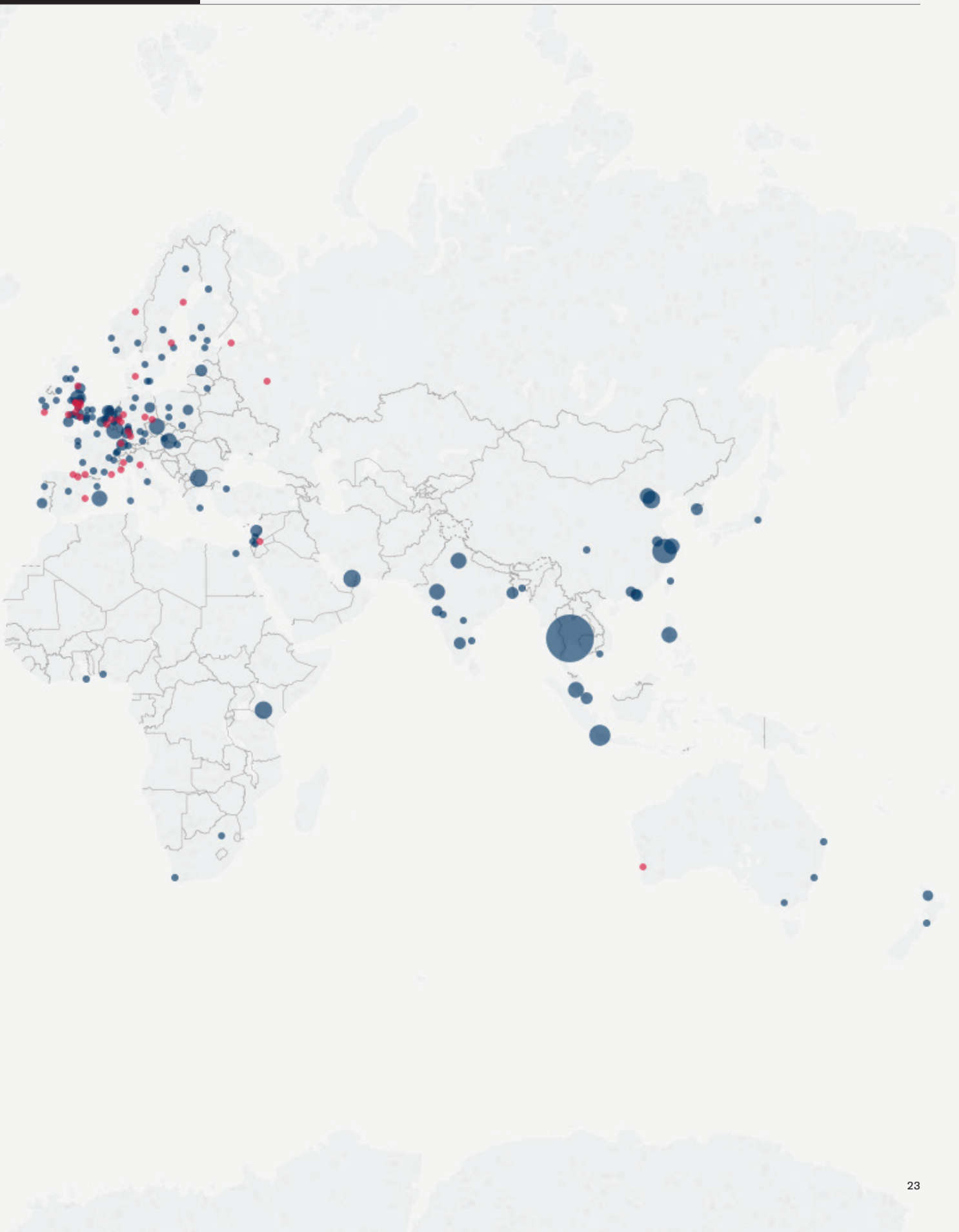


FIGURE 13: GROWTH IN VENTURE CAPITAL INVESTMENT FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook data.

Note: Values are the percentage change between the three-year periods 2010-12 and 2015-17. Dot sizes reflect value magnitude. Blue dots indicate positive values while red dots indicate negative values.



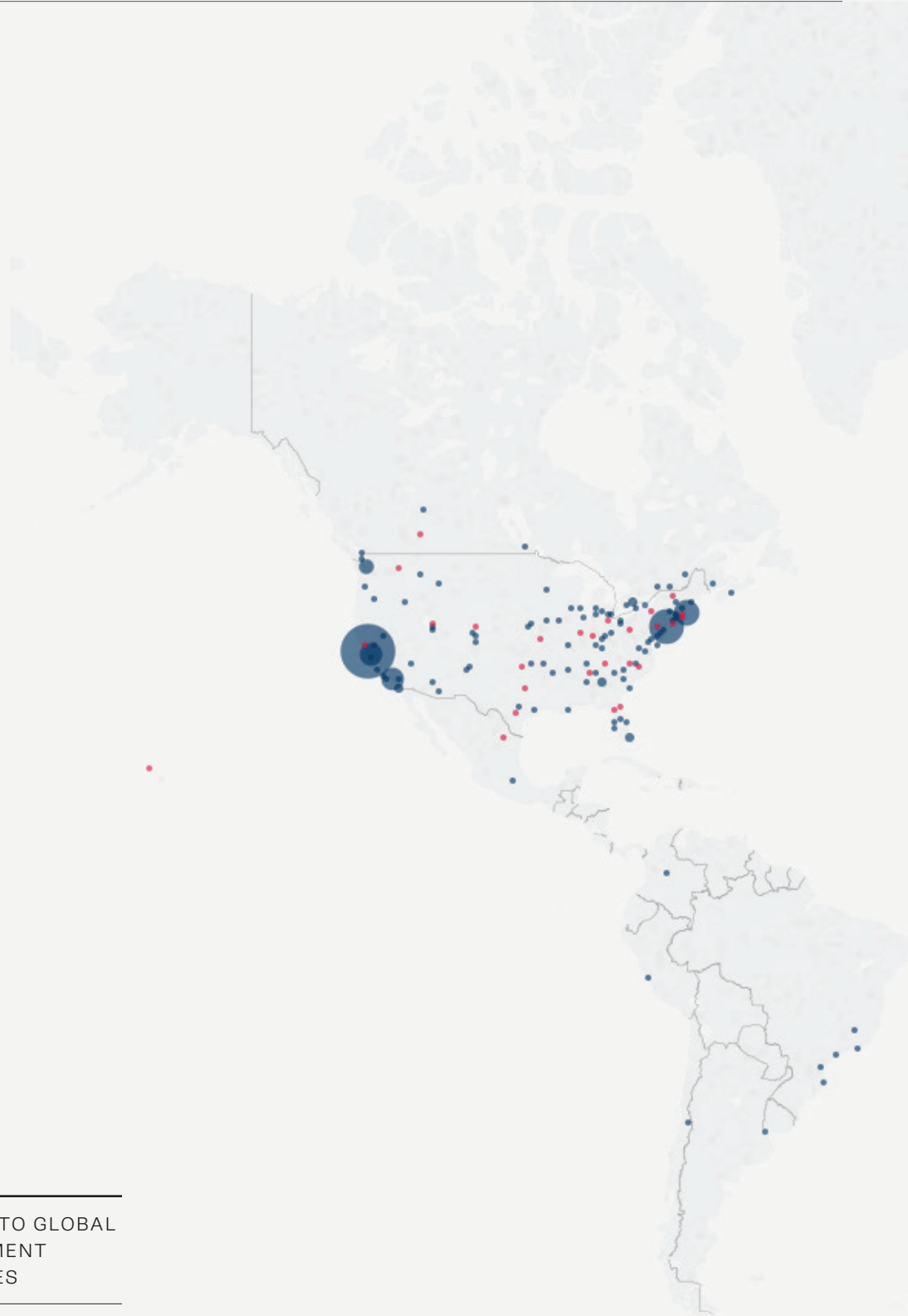
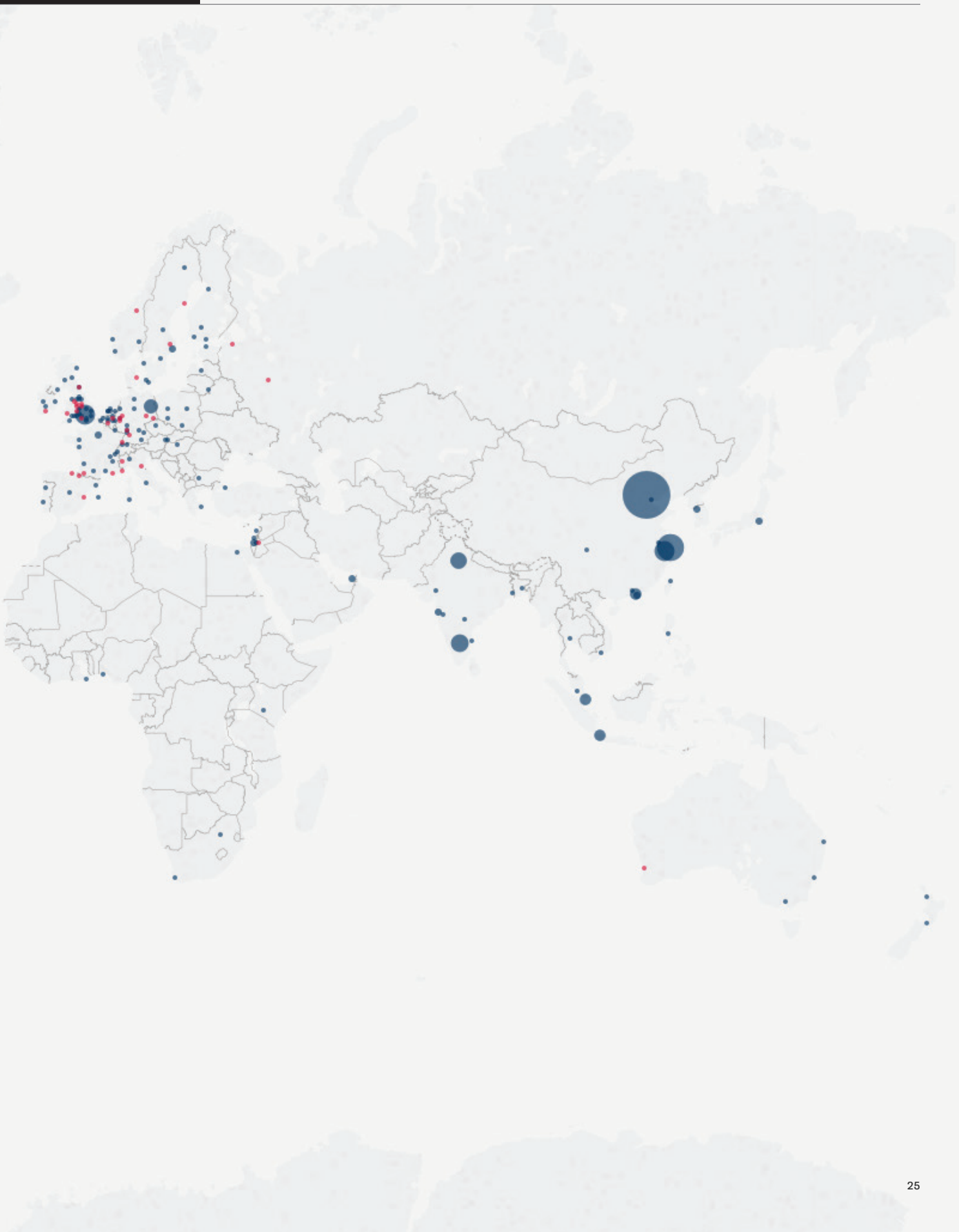


FIGURE 14: CONTRIBUTION TO GLOBAL VENTURE CAPITAL INVESTMENT GROWTH FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook data.

Note: Values are the percentage contribution to global change between the three-year periods 2010-12 and 2015-17. Dot sizes reflect value magnitude. Blue dots indicate positive values while red dots indicate negative values.



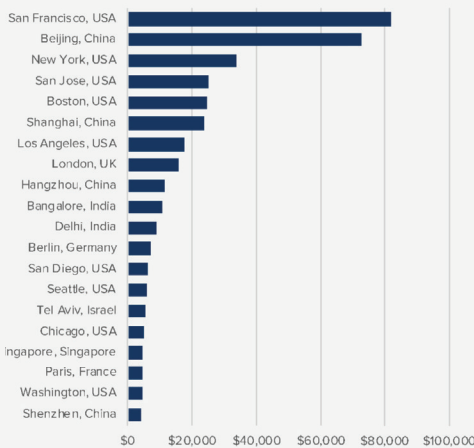


Once again, San Francisco tops the list with 16 percent of global venture capital investment. Next in line is Beijing, followed by New York and San Jose. Together, the two Bay Area metros account for roughly a fifth of global venture investment.

Rounding out the top 10 are Boston, Shanghai, Los Angeles, London, Hangzhou, and Bangalore.

All told, these 10 startup hubs account for more than 60 percent of global venture capital investment, while the top 25 hubs account for more than three-quarters.

FIGURE 15: TOP 20 GLOBAL CITIES FOR VENTURE CAPITAL INVESTMENT



Source: Authors' analysis of PitchBook data.
Note: Values are the levels of activity (in \$ millions) spanning the three-year period 2015-17.

Twenty-one of the top 50 cities (42 percent) for global venture capital investment are located in the United States, compared to 15 cities (30 percent) in Asia-Pacific (half of them in China), and eight cities (16 percent) in Europe. Another three cities hail from Canada, followed by two in the Middle East, and one in South America (see Appendix B).

Over the past decade or so, America's startup hubs, as a group, have lost significant ground in terms of their share of venture capital investment. In the period from 2005-2007, each of the leading eight cities for venture capital investment were located in the U.S., as were 12 of the top 15 cities, 18 of the top 25 cities, and 32 of the top 50 cities worldwide. However, by 2015-2017, the U.S. was home to just five of the top eight cities, seven of the top 15 cities, 12 of the top 25, and 21 of the top 50 cities worldwide.

But which cities have seen the largest percentage growth in venture capital investment? Once more, Bangkok leads the way with a nearly 8,000 percent change in venture capital investment between 2010 and 2017. Next in line is Hangzhou, followed by Jakarta, Sofia, Dubai, and Tianjin—each of which increased its level of venture capital investment by more than 1,000 percent over this period.

21

Twenty-one of the top 50 cities (42 percent) for global venture capital investment are located in the United States.

15

Fifteen of the top 50 cities (30 percent) for global venture capital investment are located in Asia-Pacific.

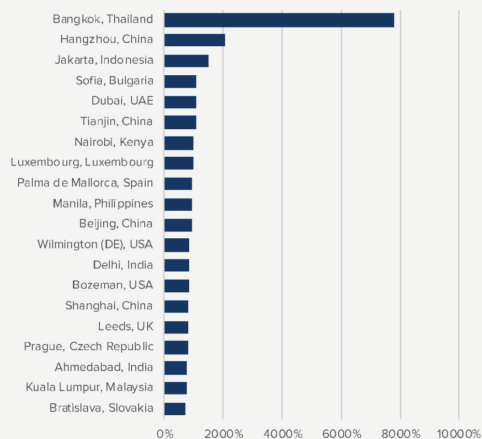
1/2

Half of the leading cities for venture capital investment from the Asia-Pacific region are in China.

8

Eight of the top 50 cities (16 percent) for global venture capital investment are located in Europe.

FIGURE 16: TOP 20 GLOBAL CITIES FOR GROWTH IN VENTURE CAPITAL INVESTMENT



Source: Authors' analysis of PitchBook data.

Note: Values are the percentage change between the three-year periods 2010-12 and 2015-17.

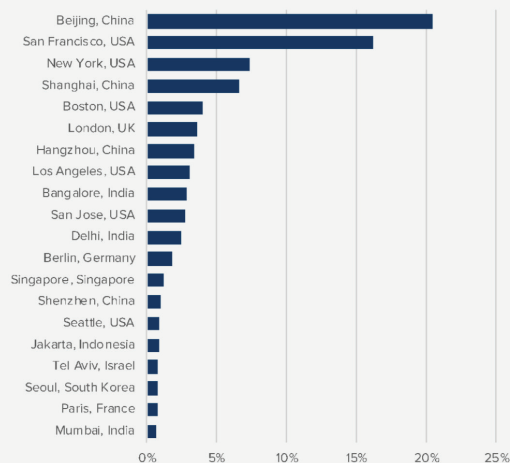
Of the top 50 fastest growing global cities for venture capital investment, American cities account for less than a fifth (nine). Asia-Pacific accounts for 40 percent (19 of the top 50 cities; lead by China's six and India's five) and Europe accounts for a third (16 cities). Africa-Middle East and South America each have three cities on the list (see Appendix B).

Many of these fast-growing cities started with low levels of venture capital investment, meaning that in spite of their impressive growth rates, they only made modest contributions to the overall growth in global venture capital investment. Next, we look at the cities that did drive the overall trend.

The leader of the pack is Beijing, which accounted for more than 20 percent of the growth in global venture capital investment between 2010-12 and 2015-17. San Francisco is second, followed by New York and Shanghai. Together, these four cities accounted for more than half the total growth in global venture capital investment. Next in line are Boston, London, Hangzhou, Los Angeles, and Bangalore. All told, these nine cities accounted for more than two-thirds of the global growth. Another two cities—San Jose and Delhi—accounted for more than two percent each, while three others—Berlin, Singapore, and Shenzhen—accounted for more than one percent each.

In total, the U.S. represents 19 of the top 50 cities, or around 40 percent. Asia-Pacific represents roughly a third (including seven cities in China and three in India), while Europe represents more than a fifth (11 cities), including three in the United Kingdom and two in Germany. The Middle East has two cities in the list and South America has one.

FIGURE 17: TOP 20 CITIES FOR CONTRIBUTION TO GLOBAL VENTURE CAPITAL INVESTMENT GROWTH



Source: Authors' analysis of PitchBook data.

Note: Values are the percentage contribution to global change between the three-year periods 2010-12 and 2015-17.

Here, again, we find that venture capital investment is highly concentrated in a small number of global cities—considerably more so than for venture capital deals. In addition, most of the growth in venture capital investment is being driven by an even smaller number of global hubs. Though a good number of these cities are located in the U.S., many others are not. While the spread of leading cities for venture capital investment has become more internationalized, the leading hubs are pulling further away from the pack—a pattern we have also seen with venture capital deals, though to a lesser degree.

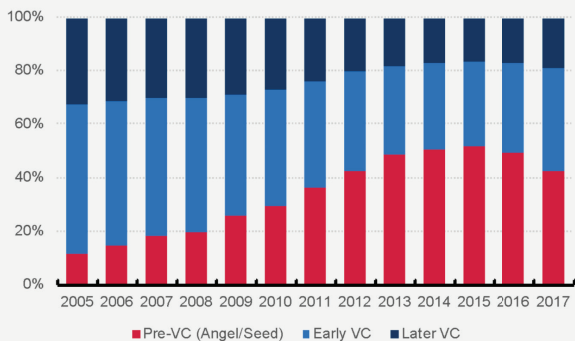
The Global Map of Angel and Seed Activity

Thus far, we have looked at the overall growth and shifting geographic patterns in venture capital activity. But it is also useful to look at various stages of investments—and in the case here, of the most recently formed companies—which provides some additional depth to our understanding of startup activity.

The last half-decade has seen a surge in larger, later-stage venture capital investments as venture funds grow bigger and certain companies require more cash to scale. In many cities, the sheer size of deals can obscure the underlying activity of early-stage companies.

To get at this, we map the global geography of early-stage venture capital investment in angel and seed-stage deals. These are investments in high-risk, very early-stage companies that are still developing their products or testing minimum viable products with customers. Angels are individual investors, often successful serial entrepreneurs, who invest their own money. Collectively, these deals are typically smaller, higher-risk exchanges in the range of \$500,000 to \$2 million.

FIGURE 18: DISTRIBUTION OF VENTURE CAPITAL DEALS BY STAGE

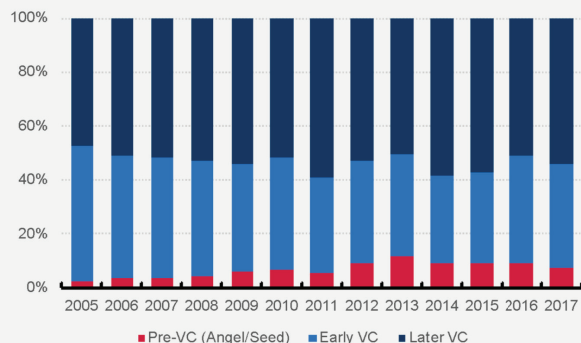


Source: Authors' analysis of PitchBook data.

As Figure 18 shows, angel and seed investments increased from slightly more than 10 percent of global startup deals in 2005 to a peak of more than half in 2015, before dropping down to roughly 40 percent in 2017.

That said, the share of venture capital going toward angel and seed-stage investments has not increased as much, as Figure 19 shows. This reflects the huge growth in the size of later-stage investments, which increasingly emanate from many non-traditional venture investors in recent years.

FIGURE 19: DISTRIBUTION OF VENTURE CAPITAL INVESTMENT BY STAGE

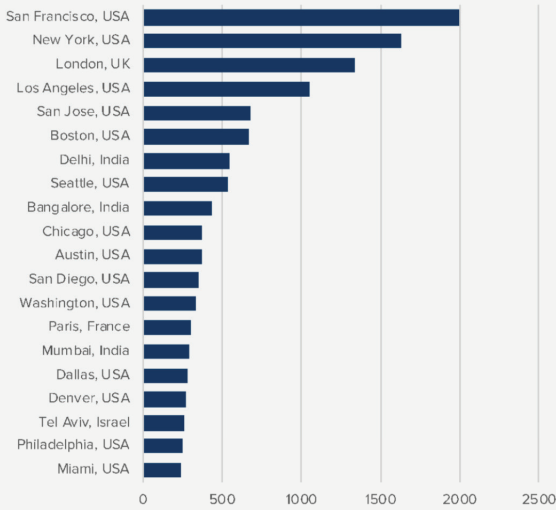


Source: Authors' analysis of PitchBook data.

Even with these changes in the investment landscape, the global map for angel and seed-stage investment looks quite similar to what we have already seen for startup deals and venture capital investment. In fact, the correlation between these very early-stage startup deals and total venture capital deals across the world's startup hubs is .98, while the correlation between angel and seed-stage investments and total venture capital investment is .90.

Take a look at Figure 20, which shows the top 20 cities for angel and seed-stage deals. The list is strikingly similar to the overall leading cities for startup deals and venture capital investment, though it's more dominated here by American cities—14 of the top 20, versus 11 in the top 20 for deals overall.

FIGURE 20: TOP GLOBAL 20 CITIES FOR ANGEL AND SEED-STAGE DEALS



Source: Authors' analysis of PitchBook data. **Note:** Values are the levels of activity spanning the three-year period 2015-17.

Just five of the top the 50 global cities for angel and seed-stage deals do not appear on the list for overall venture capital deals (see Appendix B). These cities include Indianapolis, Melbourne, Columbus, Las Vegas, and Jakarta. With their pipeline of young companies and overall size, these may be startup hubs to watch out for in the future. Another five cities—Shanghai, Tokyo, Seoul, Montreal, and Cambridge—appeared on the top 50 list for overall venture capital deals, but do not rank among the top 50 cities for angel and seed-stage deals.

The cities making the biggest moves up this list, compared with their rankings for total venture deals, include Dallas, Denver, Miami, and Phoenix, among others. Those falling the most include Paris, Tel Aviv, and Berlin.

Of the top 50 cities, the U.S. is home to 28 cities (more than half), while Europe is home to 11 cities (more than a fifth). Asia-Pacific is home to another 16 percent (lead by India and Australia). Canada adds two more hubs, while the Middle East has just one.

5

Just five of the top 50 global cities for angel and seed-stage deals do not appear on the list for overall venture capital deals (see Appendix B).

28

The United States is home to 28 of the top 50 cities (more than half) for angel and seed-stage deals.

The Global Map of Mega Deals

One of the biggest changes to the global venture capital landscape is the rise of large-scale, later-stage investments—so-called “mega deals”—of \$500 million or more.

These deals have grown significantly in recent years and tend to be concentrated in Chinese cities.

From 2005-2007, only two mega deals took place for a total of \$1.9 billion. The subsequent period from 2010-2012 saw eight mega deals, totaling \$8 billion. By 2015-2017, there were 80 mega deals globally, adding up to a staggering \$110 billion in venture capital investments.

2005-2007

\$1.9B

From 2005-2007, only two mega deals took place for a total of \$1.9 billion.

2010-2012

\$8B

The subsequent period from 2010-2012 saw eight mega deals, totaling \$8 billion.

2015-2017

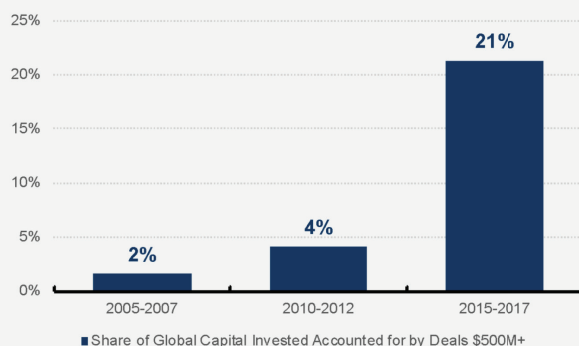
\$110B

By 2015-2017, there were 80 mega deals globally, adding up to a staggering \$110 billion in venture capital investments.



These mega deals also comprise a growing share of global venture capital activity. From 2005-2007, mega deals comprised just two percent of venture capital investment worldwide, rising to four percent in 2010-2012, before exploding to more than 20 percent in 2015-2017.

FIGURE 21: MEGA DEAL SHARE OF GLOBAL VENTURE CAPITAL INVESTMENT

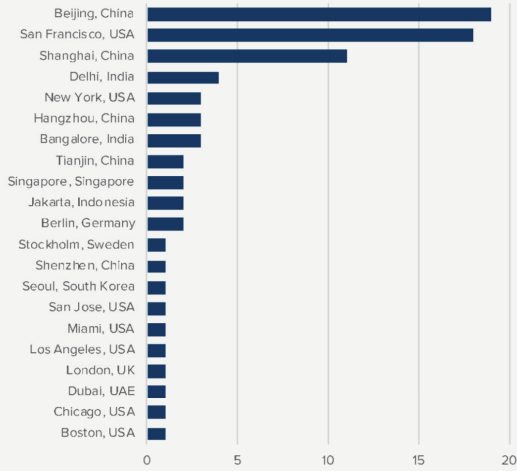


Source: Authors’ analysis of PitchBook data. **Note:** Values are the shares of global activity during each three-year period.

The share of mega deals is highly concentrated geographically (Figure 22), with Beijing, San Francisco, and Shanghai accounting for a whopping 60 percent of all mega deals worldwide. Notable mega deals hail from Airbnb, Uber, Lyft, and their Chinese equivalent, Didi Chuxing. Rounding out the top 11 cities are Delhi, Bangalore, Hangzhou, New York, Tianjin, Berlin, Jakarta, and Singapore. Of the 20 cities with mega deals, seven are located in the U.S., five are located in China, while India has two.

Overall, in the latest period, Chinese cities accounted for nearly half of all mega deals while U.S. cities accounted for a third. No other country accounted for more than 10 percent of all mega deals, though India came close with nine percent.

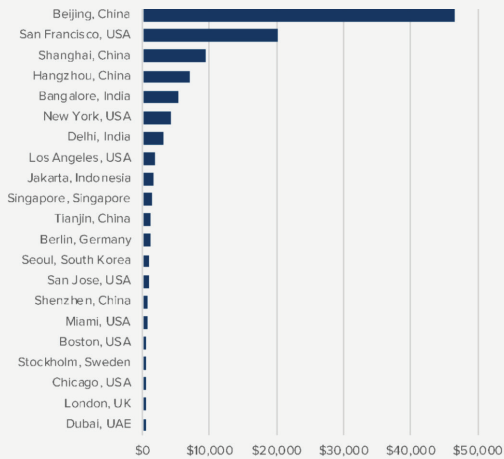
FIGURE 22: LEADING GLOBAL CITIES FOR MEGA DEALS



Source: Authors' analysis of PitchBook data. **Note:** Values are the levels of activity spanning the three-year period 2015-17.

This pattern is even more pronounced when we look at the volume of venture capital investment going to mega deals. On this metric, the top three cities—Beijing, San Francisco, and Shanghai—account for almost 70 percent of all mega deal investment worldwide. Next in line are Hangzhou, Bangalore, New York, Delhi, Los Angeles, and Jakarta.

FIGURE 23: LEADING GLOBAL CITIES FOR MEGA DEAL INVESTMENT

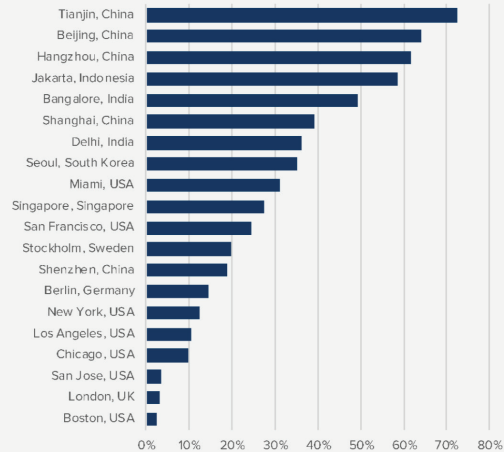


Source: Authors' analysis of PitchBook data. **Note:** Values are the levels of activity (in \$ millions) spanning the three-year period 2015-17.

Mega deals also account for a substantial portion of total venture capital investment in many cities—more than 60 percent in the Chinese cities of Tianjin, Beijing, and Hangzhou. In Jakarta such deals accounted for more than half of all capital invested, while for Bangalore it was nearly half. Shanghai, Delhi, and Seoul each had mega deals accounting for more than a third of total venture investment.

Mega deals play a smaller role in U.S. and European cities. In San Francisco, mega deals account for a quarter of investment—less than the average across all cities with mega deals (30 percent). Mega deals accounted for less than 15 percent of investment in New York, Los Angeles and Chicago, and less than five percent in London, San Jose, and Boston.

FIGURE 24: MEGA DEAL SHARE OF VENTURE CAPITAL INVESTMENT BY GLOBAL CITY



Source: Authors' analysis of PitchBook data. **Note:** Values are the shares of activity spanning the three-year period 2015-17.



The Global Map of Venture Capital Per Capita

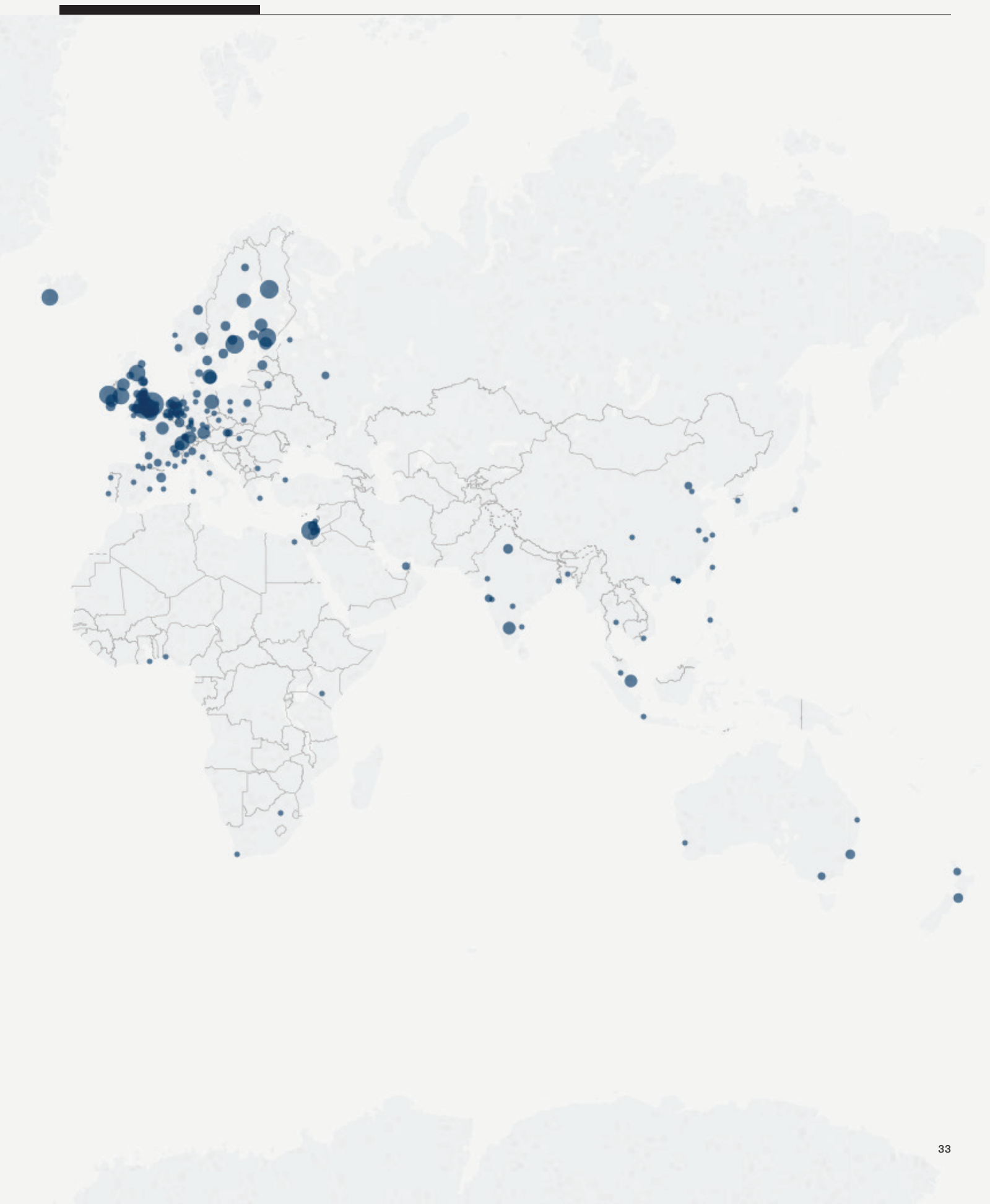
By virtue of their size, larger cities tend to have larger shares of venture capital deals and investment—particularly in more established markets.

To get a better understanding of this dynamic, we track startup activity and venture capital investment relative to population size. This is depicted in two maps: one of venture capital deals on a per capita basis (Figure 25) and the other of venture capital investment per capita (Figure 26). The top 20 cities for each are displayed further below (Figure 27 and Figure 28).

FIGURE 25: VENTURE CAPITAL DEALS PER CAPITA FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology).

Note: Values are the levels of activity spanning the three-year period 2015-17. Dot sizes reflect value magnitude.



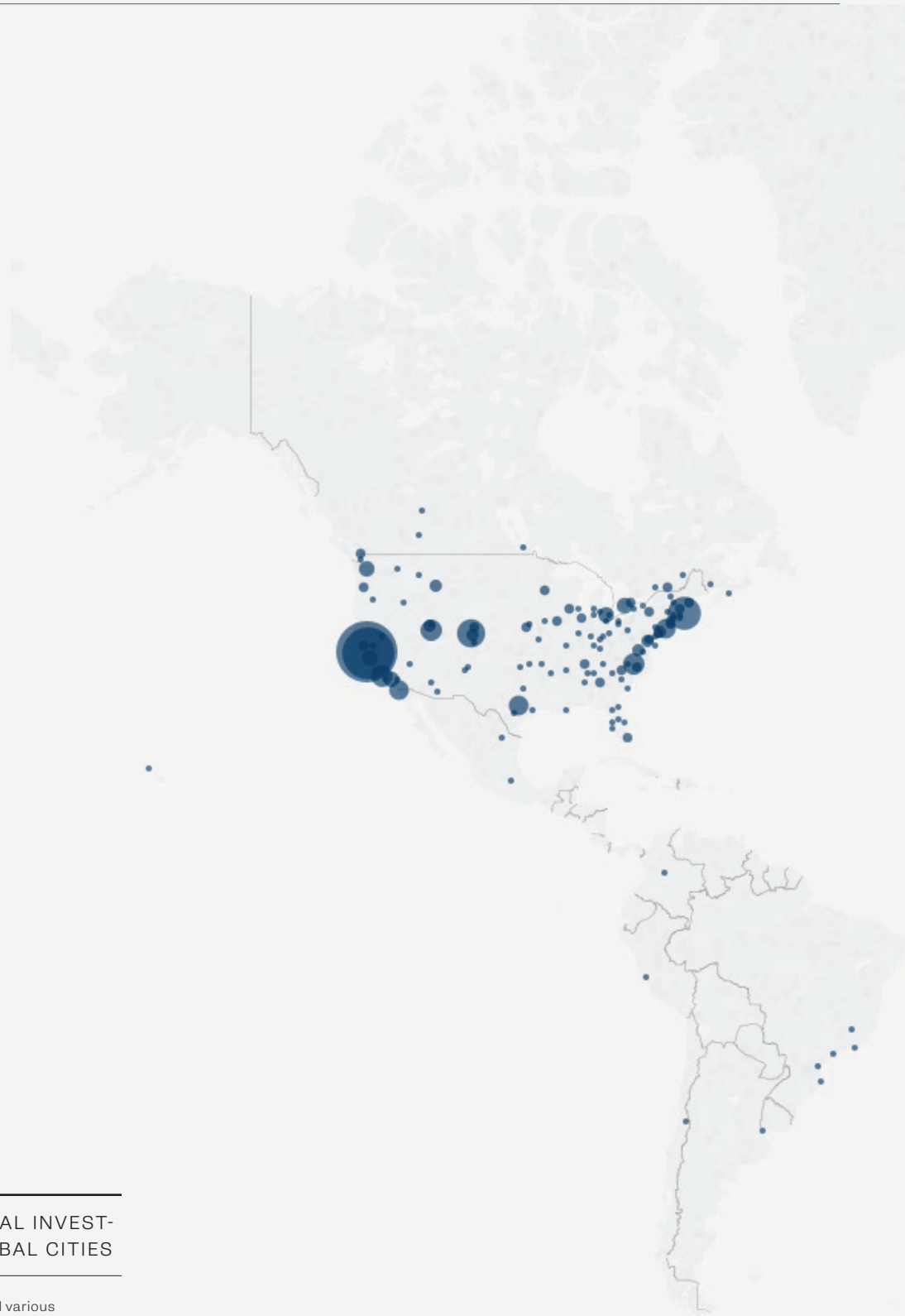
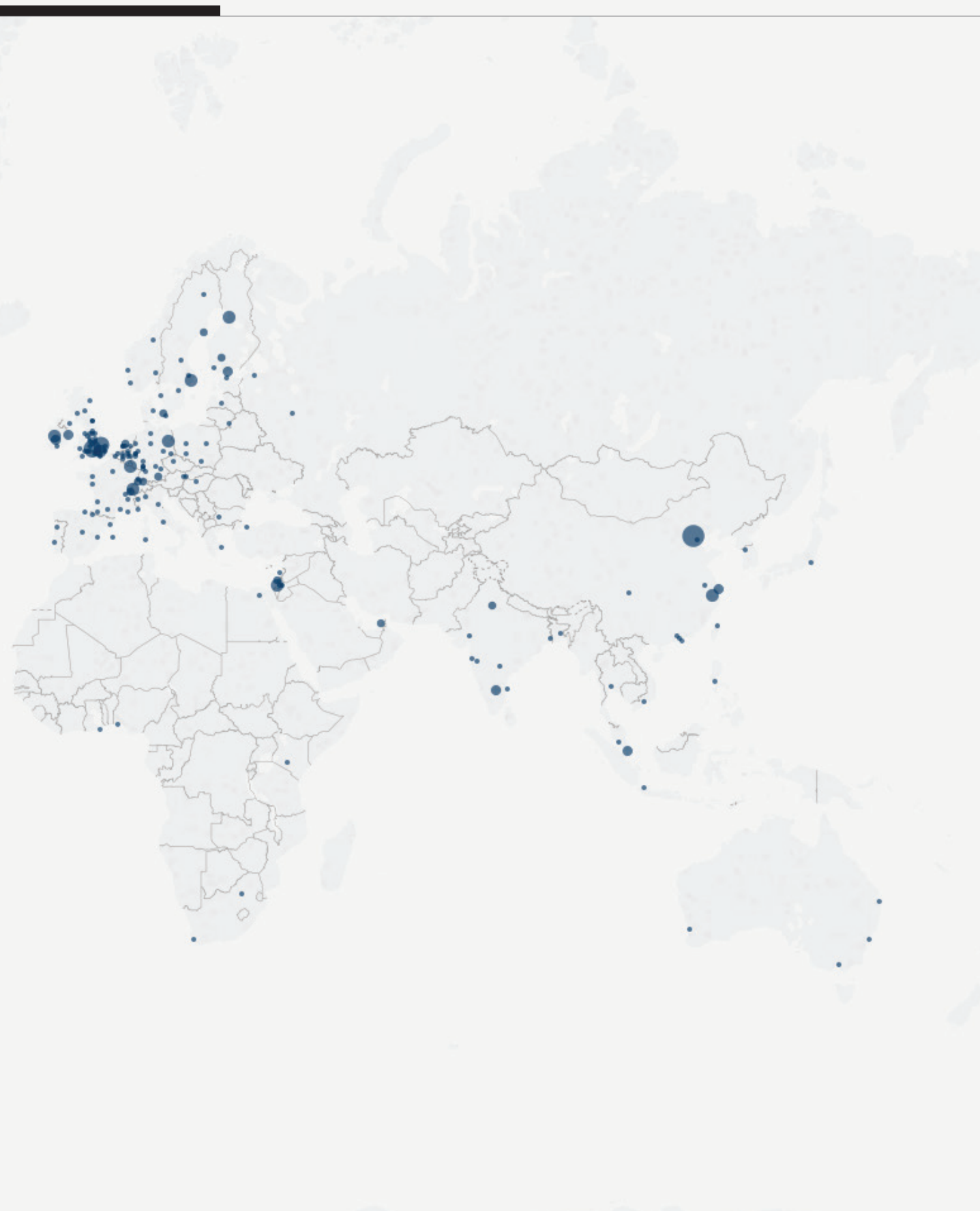


FIGURE 26: VENTURE CAPITAL INVESTMENT PER CAPITA FOR GLOBAL CITIES

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology).

Note: Values are the levels of activity spanning the three-year period 2015-17. Dot sizes reflect value magnitude.



Again, we see the dominance of the Bay Area, with San Francisco topping the list and neighboring San Jose in second. Both metros continue to do well even after controlling for population size—another indicator of their global dominance.

Still, many smaller metros now appear on the list, including a number from the United States and Europe.

Many U.S. college and university towns rank among the global top 50, including Boulder (University of Colorado), Durham (Duke University, University of North Carolina), Ann Arbor (University of Michigan), Charlottesville (University of Virginia), Bozeman (Montana State University), Provo (Brigham Young University), Madison (University of Wisconsin), Burlington (University of Vermont), Ithaca (Cornell University), Gainesville (University of Florida), Urbana-Champaign (University of Illinois), Iowa City (University of Iowa), and Fort Collins (Colorado State University) (see Appendix B).

Outside the U.S., we find university towns like Cambridge (Cambridge University) and Oxford (Oxford University) in the U.K., and Waterloo (University of Waterloo) and Halifax (Dalhousie University) in Canada. Smaller European cities

like Oulu, Finland; Reykjavik, Iceland; Umea, Sweden; and Galway, Ireland also rank among the top 50, as do some larger ones like Stockholm and London.

Overall, two-thirds (33) of the top 50 cities for startup deals per capita are located in the U.S. Another quarter (13 cities) are located in Europe, while six percent (3 cities) are located in Canada. This time around, not a single Asian city makes the list.

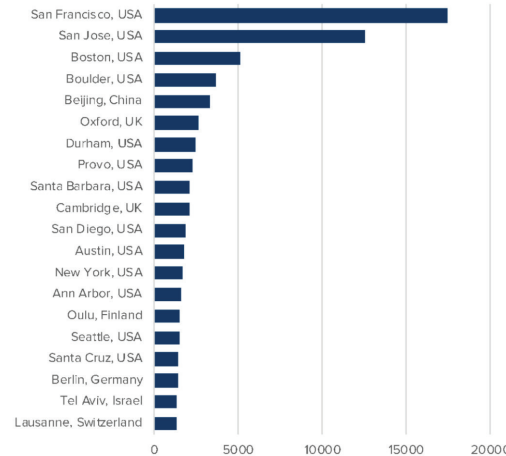
The pattern is similar for venture capital investment. San Francisco again leads the way, with San Jose in second. Once again, smaller university towns in the U.S. and U.K. are relatively high on the list. The top 50 list also includes smaller cities like Basel and Lausanne, Switzerland; Limerick, Ireland; and Edinburgh, Scotland (see Appendix B). In total, the U.S. accounts for more than half (28) of the top 50 cities. Europe accounts for 28 percent (14 cities), while Asia accounts for 12 percent (five cities).

FIGURE 27: TOP 20 CITIES FOR VENTURE CAPITAL DEALS PER CAPITA



Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology). **Note:** Values are the levels of activity spanning the three-year period 2015-17, indicating the number of venture deals per one million residents.

FIGURE 28: TOP 20 CITIES FOR VENTURE CAPITAL INVESTMENT PER CAPITA



Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology). **Note:** Values are the levels of activity spanning the three-year period 2015-17, indicating the amount of venture capital invested (\$ million) per one million residents.



A Typology of Global Startup Hubs

How exactly do the world's startup hubs line up comparatively? Which ones are the undisputed leaders, which are the up-and-comers, and which ones punch above their weight?

To get at this, we introduce a new typology of global startup hubs, bringing together our data on venture capital deals and venture capital investments. We assess each city along three dimensions: size, growth, and balance (Appendix A provides more detail on our methodology). For this portion of our research, we combine the San Francisco and San Jose metros into the broader San Francisco Bay Area region. We also combine the Raleigh and Durham metros into the North Carolina Research Triangle.

Our analysis generates two overall types and seven individual tiers of Global Startup Hubs. This includes four categories of Established Startup Hubs and three tiers of Emerging Startup Hubs.

Established Global Startup Hubs



SUPERSTAR GLOBAL STARTUP HUBS

Our research identifies six Superstar Global Hubs. These are places that demonstrate substantial levels of activity in both venture capital deals and venture capital investment, as well as growth along both measures. With their combination of size and growth, these are the world's top hubs for startup activity and venture capital investment, and the key drivers of global trends. The San Francisco Bay Area is the undisputed leader, accounting for more than a fifth of global venture capital investment. The remaining superstar hubs include New York, London, Beijing, Los Angeles, and Boston. Together, these six hubs account for more than half of all global venture capital investment and about one percent of the world's population.





ELITE GLOBAL STARTUP HUBS

The second tier includes 13 Elite Global Startup Hubs, which also have considerable venture capital deals and venture capital investment. This group includes four U.S. cities (Austin, Chicago, San Diego, and Seattle), three Indian cities (Bangalore, Delhi, and Mumbai), three European cities (Berlin, Paris, and Stockholm), two Asian cities (Shanghai and Singapore), and one Middle-Eastern city (Tel Aviv). Together, these 13 hubs account for 18 percent of global venture capital investment and 1.6 percent of the global population.



ADVANCED GLOBAL STARTUP HUBS

The third tier is comprised of 20 Advanced Global Startup Hubs. These hubs perform in the top 10 percent of startup hubs, but lack the level of activity, growth, or balance to rank among the Elite. This tier includes eight hubs in the U.S. (Atlanta, Dallas, Denver, Houston, Miami, Philadelphia, Raleigh-Durham, and Washington, D.C.), seven in Asia-Pacific (Hangzhou, Hong Kong, Jakarta, Seoul, Shenzhen, Tokyo, and Sydney), four in Europe (Amsterdam, Barcelona, Dublin, and Helsinki), and one in Canada (Toronto). Combined, these 20 hubs account for 11 percent of global venture capital investment and 2.5 percent of the global population.

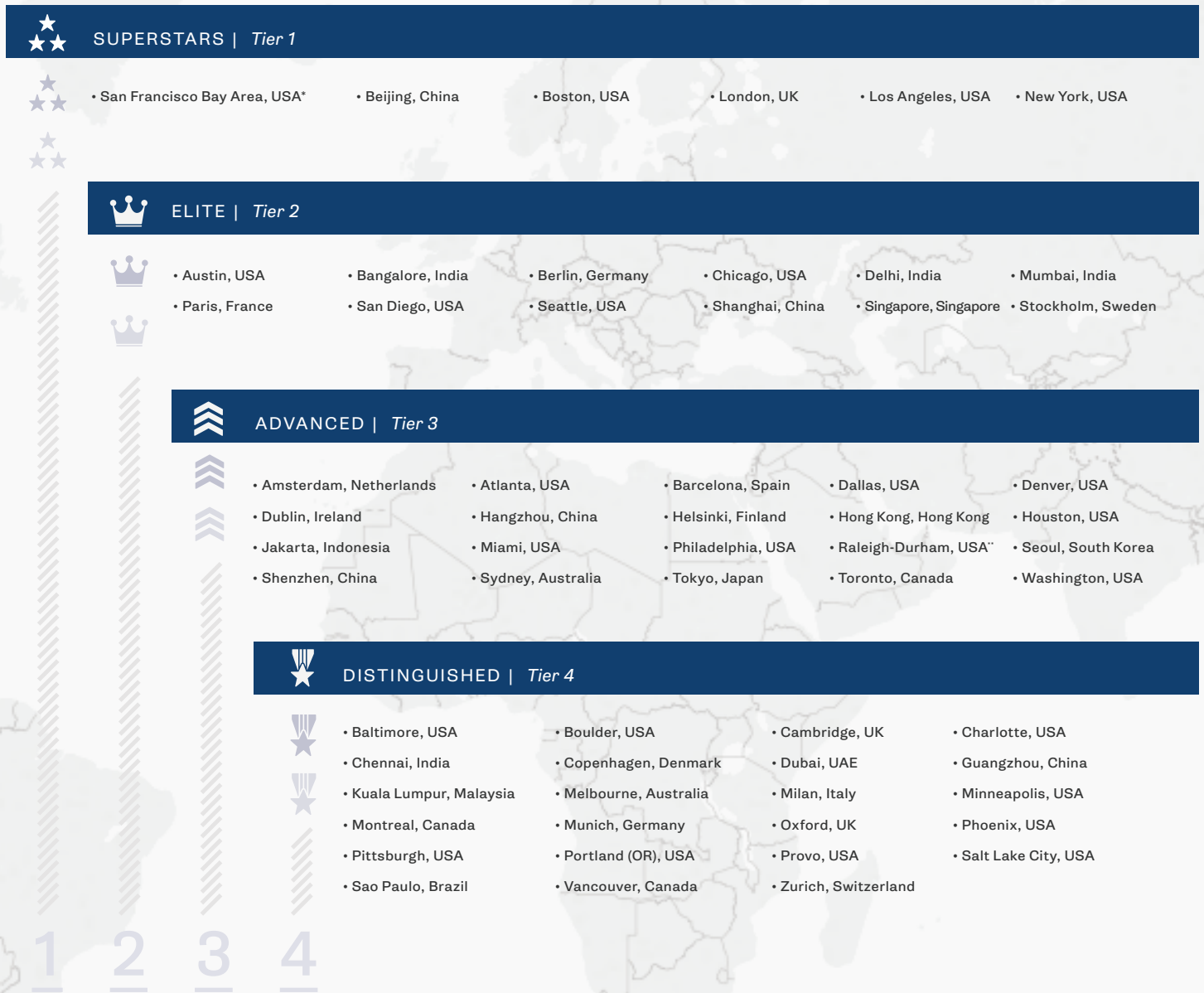


DISTINGUISHED GLOBAL STARTUP HUBS

The fourth tier consists of 23 Distinguished Global Startup Hubs. These hubs rank among the top quintile in our comprehensive scoring, but lack some combination of size, growth, balance, or stability to be considered among the three higher tiers. This group includes nine cities in the U.S. (Baltimore, Boulder, Charlotte, Minneapolis, Phoenix, Pittsburgh, Provo, Salt Lake City, and Portland, Oregon), six in Europe (Cambridge, Copenhagen, Milan, Munich, Oxford, and Zurich), four in Asia-Pacific (Chennai, Guangzhou, Kuala Lumpur, and Melbourne), two in Canada (Montreal and Vancouver), and one each in the Middle East (Dubai) and South America (Sao Paulo). These 23 hubs account for five percent of global venture capital investment and 1.3 percent of the world's population.

FIGURE 29: ESTABLISHED GLOBAL STARTUP HUBS

These 62 Global Startup Hubs account for about 75 percent of global venture deals and 90 percent of venture capital investments globally, while housing less than seven percent of the world's population.



* includes the San Francisco and San Jose metro areas
 ** includes the Durham-Chapel Hill and Raleigh metro areas

Source: Authors' analysis of PitchBook data

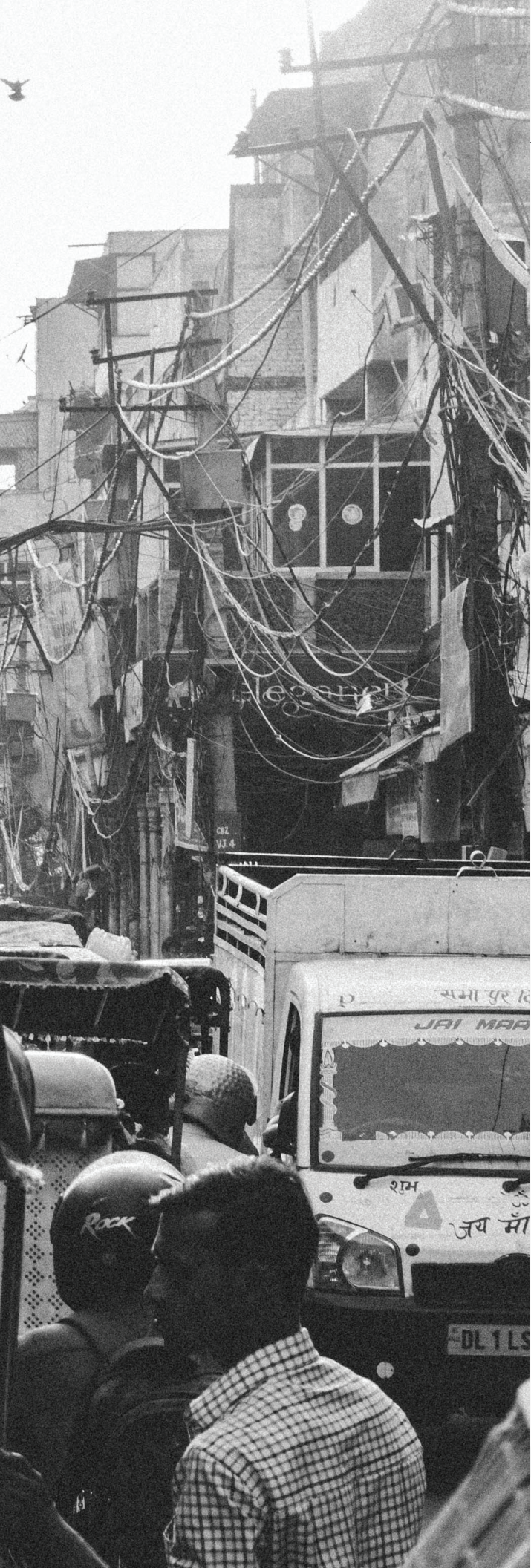
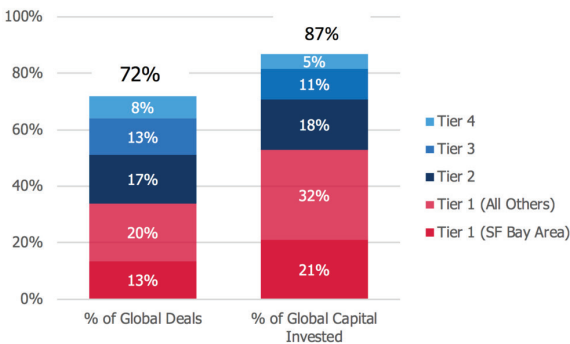


FIGURE 30: SHARE OF GLOBAL VENTURE CAPITAL DEALS AND INVESTMENT IN ESTABLISHED GLOBAL STARTUP HUBS



Source: Authors' analysis of PitchBook data. Note: Values are the shares of activity spanning the three-year period 2015-17.

Taken together, the Established Global Startup Hubs span 62 metropolitan areas and 25 countries. Fewer than half of them (40 percent, or 25 hubs) are located in the United States. Asia-Pacific is home to 17 hubs (27 percent), including five in China, four in India, and two in Australia. Europe is home to 14 hubs (23 percent), including three in the United Kingdom and two in Germany. Another three hubs are located in Canada, while two are in the Middle East, and one is in South America.

In total, the 62 Global Startup Hubs account for nearly three-quarters of startup deals and almost 90 percent of global venture capital investment, despite being home to less than seven percent of the world's population.

Emerging Global Startup Hubs

Thirty additional cities constitute a group of Emerging Startup Hubs. These hubs have less global reach and are more regional in nature. This category can be further broken down into three distinct groups.

The three tiers of Emerging Startup Hubs account for roughly two percent of global venture capital investment, while housing around two percent of the world's population. Thirteen of these cities—slightly more than 40 percent—are located in the U.S., while about a quarter are located in Asia and 20 percent are in Europe. Africa is home to two cities, while Mexico and Canada are home to one each.



GLOBAL NEXT

The Global Next consists of 10 hubs that are too small to qualify as Established Global Startup Hubs but rank among the top 100 cities for global venture capital deals and among the top 60 for angel and seed-stage investment. Seven of these hubs—Detroit, Nashville, Indianapolis, Columbus, Cincinnati, Las Vegas, and Orlando—are located in the U.S. This category also includes Moscow and the Indian cities of Pune and Hyderabad. Together, the Global Next account for less than one percent of global venture capital investment.

LITTLE GIANTS

The Little Giants are 10 hubs that have high levels of venture capital investment per capita, but a lower volume of venture capital investment than Established Global Startup Hubs. These include smaller college towns like Ann Arbor (University of Michigan), Charlottesville (University of Virginia), Madison (University of Wisconsin-Madison), Bozeman (Montana State University), Santa Barbara (University of California Santa Barbara), and Santa Cruz (University of California Santa Cruz). Hubs outside the U.S. include: Waterloo, Canada (University of Waterloo); Oulu, Finland (University of Oulu); Galway, Ireland (National University of Ireland); and Reykjavik, Iceland (University of Iceland). Together, the Little Giants account for around half of a percent of global venture capital investment.

GLOBAL GAZELLES

The Global Gazelles consist of 10 cities that experienced very rapid growth in their percentage of venture capital activity in the last half-decade, but do not have enough venture capital investment, deals, balance, or stability to qualify as Established Global Startup Hubs. This group includes five Asian cities (Bangkok, Ho Chi Minh City, Manila, Ahmadabad, and Calcutta), two European cities (Basel and Sofia), two African cities (Nairobi and Lagos), and Mexico City. Together, the Global Gazelles account for around half of a percent of global venture capital investment.

FIGURE 31: EMERGING GLOBAL STARTUP HUBS

GLOBAL NEXT	LITTLE GIANTS	GLOBAL GAZELLES
Cincinnati, USA	Ann Arbor, USA	Ahmedabad, India
Columbus, USA	Bozeman, USA	Bangkok, Thailand
Detroit, USA	Charlottesville, USA	Basel, Switzerland
Hyderabad, India	Galway, Ireland	Calcutta, India
Indianapolis, USA	Madison, USA	Ho Chi Minh City, Vietnam
Las Vegas, USA	Oulu, Finland	Lagos, Nigeria
Moscow, Russia	Reykjavik, Iceland	Manila, Philippines
Nashville, USA	Santa Barbara, USA	Mexico City, Mexico
Orlando, USA	Santa Cruz, USA	Nairobi, Kenya
Pune, India	Waterloo, Canada	Sofia, Bulgaria

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology).

Conclusion

This report has examined the new global geography of global startup hubs. To do so, we analyzed detailed data for more than 100,000 venture capital deals spanning more than 300 global cities and metropolitan areas across 60 countries from 2005-2017. Our research informs several key findings.

First and foremost, startup activity and venture capital investment have become increasingly global, with the U.S. witnessing a decline in its long-standing lead. The U.S. share of venture capital investment, which remained above 95 percent into the mid-1990s, fell to more than two-thirds by 2012, and today stands at slightly more than half of global venture capital investment.

THE SAN FRANCISCO BAY AREA REMAINS, BY FAR, THE WORLD'S DOMINANT LOCATION FOR STARTUP ACTIVITY

Second, the globalization of startup activity has largely been a local, urban phenomenon, powered by the rise of significant startup hubs outside the U.S. The San Francisco Bay Area remains, by far, the world's dominant location for startup activity, capturing roughly a fifth of global venture capital investment. But a number of cities across the world have developed into leading startup hubs, including London, Berlin, Paris, and Stockholm in Europe; Beijing and Shanghai in China; Bangalore, Delhi, and Mumbai in India; and Singapore and Tel Aviv.

Third, the globalization of startup activity and venture capital investment is extraordinarily clustered, concentrated, and spiky. Three-quarters of all global venture capital investment goes to the top 24 global startup hubs, which together house just four percent of the population. What's more, half of all venture capital investment goes to the world's six leading startup hubs,

where one percent of the global population resides. This pattern has become even more pronounced with time: During the last half-decade, four global startup hubs accounted for half of the global growth in venture capital investment, while 13 hubs accounted for more than three-quarters.

Fourth, today's leading global startup hubs skew heavily toward many of the world's largest and most economically powerful cities, including New York, London, Beijing, Shanghai, Delhi, Los Angeles, Chicago, and the San Francisco Bay Area. The world's 62 leading Global Startup Hubs have an average of nearly eight million people. More than half of these hubs (32) have more than five million residents, while 16 have populations of 10 million or more, and seven have populations of more than 20 million.

Fifth, our analysis generates a new typology of Global Startups Hubs, which we group into two broad types—Established Global Startup Hubs and Emerging Global Startup Hubs—and seven individual categories or tiers.

The 62 Established Global Startup Hubs account for the lion's share of global startup activity and venture capital investment, with nearly three-quarters of venture capital deals and almost 90 percent of global venture capital investment, while housing less than seven percent of the world's population. American cities comprise a bit more than 40 percent of these hubs, with Asia and Europe comprising roughly a quarter each.

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WE FURTHER DISTINGUISH BETWEEN FOUR TIERS OF ESTABLISHED GLOBAL STARTUP HUBS.

Superstar Global Startup Hubs: The first tier of Superstar Global Startup Hubs consists of six cities or metro areas—four in the U.S. and two elsewhere. The San Francisco Bay Area is the undisputed leader, while New York, London, Beijing, Los Angeles, and Boston round out the list.

Elite Global Startup Hubs: The second tier of Elite Global Startup Hubs consists of 13 cities, including Austin, Chicago, San Diego, and Seattle in the U.S.; Bangalore, Delhi, and Mumbai in India; Berlin, Paris, and Stockholm in Europe; Shanghai and Singapore in Asia; and Tel Aviv in Israel.

Advanced Global Startup Hubs: The third tier of Advanced Global Startup Hubs consists of 20 cities, including eight U.S. hubs, seven Asia-Pacific hubs, four European hubs, and one in Canada.

Distinguished Global Startup Hubs: The fourth tier of Distinguished Global Startup Hubs consists of 23 cities, including nine in the U.S., six in Europe, four in Asia-Pacific, two in Canada, and one each in the Middle East and South America.

We identify 30 additional cities as Emerging Startup Hubs. Roughly 40 percent of these Emerging Hubs are located in the U.S., while about a quarter are located in Asia, and another 20 percent are located in Europe. These hubs account for five percent of global venture capital deals and two percent of global venture capital investment, while housing around two percent of the world's population.

Overall, our analysis provides convincing evidence of the globalization of startup activity and venture capital investment. America remains the world's leading player, but its dominance has diminished considerably as startups have developed in other global cities. The old adage that Silicon Valley is the only place to grow and scale startup activity is no longer true. High-tech entrepreneurs in a wide range of cities and countries have chosen to build their startups at home—a pattern that may well continue in the future or even accelerate if the U.S. government fails to create an entrepreneur visa or attempts to limit the ability of highly-skilled foreign nationals to live and work in the United States.

The phrase “the rise of the rest” is commonly used in the U.S. to refer to the emergence of startup hubs outside of established leaders like the Silicon Valley, San Francisco, New York, and Boston. While our analysis confirms this phenomenon in the U.S., the broader reality is that the rise of the rest is occurring to a much larger degree outside of America. Indeed, the real rise of the rest is global.

Appendix

Appendix A: Methodology

Appendix B: Data Tables

Appendix C: Data Tabulations

APPENDIX A: METHODOLOGY

To document the world's leading startup hubs, we used data from PitchBook Data, Inc., which captures the geographic location of companies that received venture capital investment. We grouped the metro-level data into three three-year periods—2005-2007, 2010-2012, and 2015-2017—to reduce noisiness from year to year, especially in smaller geographies. These figures were broken down by country, state or province, city, and postal code for each company's headquarters. The data was then cleaned for any spellings or identification errors.

Once the raw data was cleaned and tabulated, we grouped these data into broader metropolitan areas based on their country-state-city-postal code combination. While most of these places are metropolitan areas, a few are non-metropolitan areas. Startup activity in the U.S. was mapped to metropolitan or micropolitan areas using Census Bureau data. Startup activity in the European Union was mapped onto metropolitan, intermediate, or rural areas (at the level of NUTS 3) using Eurostat data. The rest of the world's aggregations were made only by metropolitan area, using a combination of files from national statistical authorities (e.g., Canada, Israel) or international sources (e.g., Brookings Institution, World Bank, Oxford Economics, ESRI, Google Maps). This produced a list of relevant geographic areas for each deal in the PitchBook database (or confirmed blanks where no corresponding area existed). Deals that occurred in another area of a country were grouped into an "other" category.

Next, these data were fed back to PitchBook for the aggregation of deal counts according to our specified geographic areas for each of the three-year periods and across one of four round types: angel and seed-stage, early-stage venture, later-stage venture, and mega deals of more than \$500 million. The nearly 100,000 venture deals in the PitchBook database, which cover nine years of collected data that span a period of 17 years, collectively produced more than 5,000 combinations (cells) of deal activity along our aggregations of geography, time period, and round type.

In addition to the number of deals, PitchBook extracted two other measures: the amount of capital invested in these deals (where the amount invested was reported) and the number of deals in which the amount of invested capital was reported. As a result, the amount of capital invested for 17 percent of the nearly 100,000 deals was not reported. Since our aim is to analyze both deals and capital invested (dollars), we conservatively interpolated values for these approximately 17,000 deals. To do this, we first tabulated global average deal sizes for each of the 12 round-period combinations. We then assigned geographic areas into quartiles for global deal volume in each period and round type. Each of the four groups in each period was assigned an adjustment factor of 40 percent, 50 percent, 60 percent, or 70 percent (from the lowest deal activity group to the highest).

For each geographic area with a deal reported, but a missing value for the capital investment, we assume that the deal size is the global average for that period-round, reduced by the relevant adjustment factor. In other words, the places with the fewest deals are assumed to have relatively smaller deal sizes compared to the global average, while the most active places are assumed to have relatively larger deal sizes. In all cases, missing deals are assumed to be smaller in general, as each adjustment factor value is far less than 100 percent (an adjustment factor of 100 percent would indicate an equivalent of the global average). These new adjusted figures have the effect of raising the level of capital invested by 10 percent globally over the three periods compared to capital invested when missing deal size values were not interpolated.

Next, we mapped each geographic area onto its population estimate for the most recent period, 2015-2017. To make this process manageable, we filtered out all but 500 of the most active regions for venture deals in the most recent period. From there, we applied population figures from a variety of sources. For the U.S., Canada, and Israel, figures came directly from national sources. Europe's figures came primarily from the Eurostat, though there were a few exceptions for smaller areas in Ireland, Finland, Sweden, and the United Kingdom, which came directly from national sources. Aside from these, population data for the rest of the world came from Oxford Economics (via the Brookings Institution) or the United Nations.

With a nearly complete dataset in hand, we applied two final filters. The remaining geographic areas needed to satisfy two conditions: (1) a population of at least 100,000 residents in the most recent period (2015-2017), and (2) a minimum of six venture capital deals in the two most recent periods (2010-2012 and 2015-2017), or an average of two deals per year within each of the three-year periods.

This resulted in a final list of 314 geographic areas—primarily metropolitan areas, but also a small number of micropolitan (U.S.), intermediate (EU), and rural areas (EU). These 314 startup hubs cover 92 percent of total venture deals and 96 percent of total venture capital investment in 2015-2017. For each of these 314 hubs, we tabulated figures for venture deals, venture capital invested (adjusted), and a measure that caps deal sizes at \$500 million to control for the effect of very large mega deals. Each of these three measures is available by round (pre, early, late, mega) and period.

Our typology of startup hubs is based on the level of venture capital deals, the volume of venture capital investment, and the change in both. We used our capped figures for venture capital investment (which limits all deals to \$500 million in size) to reduce the influence of cities that have total activity driven to a very large extent by these massive outliers.

We next benchmarked each metropolitan area against the within-measure maximum (i.e. the leading city received a score of one for each category) and created a composite score across all measures for each city. The scores were then assessed to look for statistically meaningful breaks in the data and to discern natural groupings. These were also crosschecked with several iterations of statistical clustering analyses through the k-means method.

Based on this, we identified two main types and seven individual categories of Global Startup Hubs. The first type is comprised of large Established Global Startup Hubs, which span 64 individual metropolitan areas. For this exercise, we combined the San Francisco and San Jose metros into the San Francisco Bay Area and the Raleigh and Durham metros into the Research Triangle, to produce 62 Established Startup Hubs.

The second type is comprised of smaller Emerging Global Startup Hubs. The Global Next are cities within the top 100 for total venture deals and a strong presence (relative activity) and growth of angel and seed-stage investment. Each is among the top 60 for such deals. We simply selected the top 10 from the list, as we did for all Emerging Startup Hubs. For the Little Giants, we took the remaining metros with the highest per capita measures for venture deals and venture capital investment by calculating a composite relative metric across both. For the Global Gazelles, we calculated a composite metric for relative growth rates in venture capital deals and venture capital investment and took the remaining 10 cities with the highest scores.

APPENDIX B: DATA TABLES

FIGURE B1: TOP 50 GLOBAL CITIES FOR VENTURE CAPITAL DEALS

Rank	Geography	Deals (2015-2017)	Share of Global Total	Cumulative Share of Global Total
	Global	50,704	100.0%	--
1	San Francisco, USA	4,900	9.7%	9.7%
2	New York, USA	3,287	6.5%	16.1%
3	London, UK	2,557	5.0%	21.2%
4	San Jose, USA	1,931	3.8%	25.0%
5	Boston, USA	1,870	3.7%	28.7%
6	Los Angeles, USA	1,864	3.7%	32.4%
7	Seattle, USA	927	1.8%	34.2%
8	Delhi, India	851	1.7%	35.9%
9	Paris, France	822	1.6%	37.5%
10	Bangalore, India	792	1.6%	39.1%
11	Beijing, China	781	1.5%	40.6%
12	Chicago, USA	721	1.4%	42.0%
13	Austin, USA	714	1.4%	43.4%
14	San Diego, USA	699	1.4%	44.8%
15	Tel Aviv, Israel	665	1.3%	46.1%
16	Washington, USA	660	1.3%	47.4%
17	Berlin, Germany	629	1.2%	48.7%
18	Philadelphia, USA	538	1.1%	49.7%
19	Mumbai, India	516	1.0%	50.7%
20	Toronto, Canada	482	1.0%	51.7%
21	Denver, USA	475	0.9%	52.6%
22	Shanghai, China	472	0.9%	53.6%
23	Stockholm, Sweden	460	0.9%	54.5%
24	Singapore, Singapore	458	0.9%	55.4%
25	Dallas, USA	394	0.8%	56.1%
26	Atlanta, USA	393	0.8%	56.9%
27	Tokyo, Japan	381	0.8%	57.7%
28	Miami, USA	354	0.7%	58.4%
29	Houston, USA	300	0.6%	59.0%
30	Helsinki, Finland	299	0.6%	59.5%

Rank	Geography	Deals (2015-2017)	Share of Global Total	Cumulative Share of Global Total
	Global	50,704	100.0%	--
31	Moscow, Russia	294	0.6%	60.1%
32	Sydney, Australia	287	0.6%	60.7%
33	Barcelona, Spain	286	0.6%	61.3%
34	Boulder, USA	284	0.6%	61.8%
35	Vancouver, Canada	282	0.6%	62.4%
36	Minneapolis, USA	279	0.6%	62.9%
37	Dublin, Ireland	274	0.5%	63.5%
38	Phoenix, USA	268	0.5%	64.0%
39	Portland (OR), USA	262	0.5%	64.5%
40	Seoul, South Korea	244	0.5%	65.0%
41	Copenhagen, Denmark	235	0.5%	65.5%
42	Baltimore, USA	229	0.5%	65.9%
43	Pittsburgh, USA	229	0.5%	66.4%
44	Munich, Germany	215	0.4%	66.8%
45	Amsterdam, Netherlands	212	0.4%	67.2%
46	Nashville, USA	200	0.4%	67.6%
47	Montreal, Canada	192	0.4%	68.0%
48	Cambridge, UK	181	0.4%	68.3%
49	Salt Lake City, USA	178	0.4%	68.7%
50	Raleigh, USA	166	0.3%	69.0%

Source: Authors' analysis of PitchBook data. **Note:** Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX B: DATA TABLES

FIGURE B2: TOP 50 GLOBAL CITIES BY FIVE-YEAR GROWTH IN VENTURE CAPITAL DEALS

Rank	Geography	Deals (2010-12)	Deals (2015-17)	% Change
	Global	32,531	50,704	56%
1	Bangkok, Thailand	9	65	622%
2	Ahmedabad, India	7	49	600%
3	Jakarta, Indonesia	24	161	571%
4	Delhi, India	168	851	407%
5	Bangalore, India	195	792	306%
6	Ho Chi Minh City, Vietnam	8	32	300%
7	Mumbai, India	133	516	288%
8	Calcutta, India	8	31	288%
9	Dubai, UAE	23	86	274%
10	Kuala Lumpur, Malaysia	28	103	268%
11	Pune, India	26	91	250%
12	Hangzhou, China	38	132	247%
13	Mexico City, Mexico	29	92	217%
14	Bozeman, USA	7	22	214%
15	Milan, Italy	41	127	210%
16	Des Moines, USA	11	34	209%
17	Manila, Philippines	14	43	207%
18	Sofia, Bulgaria	7	21	200%
19	Basel, Switzerland	9	27	200%
20	Lagos, Nigeria	13	39	200%
21	Johannesburg, South Africa	9	26	189%
22	Stockholm, Sweden	163	460	182%
23	Lille, France	19	52	174%
24	Sydney, Australia	106	287	171%
25	Nanjing, China	17	45	165%
26	Lisbon, Portugal	11	29	164%
27	Singapore, Singapore	174	458	163%
28	Nairobi, Kenya	21	55	162%
29	Rome, Italy	21	55	162%
30	Hyderabad, India	40	104	160%

Rank	Geography	Deals (2010-12)	Deals (2015-17)	% Change
	Global	32,531	50,704	56%
31	Brisbane, Australia	20	51	155%
32	East Kent, UK	6	15	150%
33	Riga, Latvia	16	40	150%
34	The Hague, Netherlands	18	45	150%
35	Beirut, Lebanon	11	27	145%
36	Porto, Portugal	9	22	144%
37	Rotterdam, Netherlands	12	29	142%
38	Lincoln, USA	12	29	142%
39	London, UK	1,061	2,557	141%
40	Chennai, India	42	101	140%
41	Santa Cruz, USA	20	48	140%
42	Bratislava, Slovakia	8	19	138%
43	Hong Kong, Hong Kong	57	134	135%
44	Krakow, Poland	12	28	133%
45	Antwerp, Belgium	12	28	133%
46	Cape Town, South Africa	31	72	132%
47	Melbourne, Australia	65	150	131%
48	Helsinki, Finland	130	299	130%
49	Utrecht, Netherlands	20	46	130%
50	Little Rock, USA	11	25	127%

Source: Authors' analysis of PitchBook data. Note: Values are the percentage change between the three-year periods 2010-12 and 2015-17.

APPENDIX B: DATA TABLES

FIGURE B3: TOP 50 GLOBAL CITIES FOR CONTRIBUTION TO FIVE-YEAR GLOBAL VENTURE CAPITAL DEAL GROWTH

Rank	Geography	Change in Deals (2010-12 to 2015-17)	Contribution to Global Change in Deals	Cumulative Share of Change in Global Total
	Global	18,173	100.0%	--
1	San Francisco, USA	1,511	8.3%	8.3%
2	London, UK	1,496	8.2%	16.5%
3	New York, USA	1,172	6.4%	23.0%
4	Delhi, India	683	3.8%	26.8%
5	Los Angeles, USA	648	3.6%	30.3%
6	Bangalore, India	597	3.3%	33.6%
7	Mumbai, India	383	2.1%	35.7%
8	Beijing, China	366	2.0%	37.7%
9	Boston, USA	340	1.9%	39.6%
10	Berlin, Germany	303	1.7%	41.3%
11	Stockholm, Sweden	297	1.6%	42.9%
12	Tel Aviv, Israel	285	1.6%	44.5%
13	Singapore, Singapore	284	1.6%	46.0%
14	Paris, France	280	1.5%	47.6%
15	Seattle, USA	279	1.5%	49.1%
16	Austin, USA	237	1.3%	50.4%
17	Chicago, USA	230	1.3%	51.7%
18	Shanghai, China	223	1.2%	52.9%
19	Tokyo, Japan	207	1.1%	54.0%
20	San Jose, USA	207	1.1%	55.2%
21	San Diego, USA	201	1.1%	56.3%
22	Toronto, Canada	191	1.1%	57.3%
23	Sydney, Australia	181	1.0%	58.3%
24	Denver, USA	175	1.0%	59.3%
25	Helsinki, Finland	169	0.9%	60.2%
26	Barcelona, Spain	140	0.8%	61.0%
27	Miami, USA	139	0.8%	61.8%
28	Washington, USA	138	0.8%	62.5%
29	Jakarta, Indonesia	137	0.8%	63.3%
30	Houston, USA	130	0.7%	64.0%

Rank	Geography	Change in Deals (2010-12 to 2015-17)	Contribution to Global Change in Deals	Cumulative Share of Change in Global Total
	Global	18,173	100.0%	--
31	Philadelphia, USA	126	0.7%	64.7%
32	Seoul, South Korea	119	0.7%	65.3%
33	Dallas, USA	118	0.6%	66.0%
34	Phoenix, USA	115	0.6%	66.6%
35	Amsterdam, Netherlands	111	0.6%	67.2%
36	Copenhagen, Denmark	103	0.6%	67.8%
37	Dublin, Ireland	102	0.6%	68.4%
38	Hangzhou, China	94	0.5%	68.9%
39	Portland (OR), USA	90	0.5%	69.4%
40	Vancouver, Canada	87	0.5%	69.9%
41	Milan, Italy	86	0.5%	70.3%
42	Melbourne, Australia	85	0.5%	70.8%
43	Shenzhen, China	81	0.4%	71.2%
44	Hong Kong, Hong Kong	77	0.4%	71.7%
45	Kuala Lumpur, Malaysia	75	0.4%	72.1%
46	Munich, Germany	72	0.4%	72.5%
47	Baltimore, USA	72	0.4%	72.9%
48	Boulder, USA	71	0.4%	73.3%
49	Pune, India	65	0.4%	73.6%
50	Durham, USA	65	0.4%	74.0%

Source: Authors' analysis of PitchBook data. **Note:** Values are the percentage contribution to global change between the three-year periods 2010-12 and 2015-17.

APPENDIX B: DATA TABLES

FIGURE B4: TOP 50 GLOBAL CITIES FOR VENTURE CAPITAL INVESTMENT

Rank	Geography	Capital Invested (\$M) (2015-17)	Share of Global Total	Cumulative Share of Global Total
	Global	\$512,097	100%	--
1	San Francisco, USA	\$81,808	16.0%	16.0%
2	Beijing, China	\$72,819	14.2%	30.2%
3	New York, USA	\$33,763	6.6%	36.8%
4	San Jose, USA	\$24,857	4.9%	41.6%
5	Boston, USA	\$24,567	4.8%	46.4%
6	Shanghai, China	\$23,839	4.7%	51.1%
7	Los Angeles, USA	\$17,391	3.4%	54.5%
8	London, UK	\$15,650	3.1%	57.5%
9	Hangzhou, China	\$11,390	2.2%	59.8%
10	Bangalore, India	\$10,568	2.1%	61.8%
11	Delhi, India	\$8,749	1.7%	63.5%
12	Berlin, Germany	\$7,291	1.4%	65.0%
13	San Diego, USA	\$6,030	1.2%	66.1%
14	Seattle, USA	\$5,710	1.1%	67.3%
15	Tel Aviv, Israel	\$5,280	1.0%	68.3%
16	Chicago, USA	\$5,148	1.0%	69.3%
17	Singapore, Singapore	\$4,720	0.9%	70.2%
18	Paris, France	\$4,578	0.9%	71.1%
19	Washington, USA	\$4,359	0.9%	72.0%
20	Shenzhen, China	\$4,286	0.8%	72.8%
21	Austin, USA	\$3,635	0.7%	73.5%
22	Tokyo, Japan	\$3,066	0.6%	74.1%
23	Atlanta, USA	\$3,036	0.6%	74.7%
24	Toronto, Canada	\$2,986	0.6%	75.3%
25	Philadelphia, USA	\$2,985	0.6%	75.9%
26	Seoul, South Korea	\$2,848	0.6%	76.4%
27	Jakarta, Indonesia	\$2,828	0.6%	77.0%
28	Mumbai, India	\$2,757	0.5%	77.5%
29	Stockholm, Sweden	\$2,641	0.5%	78.0%
30	Denver, USA	\$2,581	0.5%	78.5%

Rank	Geography	Capital Invested (\$M) (2015-17)	Share of Global Total	Cumulative Share of Global Total
	Global	\$512,097	100%	--
31	Miami, USA	\$2,540	0.5%	79.0%
32	Hong Kong, Hong Kong	\$2,241	0.4%	79.5%
33	Oxford, UK	\$1,806	0.4%	79.8%
34	Sao Paulo, Brazil	\$1,804	0.4%	80.2%
35	Montreal, Canada	\$1,771	0.3%	80.5%
36	Minneapolis, USA	\$1,757	0.3%	80.9%
37	Dubai, UAE	\$1,745	0.3%	81.2%
38	Dallas, USA	\$1,701	0.3%	81.5%
39	Guangzhou, China	\$1,590	0.3%	81.8%
40	Houston, USA	\$1,571	0.3%	82.2%
41	Tianjin, China	\$1,543	0.3%	82.5%
42	Munich, Germany	\$1,506	0.3%	82.7%
43	Dublin, Ireland	\$1,388	0.3%	83.0%
44	Cambridge, UK	\$1,371	0.3%	83.3%
45	Durham, USA	\$1,353	0.3%	83.5%
46	Provo, USA	\$1,352	0.3%	83.8%
47	Nanjing, China	\$1,297	0.3%	84.1%
48	Baltimore, USA	\$1,292	0.3%	84.3%
49	Vancouver, Canada	\$1,256	0.2%	84.6%
50	Salt Lake City, USA	\$1,242	0.2%	84.8%

Source: Authors' analysis of PitchBook data. Note: Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX B: DATA TABLES

FIGURE B5: TOP 50 GLOBAL CITIES BY FIVE-YEAR GROWTH IN VENTURE CAPITAL INVESTMENT

Rank	Geography	Capital Invested (\$M) (2010-12)	Capital Invested (\$M) (2015-17)	% Change
	Global	\$191,315	\$512,097	168%
1	Bangkok, Thailand	\$4	\$336	7775%
2	Hangzhou, China	\$533	\$11,390	2035%
3	Jakarta, Indonesia	\$175	\$2,828	1513%
4	Sofia, Bulgaria	\$4	\$45	1076%
5	Dubai, UAE	\$149	\$1,745	1075%
6	Tianjin, China	\$134	\$1,543	1049%
7	Nairobi, Kenya	\$30	\$323	990%
8	Luxembourg, Luxembourg	\$69	\$738	969%
9	Palma de Mallorca, Spain	\$5	\$54	927%
10	Manila, Philippines	\$9	\$95	918%
11	Beijing, China	\$7,205	\$72,819	911%
12	Wilmington (DE), USA	\$6	\$55	860%
13	Delhi, India	\$932	\$8,749	839%
14	Bozeman, USA	\$10	\$94	832%
15	Shanghai, China	\$2,665	\$23,839	794%
16	Leeds, UK	\$25	\$217	777%
17	Prague, Czech Republic	\$12	\$104	773%
18	Ahmedabad, India	\$17	\$150	755%
19	Kuala Lumpur, Malaysia	\$45	\$382	744%
20	Bratislava, Slovakia	\$10	\$82	700%
21	Lincoln, USA	\$22	\$172	676%
22	Bangalore, India	\$1,426	\$10,568	641%
23	Beirut, Lebanon	\$11	\$83	641%
24	Iowa City, USA	\$13	\$95	616%
25	Seoul, South Korea	\$401	\$2,848	611%
26	Calcutta, India	\$23	\$159	606%
27	Rotterdam, Netherlands	\$14	\$92	559%

Rank	Geography	Capital Invested (\$M) (2010-12)	Capital Invested (\$M) (2015-17)	% Change
	Global	\$191,315	\$512,097	168%
28	Hong Kong, Hong Kong	\$353	\$2,241	536%
29	Karlsruhe, Germany	\$19	\$118	519%
30	Riga, Latvia	\$17	\$102	512%
31	Basel, Switzerland	\$77	\$470	506%
32	Singapore, Singapore	\$794	\$4,720	494%
33	Florianopolis, Brazil	\$10	\$56	476%
34	Sunderland, UK	\$5	\$27	455%
35	Bogota, Colombia	\$23	\$129	451%
36	Auckland, New Zealand	\$73	\$387	433%
37	Boise, USA	\$36	\$190	431%
38	Chattanooga, USA	\$17	\$88	406%
39	Berlin, Germany	\$1,458	\$7,291	400%
40	Las Vegas, USA	\$60	\$297	397%
41	Santa Cruz, USA	\$79	\$393	395%
42	Warsaw, Poland	\$90	\$439	390%
43	Mumbai, India	\$567	\$2,757	387%
44	Guangzhou, China	\$328	\$1,590	384%
45	Lima, Peru	\$8	\$39	382%
46	Exeter, UK	\$8	\$36	358%
47	Charlotte, USA	\$221	\$980	343%
48	Lille, France	\$34	\$149	337%
49	Nanjing, China	\$302	\$1,297	330%
50	Lisbon, Portugal	\$22	\$90	317%

Source: Authors' analysis of PitchBook data. **Note:** Values are the percentage change between the three-year periods 2010-12 and 2015-17.

APPENDIX B: DATA TABLES

FIGURE B6: TOP 50 GLOBAL CITIES FOR CONTRIBUTION TO FIVE-YEAR GLOBAL VENTURE CAPITAL INVESTMENT GROWTH

Rank	Geography	Change in Capital Invested (\$M) (2010-12 to 2015-17)	Contribution to Global Change in Capital Invested	Cumulative Share of Change in Global Total
	Global	\$320,782	100%	--

1	Beijing, China	\$65,614	20.5%	20.5%
2	San Francisco, USA	\$52,018	16.2%	36.7%
3	New York, USA	\$23,613	7.4%	44.0%
4	Shanghai, China	\$21,174	6.6%	50.6%
5	Boston, USA	\$12,676	4.0%	54.6%
6	London, UK	\$11,554	3.6%	58.2%
7	Hangzhou, China	\$10,856	3.4%	61.6%
8	Los Angeles, USA	\$9,778	3.0%	64.6%
9	Bangalore, India	\$9,142	2.8%	67.5%
10	San Jose, USA	\$8,950	2.8%	70.3%
11	Delhi, India	\$7,817	2.4%	72.7%
12	Berlin, Germany	\$5,833	1.8%	74.5%
13	Singapore, Singapore	\$3,926	1.2%	75.7%
14	Shenzhen, China	\$3,249	1.0%	76.8%
15	Seattle, USA	\$2,691	0.8%	77.6%
16	Jakarta, Indonesia	\$2,653	0.8%	78.4%
17	Tel Aviv, Israel	\$2,501	0.8%	79.2%
18	Seoul, South Korea	\$2,447	0.8%	80.0%
19	Paris, France	\$2,412	0.8%	80.7%
20	Mumbai, India	\$2,190	0.7%	81.4%
21	Tokyo, Japan	\$1,949	0.6%	82.0%
22	San Diego, USA	\$1,898	0.6%	82.6%
23	Hong Kong, Hong Kong	\$1,889	0.6%	83.2%
24	Dubai, UAE	\$1,597	0.5%	83.7%
25	Miami, USA	\$1,547	0.5%	84.2%
26	Stockholm, Sweden	\$1,540	0.5%	84.6%
27	Atlanta, USA	\$1,494	0.5%	85.1%
28	Toronto, Canada	\$1,487	0.5%	85.6%
29	Denver, USA	\$1,414	0.4%	86.0%
30	Tianjin, China	\$1,409	0.4%	86.5%

Rank	Geography	Change in Capital Invested (\$M) (2010-12 to 2015-17)	Contribution to Global Change in Capital Invested	Cumulative Share of Change in Global Total
	Global	\$320,782	100%	--

31	Guangzhou, China	\$1,262	0.4%	86.8%
32	Philadelphia, USA	\$1,201	0.4%	87.2%
33	Chicago, USA	\$1,164	0.4%	87.6%
34	Oxford, UK	\$1,130	0.4%	87.9%
35	Austin, USA	\$1,113	0.3%	88.3%
36	Sao Paulo, Brazil	\$1,015	0.3%	88.6%
37	Provo, USA	\$1,009	0.3%	88.9%
38	Nanjing, China	\$995	0.3%	89.2%
39	Washington, USA	\$886	0.3%	89.5%
40	Munich, Germany	\$837	0.3%	89.8%
41	Sydney, Australia	\$828	0.3%	90.0%
42	Cambridge, UK	\$823	0.3%	90.3%
43	Amsterdam, Netherlands	\$793	0.2%	90.5%
44	Lausanne, Switzerland	\$783	0.2%	90.8%
45	Baltimore, USA	\$767	0.2%	91.0%
46	Durham, USA	\$759	0.2%	91.2%
47	Charlotte, USA	\$758	0.2%	91.5%
48	Dublin, Ireland	\$712	0.2%	91.7%
49	Houston, USA	\$694	0.2%	91.9%
50	Luxembourg, Luxembourg	\$669	0.2%	92.1%

Source: Authors' analysis of PitchBook data. Note: Values are the percentage contribution to global change between the three-year periods 2010-12 and 2015-17.

APPENDIX B: DATA TABLES

FIGURE B7: TOP 50 GLOBAL CITIES FOR ANGEL AND SEED-STAGE DEALS

Rank	Geography	Pre-VC Deals (2015-17)	Pre-VC Share of Geography Total Deals	Change in Rank v Total Deals Rank
	Global	23,984	47%	--
1	San Francisco, USA	1,998	41%	0
2	New York, USA	1,634	50%	0
3	London, UK	1,335	52%	0
4	Los Angeles, USA	1,049	56%	2
5	San Jose, USA	676	35%	-1
6	Boston, USA	669	36%	-1
7	Delhi, India	543	64%	1
8	Seattle, USA	539	58%	-1
9	Bangalore, India	436	55%	1
10	Chicago, USA	372	52%	2
11	Austin, USA	368	52%	2
12	San Diego, USA	347	50%	2
13	Washington, USA	333	50%	3
14	Paris, France	301	37%	-5
15	Mumbai, India	294	57%	4
16	Dallas, USA	281	71%	9
17	Denver, USA	274	58%	4
18	Tel Aviv, Israel	262	39%	-3
19	Philadelphia, USA	249	46%	-1
20	Miami, USA	243	69%	8
21	Singapore, Singapore	230	50%	3
22	Toronto, Canada	224	46%	-2
23	Berlin, Germany	217	34%	-6
24	Stockholm, Sweden	193	42%	-1
25	Phoenix, USA	191	71%	13
26	Houston, USA	190	63%	3
27	Atlanta, USA	184	47%	-1
28	Vancouver, Canada	164	58%	7
29	Minneapolis, USA	162	58%	7
30	Moscow, Russia	161	55%	1

Rank	Geography	Pre-VC Deals (2015-17)	Pre-VC Share of Geography Total Deals	Change in Rank v Total Deals Rank
	Global	23,984	47%	--
31	Sydney, Australia	159	55%	1
32	Boulder, USA	156	55%	2
33	Helsinki, Finland	136	45%	-3
33	Portland (OR), USA	136	52%	6
35	Barcelona, Spain	128	45%	-2
36	Pittsburgh, USA	124	54%	6
37	Dublin, Ireland	122	45%	0
38	Baltimore, USA	120	52%	4
39	Copenhagen, Denmark	112	48%	2
40	Beijing, China	106	14%	-29
41	Raleigh, USA	100	60%	9
42	Amsterdam, Netherlands	96	45%	3
42	Nashville, USA	96	48%	4
42	Salt Lake City, USA	96	54%	7
45	Indianapolis, USA	90	60%	11
45	Melbourne, Australia	90	60%	11
47	Columbus, USA	86	60%	14
47	Las Vegas, USA	86	79%	26
49	Jakarta, Indonesia	82	51%	3
50	Munich, Germany	79	37%	-6

Source: Authors' analysis of PitchBook data. **Note:** Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX B: DATA TABLES

FIGURE B8: MEGA DEALS BY GLOBAL CITY

Rank	Geography	Deals	Share of Global Total	Cumulative Share of Global Total
	Global	80	100%	--
1	Beijing, China	19	24%	24%
2	San Francisco, USA	18	23%	46%
3	Shanghai, China	11	14%	60%
4	Delhi, India	4	5%	65%
5	Bangalore, India	3	4%	69%
6	Hangzhou, China	3	4%	73%
7	New York, USA	3	4%	76%
8	Berlin, Germany	2	3%	79%
9	Jakarta, Indonesia	2	3%	81%
10	Singapore, Singapore	2	3%	84%
11	Tianjin, China	2	3%	86%
12	Boston, USA	1	1%	88%
13	Chicago, USA	1	1%	89%
14	Dubai, UAE	1	1%	90%
15	London, UK	1	1%	91%
16	Los Angeles, USA	1	1%	93%
17	Miami, USA	1	1%	94%
18	San Jose, USA	1	1%	95%
19	Seoul, South Korea	1	1%	96%
20	Shenzhen, China	1	1%	98%
21	Stockholm, Sweden	1	1%	99%

Source: Authors' analysis of PitchBook data. Note: Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX B: DATA TABLES

FIGURE B9: MEGA DEAL INVESTMENTS BY GLOBAL CITY

Rank	Geography	Mega Deal Capital Invested (\$M) (2015-17)	Share of Global Total	Cumulative Share of Global Total
	Global	\$109,585	100%	--
1	Beijing, China	\$46,592	43%	43%
2	San Francisco, USA	\$20,083	18%	61%
3	Shanghai, China	\$9,318	9%	69%
4	Hangzhou, China	\$7,000	6%	76%
5	Bangalore, India	\$5,200	5%	80%
6	New York, USA	\$4,240	4%	84%
7	Delhi, India	\$3,155	3%	87%
8	Los Angeles, USA	\$1,809	2%	89%
9	Jakarta, Indonesia	\$1,650	2%	90%
10	Singapore, Singapore	\$1,300	1%	92%
11	Tianjin, China	\$1,118	1%	93%
12	Berlin, Germany	\$1,063	1%	94%
13	Seoul, South Korea	\$1,000	1%	94%
14	San Jose, USA	\$880	1%	95%
15	Shenzhen, China	\$800	1%	96%
16	Miami, USA	\$794	1%	97%
17	Boston, USA	\$615	1%	97%
18	Stockholm, Sweden	\$526	0%	98%
19	Chicago, USA	\$510	0%	98%
20	London, UK	\$506	0%	99%
21	Dubai, UAE	\$500	0%	99%

Source: Authors' analysis of PitchBook data. **Note:** Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX B: DATA TABLES

FIGURE B10: TOP 50 GLOBAL CITIES FOR VENTURE CAPITAL DEALS PER CAPITA

Rank	Geography	Deals (2015-17)	Deals per 1M residents	Share of Global Deals
	Global	50,704	6.8	100%
1	San Francisco, USA	4,900	1,046	9.7%
2	San Jose, USA	1,931	974	3.8%
3	Boulder, USA	284	879	0.6%
4	Boston, USA	1,870	390	3.7%
5	Austin, USA	714	347	1.4%
6	Durham, USA	160	286	0.3%
7	Cambridge, UK	181	278	0.4%
8	Ann Arbor, USA	92	253	0.2%
9	Seattle, USA	927	244	1.8%
10	Charlottesville, USA	54	235	0.1%
11	Oxford, UK	157	231	0.3%
12	Santa Barbara, USA	102	228	0.2%
13	Provo, USA	136	226	0.3%
14	Madison, USA	146	225	0.3%
15	San Diego, USA	699	210	1.4%
16	Bozeman, USA	22	210	0.0%
17	Stockholm, Sweden	460	206	0.9%
18	Oulu, Finland	48	195	0.1%
19	Helsinki, Finland	299	184	0.6%
20	London, UK	2,557	182	5.0%
21	Galway, Ireland	21	176	0.0%
22	Santa Cruz, USA	48	175	0.1%
23	Tel Aviv, Israel	665	173	1.3%
24	Denver, USA	475	166	0.9%
25	Bend, USA	30	166	0.1%
26	New York, USA	3,287	163	6.5%
27	Burlington (VT), USA	35	161	0.1%
28	Salt Lake City, USA	178	150	0.4%
29	Edinburgh, UK	129	148	0.3%
30	Dublin, Ireland	274	146	0.5%
31	Reykjavik, Iceland	31	145	0.1%

Rank	Geography	Deals (2015-17)	Deals per 1M residents	Share of Global Deals
	Global	50,704	6.8	100%
32	Ithaca, USA	15	143	0.0%
33	Los Angeles, USA	1,864	140	3.7%
34	Waterloo, Canada	73	139	0.1%
35	Missoula, USA	15	129	0.0%
36	Halifax, Canada	52	129	0.1%
37	Raleigh, USA	166	127	0.3%
38	Bridgeport, USA	116	123	0.2%
39	Berlin, Germany	629	122	1.2%
40	Umea, Sweden	15	122	0.0%
41	Copenhagen, Denmark	235	118	0.5%
42	Gainesville, USA	33	117	0.1%
43	Urbana-Champaign, USA	28	117	0.1%
44	Vancouver, Canada	282	114	0.6%
45	Trenton, USA	42	113	0.1%
46	Portland (OR), USA	262	108	0.5%
47	Washington, USA	660	108	1.3%
48	Nashville, USA	200	107	0.4%
49	Iowa City, USA	18	107	0.0%
50	Fort Collins, USA	35	103	0.1%

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology). Note: Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX B: DATA TABLES

FIGURE B11: TOP 50 GLOBAL CITIES FOR VENTURE CAPITAL DOLLARS PER CAPITA

Rank	Geography	Capital Invested (\$M) (2015-17)	Capital Invested (\$M) per 1M Residents	Share of Global Capital Invested
	Global	\$512,097	\$6.8	100%
1	San Francisco, USA	\$81,808	\$17,458	16.0%
2	San Jose, USA	\$24,857	\$12,535	4.9%
3	Boston, USA	\$24,567	\$5,120	4.8%
4	Boulder, USA	\$1,187	\$3,676	0.2%
5	Beijing, China	\$72,819	\$3,341	14.2%
6	Oxford, UK	\$1,806	\$2,656	0.4%
7	Durham, USA	\$1,353	\$2,415	0.3%
8	Provo, USA	\$1,352	\$2,246	0.3%
9	Santa Barbara, USA	\$958	\$2,144	0.2%
10	Cambridge, UK	\$1,371	\$2,110	0.3%
11	San Diego, USA	\$6,030	\$1,816	1.2%
12	Austin, USA	\$3,635	\$1,766	0.7%
13	New York, USA	\$33,763	\$1,674	6.6%
14	Ann Arbor, USA	\$566	\$1,555	0.1%
15	Oulu, Finland	\$371	\$1,508	0.1%
16	Seattle, USA	\$5,710	\$1,503	1.1%
17	Santa Cruz, USA	\$393	\$1,428	0.1%
18	Berlin, Germany	\$7,291	\$1,418	1.4%
19	Tel Aviv, Israel	\$5,280	\$1,370	1.0%
20	Lausanne, Switzerland	\$1,035	\$1,337	0.2%
21	Los Angeles, USA	\$17,391	\$1,305	3.4%
22	Luxembourg, Luxembourg	\$738	\$1,281	0.1%
23	Galway, Ireland	\$152	\$1,277	0.0%
24	Hangzhou, China	\$11,390	\$1,253	2.2%
25	Stockholm, Sweden	\$2,641	\$1,183	0.5%
26	Waterloo, Canada	\$605	\$1,155	0.1%
27	London, UK	\$15,650	\$1,115	3.1%
28	Salt Lake City, USA	\$1,242	\$1,047	0.2%
29	Bangalore, India	\$10,568	\$1,022	2.1%

Rank	Geography	Capital Invested (\$M) (2015-17)	Capital Invested (\$M) per 1M Residents	Share of Global Capital Invested
	Global	\$512,097	\$6.8	100%
30	Shanghai, China	\$23,839	\$980	4.7%
31	Trenton, USA	\$343	\$925	0.1%
32	Denver, USA	\$2,581	\$904	0.5%
33	Bozeman, USA	\$94	\$895	0.0%
34	Singapore, Singapore	\$4,720	\$845	0.9%
35	Charlottesville, USA	\$190	\$827	0.0%
36	Limerick, Ireland	\$152	\$781	0.0%
37	Dublin, Ireland	\$1,388	\$739	0.3%
38	Helsinki, Finland	\$1,163	\$718	0.2%
39	Washington, USA	\$4,359	\$710	0.9%
40	Madison, USA	\$450	\$693	0.1%
41	New Haven, USA	\$591	\$690	0.1%
42	Basel, Switzerland	\$470	\$669	0.1%
43	Reykjavik, Iceland	\$142	\$662	0.0%
44	Portland (ME), USA	\$338	\$639	0.1%
45	Manchester, USA	\$253	\$619	0.0%
46	Dubai, UAE	\$1,745	\$598	0.3%
47	Bridgeport, USA	\$538	\$569	0.1%
48	Iowa City, USA	\$95	\$561	0.0%
49	Chicago, USA	\$5,148	\$541	1.0%
50	Santa Rosa, USA	\$270	\$536	0.1%

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology). **Note:** Values are the levels of activity spanning the three-year period 2015-17.

APPENDIX C: DATA TABULATIONS

FIGURE C1: GLOBAL VENTURE DEALS BY GEOGRAPHY

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Buenos Aires, Argentina	5	59	33	0.0%	0.2%	0.1%	1080%	-44%	0.3%	-0.1%	2.3
Brisbane, Australia	10	20	51	0.1%	0.1%	0.1%	100%	155%	0.1%	0.2%	21.5
Melbourne, Australia	21	65	150	0.1%	0.2%	0.3%	210%	131%	0.3%	0.5%	31.7
Perth, Australia	6	14	17	0.0%	0.0%	0.0%	133%	21%	0.0%	0.0%	8.4
Sydney, Australia	28	106	287	0.2%	0.3%	0.6%	279%	171%	0.4%	1.0%	56.9
Vienna, Austria	16	45	87	0.1%	0.1%	0.2%	181%	93%	0.2%	0.2%	31.4
Dhaka, Bangladesh	1	8	15	0.0%	0.0%	0.0%	700%	88%	0.0%	0.0%	0.8
Antwerp, Belgium	5	12	28	0.0%	0.0%	0.1%	140%	133%	0.0%	0.1%	27.0
Brussels, Belgium	24	44	92	0.2%	0.1%	0.2%	83%	109%	0.1%	0.3%	36.7
Charleroi, Belgium	11	13	6	0.1%	0.0%	0.0%	18%	-54%	0.0%	0.0%	13.9
Ghent, Belgium	21	21	34	0.1%	0.1%	0.1%	0%	62%	0.0%	0.1%	53.6
Hasselt, Belgium	8	20	13	0.1%	0.1%	0.0%	150%	-35%	0.1%	0.0%	30.7
Liege, Belgium	2	15	16	0.0%	0.0%	0.0%	650%	7%	0.1%	0.0%	22.8
Belo Horizonte, Brazil	2	15	16	0.0%	0.0%	0.0%	650%	7%	0.1%	0.0%	2.8
Curitiba, Brazil	2	7	15	0.0%	0.0%	0.0%	250%	114%	0.0%	0.0%	4.3
Florianopolis, Brazil	0	6	13	0.0%	0.0%	0.0%	--	117%	0.0%	0.0%	11.0
Rio de Janeiro, Brazil	1	34	29	0.0%	0.1%	0.1%	3300%	-15%	0.2%	0.0%	2.4
Sao Paulo, Brazil	7	108	165	0.0%	0.3%	0.3%	1443%	53%	0.6%	0.3%	7.8
Sofia, Bulgaria	1	7	21	0.0%	0.0%	0.0%	600%	200%	0.0%	0.1%	12.5
Calgary, Canada	18	41	52	0.1%	0.1%	0.1%	128%	27%	0.1%	0.1%	37.3
Edmonton, Canada	8	13	21	0.1%	0.0%	0.0%	63%	62%	0.0%	0.0%	15.9
Fredericton, Canada	5	11	10	0.0%	0.0%	0.0%	120%	-9%	0.0%	0.0%	98.0
Halifax, Canada	10	32	52	0.1%	0.1%	0.1%	220%	63%	0.1%	0.1%	129.0
Montreal, Canada	85	146	192	0.6%	0.4%	0.4%	72%	32%	0.4%	0.3%	46.8
Ottawa, Canada	68	65	73	0.4%	0.2%	0.1%	-4%	12%	0.0%	0.0%	55.1
Quebec City, Canada	9	17	17	0.1%	0.1%	0.0%	89%	0%	0.0%	0.0%	21.3
Toronto, Canada	98	291	482	0.6%	0.9%	1.0%	197%	66%	1.1%	1.1%	81.3
Vancouver, Canada	112	195	282	0.7%	0.6%	0.6%	74%	45%	0.5%	0.5%	114.5
Victoria, Canada	4	21	17	0.0%	0.1%	0.0%	425%	-19%	0.1%	0.0%	46.2
Waterloo, Canada	12	38	73	0.1%	0.1%	0.1%	217%	92%	0.1%	0.2%	139.3
Winnipeg, Canada	2	6	12	0.0%	0.0%	0.0%	200%	100%	0.0%	0.0%	15.4
Santiago, Chile	0	45	27	0.0%	0.1%	0.1%	--	-40%	0.3%	-0.1%	3.7
Beijing, China	175	415	781	1.2%	1.3%	1.5%	137%	88%	1.4%	2.0%	35.8
Chengdu, China	1	11	15	0.0%	0.0%	0.0%	1000%	36%	0.1%	0.0%	1.0
Guangzhou, China	15	31	56	0.1%	0.1%	0.1%	107%	81%	0.1%	0.1%	4.1

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Hangzhou, China	9	38	132	0.1%	0.1%	0.3%	322%	247%	0.2%	0.5%	14.5
Nanjing, China	3	17	45	0.0%	0.1%	0.1%	467%	165%	0.1%	0.2%	5.4
Shanghai, China	92	249	472	0.6%	0.8%	0.9%	171%	90%	0.9%	1.2%	19.4
Shenzhen, China	30	64	145	0.2%	0.2%	0.3%	113%	127%	0.2%	0.4%	12.6
Tianjin, China	4	9	11	0.0%	0.0%	0.0%	125%	22%	0.0%	0.0%	0.7
Bogota, Colombia	0	15	26	0.0%	0.0%	0.1%	--	73%	0.1%	0.1%	2.9
Prague, Czech Republic	3	15	27	0.0%	0.0%	0.1%	400%	80%	0.1%	0.1%	10.4
Arhus, Denmark	8	28	32	0.1%	0.1%	0.1%	250%	14%	0.1%	0.0%	37.0
Copenhagen, Denmark	74	132	235	0.5%	0.4%	0.5%	78%	78%	0.3%	0.6%	117.9
Cairo, Egypt	1	17	21	0.0%	0.1%	0.0%	1600%	24%	0.1%	0.0%	1.4
Tallinn, Estonia	4	19	41	0.0%	0.1%	0.1%	375%	116%	0.1%	0.1%	71.2
Helsinki, Finland	49	130	299	0.3%	0.4%	0.6%	165%	130%	0.5%	0.9%	184.5
Oulu, Finland	13	29	48	0.1%	0.1%	0.1%	123%	66%	0.1%	0.1%	195.1
Tampere, Finland	8	16	35	0.1%	0.0%	0.1%	100%	119%	0.0%	0.1%	69.2
Turku, Finland	8	16	24	0.1%	0.0%	0.0%	100%	50%	0.0%	0.0%	50.6
Bordeaux, France	12	19	39	0.1%	0.1%	0.1%	58%	105%	0.0%	0.1%	24.9
Grenoble, France	15	21	42	0.1%	0.1%	0.1%	40%	100%	0.0%	0.1%	33.3
Lille, France	4	19	52	0.0%	0.1%	0.1%	375%	174%	0.1%	0.2%	19.9
Lyon, France	17	44	48	0.1%	0.1%	0.1%	159%	9%	0.2%	0.0%	26.1
Marseille, France	11	31	38	0.1%	0.1%	0.1%	182%	23%	0.1%	0.0%	12.3
Montpellier, France	13	20	20	0.1%	0.1%	0.0%	54%	0%	0.0%	0.0%	17.6
Mulhouse, France	1	8	6	0.0%	0.0%	0.0%	700%	-25%	0.0%	0.0%	7.9
Nantes, France	7	13	18	0.0%	0.0%	0.0%	86%	38%	0.0%	0.0%	13.1
Nice, France	7	10	22	0.0%	0.0%	0.0%	43%	120%	0.0%	0.1%	20.3
Paris, France	215	542	822	1.4%	1.7%	1.6%	152%	52%	1.9%	1.5%	67.7
Pau, France	42	33	11	0.3%	0.1%	0.0%	-21%	-67%	-0.1%	-0.1%	16.3
Rennes, France	3	11	20	0.0%	0.0%	0.0%	267%	82%	0.0%	0.0%	19.0
Toulouse, France	10	19	39	0.1%	0.1%	0.1%	90%	105%	0.1%	0.1%	28.8
Aachen, Germany	6	10	15	0.0%	0.0%	0.0%	67%	50%	0.0%	0.0%	27.1
Berlin, Germany	66	326	629	0.4%	1.0%	1.2%	394%	93%	1.5%	1.7%	122.3
Bonn, Germany	2	8	8	0.0%	0.0%	0.0%	300%	0%	0.0%	0.0%	8.8
Cologne, Germany	19	53	37	0.1%	0.2%	0.1%	179%	-30%	0.2%	-0.1%	18.8
Dresden, Germany	13	17	20	0.1%	0.1%	0.0%	31%	18%	0.0%	0.0%	14.9
Dusseldorf, Germany	6	22	12	0.0%	0.1%	0.0%	267%	-45%	0.1%	-0.1%	7.8
Frankfurt, Germany	3	23	45	0.0%	0.1%	0.1%	667%	96%	0.1%	0.1%	17.0
Hamburg, Germany	33	82	88	0.2%	0.3%	0.2%	148%	7%	0.3%	0.0%	27.2
Hannover, Germany	6	8	7	0.0%	0.0%	0.0%	33%	-13%	0.0%	0.0%	5.4
Heidelberg, Germany	13	14	12	0.1%	0.0%	0.0%	8%	-14%	0.0%	0.0%	17.2
Karlsruhe, Germany	7	6	12	0.0%	0.0%	0.0%	-14%	100%	0.0%	0.0%	16.2
Leipzig, Germany	7	14	12	0.0%	0.0%	0.0%	100%	-14%	0.0%	0.0%	11.8
Mannheim, Germany	4	7	9	0.0%	0.0%	0.0%	75%	29%	0.0%	0.0%	7.7
Munich, Germany	61	143	215	0.4%	0.4%	0.4%	134%	50%	0.5%	0.4%	75.5

RISE OF THE GLOBAL STARTUP CITY: THE NEW MAP OF ENTREPRENEURSHIP AND VENTURE CAPITAL

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Nuremberg, Germany	10	18	6	0.1%	0.1%	0.0%	80%	-67%	0.0%	-0.1%	4.5
Regensburg, Germany	4	8	6	0.0%	0.0%	0.0%	100%	-25%	0.0%	0.0%	13.2
Ruhrgebiet, Germany	17	16	10	0.1%	0.0%	0.0%	-6%	-38%	0.0%	0.0%	2.0
Stuttgart, Germany	10	23	25	0.1%	0.1%	0.0%	130%	9%	0.1%	0.0%	9.1
Accra, Ghana	0	10	19	0.0%	0.0%	0.0%	--	90%	0.1%	0.0%	8.3
Athens, Greece	3	11	21	0.0%	0.0%	0.0%	267%	91%	0.0%	0.1%	5.6
Hong Kong, Hong Kong	21	57	134	0.1%	0.2%	0.3%	171%	135%	0.2%	0.4%	18.3
Budapest, Hungary	1	30	43	0.0%	0.1%	0.1%	2900%	43%	0.2%	0.1%	14.4
Reykjavik, Iceland	2	16	31	0.0%	0.0%	0.1%	700%	94%	0.1%	0.1%	144.9
Ahmedabad, India	1	7	49	0.0%	0.0%	0.1%	600%	600%	0.0%	0.2%	6.5
Bangalore, India	70	195	792	0.5%	0.6%	1.6%	179%	306%	0.7%	3.3%	76.6
Calcutta, India	1	8	31	0.0%	0.0%	0.1%	700%	288%	0.0%	0.1%	2.1
Chennai, India	17	42	101	0.1%	0.1%	0.2%	147%	140%	0.1%	0.3%	10.1
Delhi, India	28	168	851	0.2%	0.5%	1.7%	500%	407%	0.8%	3.8%	44.7
Hyderabad, India	11	40	104	0.1%	0.1%	0.2%	264%	160%	0.2%	0.4%	11.5
Mumbai, India	57	133	516	0.4%	0.4%	1.0%	133%	288%	0.4%	2.1%	25.9
Pune, India	7	26	91	0.0%	0.1%	0.2%	271%	250%	0.1%	0.4%	15.6
Jakarta, Indonesia	0	24	161	0.0%	0.1%	0.3%	--	571%	0.1%	0.8%	5.1
Cork, Ireland	16	51	38	0.1%	0.2%	0.1%	219%	-25%	0.2%	-0.1%	55.5
Dublin, Ireland	60	172	274	0.4%	0.5%	0.5%	187%	59%	0.6%	0.6%	145.8
Galway, Ireland	7	25	21	0.0%	0.1%	0.0%	257%	-16%	0.1%	0.0%	176.5
Limerick, Ireland	7	10	13	0.0%	0.0%	0.0%	43%	30%	0.0%	0.0%	66.7
Haifa, Israel	32	50	54	0.2%	0.2%	0.1%	56%	8%	0.1%	0.0%	58.4
Jerusalem, Israel	10	34	45	0.1%	0.1%	0.1%	240%	32%	0.1%	0.1%	35.9
Tel Aviv, Israel	225	380	665	1.5%	1.2%	1.3%	69%	75%	0.9%	1.6%	172.5
Bologna, Italy	2	11	12	0.0%	0.0%	0.0%	450%	9%	0.1%	0.0%	11.9
Cagliari, Italy	0	12	8	0.0%	0.0%	0.0%	--	-33%	0.1%	0.0%	14.2
Milan, Italy	7	41	127	0.0%	0.1%	0.3%	486%	210%	0.2%	0.5%	29.5
Rome, Italy	3	21	55	0.0%	0.1%	0.1%	600%	162%	0.1%	0.2%	12.7
Turin, Italy	1	12	14	0.0%	0.0%	0.0%	1100%	17%	0.1%	0.0%	6.1
Tokyo, Japan	44	174	381	0.3%	0.5%	0.8%	295%	119%	0.7%	1.1%	10.1
Amman, Jordan	1	28	12	0.0%	0.1%	0.0%	2700%	-57%	0.2%	-0.1%	10.4
Nairobi, Kenya	2	21	55	0.0%	0.1%	0.1%	950%	162%	0.1%	0.2%	14.0
Riga, Latvia	6	16	40	0.0%	0.0%	0.1%	167%	150%	0.1%	0.1%	62.6
Beirut, Lebanon	1	11	27	0.0%	0.0%	0.1%	1000%	145%	0.1%	0.1%	12.1
Vilnius, Lithuania	5	18	24	0.0%	0.1%	0.0%	260%	33%	0.1%	0.0%	29.8
Luxembourg, Luxembourg	7	18	29	0.0%	0.1%	0.1%	157%	61%	0.1%	0.1%	50.3
Kuala Lumpur, Malaysia	8	28	103	0.1%	0.1%	0.2%	250%	268%	0.1%	0.4%	14.5
Mexico City, Mexico	0	29	92	0.0%	0.1%	0.2%	--	217%	0.2%	0.3%	4.3
Monterrey, Mexico	0	17	17	0.0%	0.1%	0.0%	--	0%	0.1%	0.0%	3.8
Amsterdam, Netherlands	32	101	212	0.2%	0.3%	0.4%	216%	110%	0.4%	0.6%	78.4
Arnhem-Nijmegen, Netherlands	3	12	20	0.0%	0.0%	0.0%	300%	67%	0.1%	0.0%	27.5

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Eindhoven, Netherlands	7	20	40	0.0%	0.1%	0.1%	186%	100%	0.1%	0.1%	52.8
Enschede, Netherlands	2	11	23	0.0%	0.0%	0.0%	450%	109%	0.1%	0.1%	36.7
Rotterdam, Netherlands	4	12	29	0.0%	0.0%	0.1%	200%	142%	0.0%	0.1%	20.2
The Hague, Netherlands	7	18	45	0.0%	0.1%	0.1%	157%	150%	0.1%	0.1%	53.2
Utrecht, Netherlands	11	20	46	0.1%	0.1%	0.1%	82%	130%	0.1%	0.1%	36.1
Auckland, New Zealand	10	44	63	0.1%	0.1%	0.1%	340%	43%	0.2%	0.1%	40.1
Wellington, New Zealand	2	17	26	0.0%	0.1%	0.1%	750%	53%	0.1%	0.0%	63.0
Lagos, Nigeria	1	13	39	0.0%	0.0%	0.1%	1200%	200%	0.1%	0.1%	2.9
Bergen, Norway	5	10	18	0.0%	0.0%	0.0%	100%	80%	0.0%	0.0%	18.2
Oslo, Norway	32	66	97	0.2%	0.2%	0.2%	106%	47%	0.2%	0.2%	77.4
Rogaland, Norway	7	14	17	0.0%	0.0%	0.0%	100%	21%	0.0%	0.0%	36.2
South Trondelag, Norway	14	18	17	0.1%	0.1%	0.0%	29%	-6%	0.0%	0.0%	54.1
Lima, Peru	0	10	10	0.0%	0.0%	0.0%	--	0%	0.1%	0.0%	0.9
Manila, Philippines	3	14	43	0.0%	0.0%	0.1%	367%	207%	0.1%	0.2%	3.3
Krakow, Poland	3	12	28	0.0%	0.0%	0.1%	300%	133%	0.1%	0.1%	19.1
Poznan, Poland	1	12	13	0.0%	0.0%	0.0%	1100%	8%	0.1%	0.0%	11.1
Warsaw, Poland	13	43	85	0.1%	0.1%	0.2%	231%	98%	0.2%	0.2%	25.4
Wroclaw, Poland	2	9	10	0.0%	0.0%	0.0%	350%	11%	0.0%	0.0%	15.8
Lisbon, Portugal	8	11	29	0.1%	0.0%	0.1%	38%	164%	0.0%	0.1%	10.3
Porto, Portugal	3	9	22	0.0%	0.0%	0.0%	200%	144%	0.0%	0.1%	12.8
Moscow, Russia	14	255	294	0.1%	0.8%	0.6%	1721%	15%	1.4%	0.2%	23.9
Saint Petersburg, Russia	3	28	33	0.0%	0.1%	0.1%	833%	18%	0.1%	0.0%	6.3
Singapore, Singapore	41	174	458	0.3%	0.5%	0.9%	324%	163%	0.8%	1.6%	82.0
Bratislava, Slovakia	2	8	19	0.0%	0.0%	0.0%	300%	138%	0.0%	0.1%	30.0
Cape Town, South Africa	10	31	72	0.1%	0.1%	0.1%	210%	132%	0.1%	0.2%	17.8
Johannesburg, South Africa	2	9	26	0.0%	0.0%	0.1%	350%	189%	0.0%	0.1%	5.3
Seoul, South Korea	32	125	244	0.2%	0.4%	0.5%	291%	95%	0.5%	0.7%	9.7
Barcelona, Spain	49	146	286	0.3%	0.4%	0.6%	198%	96%	0.6%	0.8%	52.6
Bilbao, Spain	11	25	18	0.1%	0.1%	0.0%	127%	-28%	0.1%	0.0%	15.9
Madrid, Spain	30	134	145	0.2%	0.4%	0.3%	347%	8%	0.6%	0.1%	22.6
Palma de Mallorca, Spain	0	8	7	0.0%	0.0%	0.0%	--	-13%	0.0%	0.0%	7.9
Pamplona, Spain	10	16	7	0.1%	0.0%	0.0%	60%	-56%	0.0%	0.0%	11.0
Valencia, Spain	5	20	29	0.0%	0.1%	0.1%	300%	45%	0.1%	0.0%	11.5
Gavleborgs, Sweden	1	8	14	0.0%	0.0%	0.0%	700%	75%	0.0%	0.0%	49.6
Gothenberg, Sweden	18	51	87	0.1%	0.2%	0.2%	183%	71%	0.2%	0.2%	52.8
Malmo, Sweden	27	58	96	0.2%	0.2%	0.2%	115%	66%	0.2%	0.2%	73.6
Norrbottnens, Sweden	2	6	8	0.0%	0.0%	0.0%	200%	33%	0.0%	0.0%	32.0
Ostergotland, Sweden	6	19	27	0.0%	0.1%	0.1%	217%	42%	0.1%	0.0%	60.4
Stockholm, Sweden	81	163	460	0.5%	0.5%	0.9%	101%	182%	0.5%	1.6%	206.1
Umea, Sweden	10	9	15	0.1%	0.0%	0.0%	-10%	67%	0.0%	0.0%	122.0
Uppsala, Sweden	14	21	15	0.1%	0.1%	0.0%	50%	-29%	0.0%	0.0%	42.4
Basel, Switzerland	6	9	27	0.0%	0.0%	0.1%	50%	200%	0.0%	0.1%	38.5

RISE OF THE GLOBAL STARTUP CITY: THE NEW MAP OF ENTREPRENEURSHIP AND VENTURE CAPITAL

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Geneva, Switzerland	21	22	25	0.1%	0.1%	0.0%	5%	14%	0.0%	0.0%	51.5
Lausanne, Switzerland	17	45	77	0.1%	0.1%	0.2%	165%	71%	0.2%	0.2%	99.5
Zurich, Switzerland	26	68	120	0.2%	0.2%	0.2%	162%	76%	0.2%	0.3%	81.8
Taipei, Taiwan	12	24	47	0.1%	0.1%	0.1%	100%	96%	0.1%	0.1%	6.6
Bangkok, Thailand	0	9	65	0.0%	0.0%	0.1%	--	622%	0.1%	0.3%	4.0
Istanbul, Turkey	5	63	75	0.0%	0.2%	0.1%	1160%	19%	0.3%	0.1%	5.1
Dubai, UAE	3	23	86	0.0%	0.1%	0.2%	667%	274%	0.1%	0.3%	29.5
Aberdeen, UK	8	19	13	0.1%	0.1%	0.0%	138%	-32%	0.1%	0.0%	26.3
Belfast, UK	11	27	56	0.1%	0.1%	0.1%	145%	107%	0.1%	0.2%	81.6
Birmingham, UK	12	29	40	0.1%	0.1%	0.1%	142%	38%	0.1%	0.1%	16.0
Brighton, UK	2	12	26	0.0%	0.0%	0.1%	500%	117%	0.1%	0.1%	90.9
Bristol, UK	29	37	71	0.2%	0.1%	0.1%	28%	92%	0.0%	0.2%	63.2
Cambridge, UK	73	127	181	0.5%	0.4%	0.4%	74%	43%	0.3%	0.3%	278.5
Cardiff, UK	9	42	51	0.1%	0.1%	0.1%	367%	21%	0.2%	0.0%	45.3
Central Hampshire, UK	17	33	21	0.1%	0.1%	0.0%	94%	-36%	0.1%	-0.1%	38.9
Cheshire East, UK	2	18	21	0.0%	0.1%	0.0%	800%	17%	0.1%	0.0%	55.9
Coventry, UK	8	40	42	0.1%	0.1%	0.1%	400%	5%	0.2%	0.0%	46.5
Doncaster, UK	5	12	7	0.0%	0.0%	0.0%	140%	-42%	0.0%	0.0%	8.7
East Kent, UK	4	6	15	0.0%	0.0%	0.0%	50%	150%	0.0%	0.0%	28.6
Edinburgh, UK	31	136	129	0.2%	0.4%	0.3%	339%	-5%	0.6%	0.0%	148.1
Exeter, UK	1	6	13	0.0%	0.0%	0.0%	500%	117%	0.0%	0.0%	16.8
Glasgow, UK	21	59	71	0.1%	0.2%	0.1%	181%	20%	0.2%	0.1%	38.8
Gloucestershire, UK	7	14	15	0.0%	0.0%	0.0%	100%	7%	0.0%	0.0%	24.2
Ipswich, UK	6	16	12	0.0%	0.0%	0.0%	167%	-25%	0.1%	0.0%	16.1
Leeds, UK	6	24	32	0.0%	0.1%	0.1%	300%	33%	0.1%	0.0%	28.8
Leicester, UK	8	20	18	0.1%	0.1%	0.0%	150%	-10%	0.1%	0.0%	12.8
Liverpool, UK	29	44	42	0.2%	0.1%	0.1%	52%	-5%	0.1%	0.0%	27.5
London, UK	348	1,061	2,557	2.3%	3.3%	5.0%	205%	141%	4.1%	8.2%	182.1
Manchester, UK	30	70	87	0.2%	0.2%	0.2%	133%	24%	0.2%	0.1%	26.6
Newcastle, UK	18	84	67	0.1%	0.3%	0.1%	367%	-20%	0.4%	-0.1%	57.6
North Hampshire, UK	5	20	28	0.0%	0.1%	0.1%	300%	40%	0.1%	0.0%	76.7
Nottingham, UK	9	15	8	0.1%	0.0%	0.0%	67%	-47%	0.0%	0.0%	25.1
Oxford, UK	64	95	157	0.4%	0.3%	0.3%	48%	65%	0.2%	0.3%	230.9
Sheffield, UK	15	28	19	0.1%	0.1%	0.0%	87%	-32%	0.1%	0.0%	33.2
Stoke-on-Trent, UK	3	17	11	0.0%	0.1%	0.0%	467%	-35%	0.1%	0.0%	9.8
Sunderland, UK	0	8	8	0.0%	0.0%	0.0%	--	0%	0.0%	0.0%	28.8
Swansea, UK	6	17	14	0.0%	0.1%	0.0%	183%	-18%	0.1%	0.0%	26.6
West Sussex (North East), UK	8	7	15	0.1%	0.0%	0.0%	-13%	114%	0.0%	0.0%	38.1
Wiltshire, UK	9	10	13	0.1%	0.0%	0.0%	11%	30%	0.0%	0.0%	26.6
Akron, USA	7	21	23	0.0%	0.1%	0.0%	200%	10%	0.1%	0.0%	32.7
Albany (NY), USA	14	17	25	0.1%	0.1%	0.0%	21%	47%	0.0%	0.0%	28.3
Albuquerque, USA	24	42	49	0.2%	0.1%	0.1%	75%	17%	0.1%	0.0%	53.7

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Allentown, USA	22	25	15	0.1%	0.1%	0.0%	14%	-40%	0.0%	-0.1%	17.9
Ann Arbor, USA	32	72	92	0.2%	0.2%	0.2%	125%	28%	0.2%	0.1%	252.7
Atlanta, USA	191	341	393	1.3%	1.0%	0.8%	79%	15%	0.9%	0.3%	67.8
Austin, USA	246	477	714	1.6%	1.5%	1.4%	94%	50%	1.3%	1.3%	346.9
Baltimore, USA	81	157	229	0.5%	0.5%	0.5%	94%	46%	0.4%	0.4%	81.8
Bend, USA	0	14	30	0.0%	0.0%	0.1%	--	114%	0.1%	0.1%	165.7
Birmingham, USA	12	26	37	0.1%	0.1%	0.1%	117%	42%	0.1%	0.1%	32.3
Boise, USA	17	26	38	0.1%	0.1%	0.1%	53%	46%	0.1%	0.1%	55.1
Boston, USA	1,069	1,530	1,870	7.1%	4.7%	3.7%	43%	22%	2.6%	1.9%	389.7
Boulder, USA	105	213	284	0.7%	0.7%	0.6%	103%	33%	0.6%	0.4%	879.3
Bozeman, USA	3	7	22	0.0%	0.0%	0.0%	133%	214%	0.0%	0.1%	209.5
Bridgeport, USA	47	110	116	0.3%	0.3%	0.2%	134%	5%	0.4%	0.0%	122.8
Buffalo, USA	17	22	38	0.1%	0.1%	0.1%	29%	73%	0.0%	0.1%	33.5
Burlington (VT), USA	10	25	35	0.1%	0.1%	0.1%	150%	40%	0.1%	0.1%	161.3
Charleston (SC), USA	4	26	51	0.0%	0.1%	0.1%	550%	96%	0.1%	0.1%	67.0
Charlotte, USA	22	45	91	0.1%	0.1%	0.2%	105%	102%	0.1%	0.3%	36.8
Charlottesville, USA	15	28	54	0.1%	0.1%	0.1%	87%	93%	0.1%	0.1%	234.8
Chattanooga, USA	2	17	32	0.0%	0.1%	0.1%	750%	88%	0.1%	0.1%	58.1
Chicago, USA	176	491	721	1.2%	1.5%	1.4%	179%	47%	1.8%	1.3%	75.7
Cincinnati, USA	30	87	131	0.2%	0.3%	0.3%	190%	51%	0.3%	0.2%	60.6
Claremont-Lebanon (NH), USA	5	14	13	0.0%	0.0%	0.0%	180%	-7%	0.1%	0.0%	60.2
Cleveland, USA	62	118	118	0.4%	0.4%	0.2%	90%	0%	0.3%	0.0%	57.4
Colorado Springs, USA	7	18	19	0.0%	0.1%	0.0%	157%	6%	0.1%	0.0%	26.7
Columbia (SC), USA	12	7	15	0.1%	0.0%	0.0%	-42%	114%	0.0%	0.0%	18.4
Columbus, USA	42	94	143	0.3%	0.3%	0.3%	124%	52%	0.3%	0.3%	70.0
Dallas, USA	182	276	394	1.2%	0.8%	0.8%	52%	43%	0.5%	0.6%	54.4
Dayton, USA	4	13	19	0.0%	0.0%	0.0%	225%	46%	0.1%	0.0%	23.7
Denver, USA	163	300	475	1.1%	0.9%	0.9%	84%	58%	0.8%	1.0%	166.3
Des Moines, USA	1	11	34	0.0%	0.0%	0.1%	1000%	209%	0.1%	0.1%	53.5
Detroit, USA	34	89	126	0.2%	0.3%	0.2%	162%	42%	0.3%	0.2%	29.3
Durham, USA	69	95	160	0.5%	0.3%	0.3%	38%	68%	0.1%	0.4%	285.7
Fayetteville, USA	4	22	41	0.0%	0.1%	0.1%	450%	86%	0.1%	0.1%	77.8
Fort Collins, USA	9	23	35	0.1%	0.1%	0.1%	156%	52%	0.1%	0.1%	102.6
Gainesville, USA	11	24	33	0.1%	0.1%	0.1%	118%	38%	0.1%	0.0%	117.0
Grand Rapids, USA	4	23	33	0.0%	0.1%	0.1%	475%	43%	0.1%	0.1%	31.5
Greenville (SC), USA	11	26	30	0.1%	0.1%	0.1%	136%	15%	0.1%	0.0%	33.9
Hartford, USA	17	43	65	0.1%	0.1%	0.1%	153%	51%	0.1%	0.1%	53.9
Honolulu, USA	38	49	27	0.3%	0.2%	0.1%	29%	-45%	0.1%	-0.1%	27.1
Houston, USA	92	170	300	0.6%	0.5%	0.6%	85%	76%	0.4%	0.7%	44.2
Huntsville, USA	8	24	18	0.1%	0.1%	0.0%	200%	-25%	0.1%	0.0%	40.0
Indianapolis, USA	40	99	150	0.3%	0.3%	0.3%	148%	52%	0.3%	0.3%	74.9
Iowa City, USA	2	8	18	0.0%	0.0%	0.0%	300%	125%	0.0%	0.1%	106.5

RISE OF THE GLOBAL STARTUP CITY: THE NEW MAP OF ENTREPRENEURSHIP AND VENTURE CAPITAL

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Ithaca, USA	10	15	15	0.1%	0.0%	0.0%	50%	0%	0.0%	0.0%	142.9
Jacksonville, USA	14	22	36	0.1%	0.1%	0.1%	57%	64%	0.0%	0.1%	24.3
Kalamazoo, USA	5	16	12	0.0%	0.0%	0.0%	220%	-25%	0.1%	0.0%	35.6
Kansas City, USA	28	92	108	0.2%	0.3%	0.2%	229%	17%	0.4%	0.1%	51.3
Knoxville, USA	3	24	23	0.0%	0.1%	0.0%	700%	-4%	0.1%	0.0%	26.5
Lansing, USA	3	8	6	0.0%	0.0%	0.0%	167%	-25%	0.0%	0.0%	12.6
Las Vegas, USA	19	67	109	0.1%	0.2%	0.2%	253%	63%	0.3%	0.2%	50.5
Lexington (KY), USA	1	22	34	0.0%	0.1%	0.1%	2100%	55%	0.1%	0.1%	67.1
Lincoln, USA	2	12	29	0.0%	0.0%	0.1%	500%	142%	0.1%	0.1%	88.7
Little Rock, USA	3	11	25	0.0%	0.0%	0.0%	267%	127%	0.0%	0.1%	34.1
Los Angeles, USA	584	1,216	1,864	3.9%	3.7%	3.7%	108%	53%	3.6%	3.6%	139.9
Louisville, USA	26	53	58	0.2%	0.2%	0.1%	104%	9%	0.2%	0.0%	45.1
Madison, USA	42	116	146	0.3%	0.4%	0.3%	176%	26%	0.4%	0.2%	225.0
Manchester, USA	17	28	37	0.1%	0.1%	0.1%	65%	32%	0.1%	0.0%	90.7
Memphis, USA	14	36	63	0.1%	0.1%	0.1%	157%	75%	0.1%	0.1%	46.8
Miami, USA	76	215	354	0.5%	0.7%	0.7%	183%	65%	0.8%	0.8%	58.3
Milwaukee, USA	20	48	57	0.1%	0.1%	0.1%	140%	19%	0.2%	0.0%	36.2
Minneapolis, USA	140	248	279	0.9%	0.8%	0.6%	77%	13%	0.6%	0.2%	78.5
Missoula, USA	1	12	15	0.0%	0.0%	0.0%	1100%	25%	0.1%	0.0%	129.3
Nashville, USA	35	180	200	0.2%	0.6%	0.4%	414%	11%	0.8%	0.1%	107.2
New Haven, USA	30	74	69	0.2%	0.2%	0.1%	147%	-7%	0.3%	0.0%	80.5
New Orleans, USA	4	34	47	0.0%	0.1%	0.1%	750%	38%	0.2%	0.1%	37.0
New York, USA	708	2,115	3,287	4.7%	6.5%	6.5%	199%	55%	8.1%	6.4%	162.9
Ogden, USA	4	15	13	0.0%	0.0%	0.0%	275%	-13%	0.1%	0.0%	19.8
Oklahoma City, USA	15	21	37	0.1%	0.1%	0.1%	40%	76%	0.0%	0.1%	26.9
Omaha, USA	12	26	36	0.1%	0.1%	0.1%	117%	38%	0.1%	0.1%	38.9
Orlando, USA	29	68	110	0.2%	0.2%	0.2%	134%	62%	0.2%	0.2%	45.0
Oxnard-Ventura, USA	18	40	57	0.1%	0.1%	0.1%	122%	43%	0.1%	0.1%	67.0
Palm Bay, USA	3	10	19	0.0%	0.0%	0.0%	233%	90%	0.0%	0.0%	32.8
Philadelphia, USA	197	412	538	1.3%	1.3%	1.1%	109%	31%	1.2%	0.7%	88.6
Phoenix, USA	94	153	268	0.6%	0.5%	0.5%	63%	75%	0.3%	0.6%	57.5
Pittsburgh, USA	98	185	229	0.6%	0.6%	0.5%	89%	24%	0.5%	0.2%	97.7
Portland (ME), USA	20	35	42	0.1%	0.1%	0.1%	75%	20%	0.1%	0.0%	79.2
Portland (OR), USA	95	172	262	0.6%	0.5%	0.5%	81%	52%	0.4%	0.5%	108.0
Providence, USA	37	83	72	0.2%	0.3%	0.1%	124%	-13%	0.3%	-0.1%	44.6
Provo, USA	28	75	136	0.2%	0.2%	0.3%	168%	81%	0.3%	0.3%	225.9
Raleigh, USA	87	113	166	0.6%	0.3%	0.3%	30%	47%	0.1%	0.3%	127.3
Reno, USA	6	24	30	0.0%	0.1%	0.1%	300%	25%	0.1%	0.0%	65.5
Richmond, USA	8	34	46	0.1%	0.1%	0.1%	325%	35%	0.1%	0.1%	35.9
Riverside, USA	9	22	21	0.1%	0.1%	0.0%	144%	-5%	0.1%	0.0%	4.6
Rochester, USA	33	41	55	0.2%	0.1%	0.1%	24%	34%	0.0%	0.1%	51.0
Sacramento, USA	24	60	88	0.2%	0.2%	0.2%	150%	47%	0.2%	0.2%	38.3

Geography	Deals			Share of Deals			Percent Change		Contribution to Global Change in Deals		Deals per 1M residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	15,124	32,531	50,704	100%	100%	100%	115%	56%	100%	100%	6.8
Salisbury (MD), USA	2	7	13	0.0%	0.0%	0.0%	250%	86%	0.0%	0.0%	32.5
Salt Lake City, USA	102	147	178	0.7%	0.5%	0.4%	44%	21%	0.3%	0.2%	150.1
San Antonio, USA	16	53	63	0.1%	0.2%	0.1%	231%	19%	0.2%	0.1%	25.9
San Diego, USA	364	498	699	2.4%	1.5%	1.4%	37%	40%	0.8%	1.1%	210.5
San Francisco, USA	1,689	3,389	4,900	11.2%	10.4%	9.7%	101%	45%	9.8%	8.3%	1045.7
San Jose, USA	1,447	1,724	1,931	9.6%	5.3%	3.8%	19%	12%	1.6%	1.1%	973.8
San Luis Obispo, USA	4	10	14	0.0%	0.0%	0.0%	150%	40%	0.0%	0.0%	49.5
Santa Barbara, USA	52	73	102	0.3%	0.2%	0.2%	40%	40%	0.1%	0.2%	228.2
Santa Cruz, USA	11	20	48	0.1%	0.1%	0.1%	82%	140%	0.1%	0.2%	174.5
Santa Fe, USA	4	8	14	0.0%	0.0%	0.0%	100%	75%	0.0%	0.0%	94.0
Santa Rosa, USA	33	46	50	0.2%	0.1%	0.1%	39%	9%	0.1%	0.0%	99.4
Sarasota, USA	5	12	26	0.0%	0.0%	0.1%	140%	117%	0.0%	0.1%	33.0
Seattle, USA	394	648	927	2.6%	2.0%	1.8%	64%	43%	1.5%	1.5%	244.0
Spokane, USA	14	11	18	0.1%	0.0%	0.0%	-21%	64%	0.0%	0.0%	32.4
Springfield (MA), USA	2	13	14	0.0%	0.0%	0.0%	550%	8%	0.1%	0.0%	22.2
St. Louis, USA	46	132	151	0.3%	0.4%	0.3%	187%	14%	0.5%	0.1%	53.7
Tampa, USA	28	51	101	0.2%	0.2%	0.2%	82%	98%	0.1%	0.3%	33.3
Toledo, USA	5	15	9	0.0%	0.0%	0.0%	200%	-40%	0.1%	0.0%	14.9
Trenton, USA	37	46	42	0.2%	0.1%	0.1%	24%	-9%	0.1%	0.0%	113.2
Tucson, USA	14	31	51	0.1%	0.1%	0.1%	121%	65%	0.1%	0.1%	50.2
Tulsa, USA	3	13	22	0.0%	0.0%	0.0%	333%	69%	0.1%	0.0%	22.2
Urbana-Champaign, USA	5	18	28	0.0%	0.1%	0.1%	260%	56%	0.1%	0.1%	116.7
Washington, USA	366	522	660	2.4%	1.6%	1.3%	43%	26%	0.9%	0.8%	107.5
Wilmington (DE), USA	2	8	14	0.0%	0.0%	0.0%	300%	75%	0.0%	0.0%	49.5
Winston-Salem, USA	12	14	12	0.1%	0.0%	0.0%	17%	-14%	0.0%	0.0%	18.1
Worcester, USA	30	35	29	0.2%	0.1%	0.1%	17%	-17%	0.0%	0.0%	30.9
Ho Chi Minh City, Vietnam	2	8	32	0.0%	0.0%	0.1%	300%	300%	0.0%	0.1%	3.8

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology). **Note:** Figures in this table for shares, percent changes, and contributions to global change cannot be reproduced from levels due to rounding.

APPENDIX C: DATA TABULATIONS

FIGURE C2: GLOBAL VENTURE CAPITAL INVESTED BY GEOGRAPHY

Geography	Capital Invested (\$M)			Share of Capital Invested			Percent Change		Contribution to Global Change in Capital Invested		Capital Invested (\$M) per 1M Residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Buenos Aires, Argentina	\$12	\$131	\$194	0.0%	0.1%	0.0%	996%	49%	0.2%	0.0%	\$13.8
Brisbane, Australia	\$35	\$38	\$136	0.0%	0.0%	0.0%	7%	259%	0.0%	0.0%	\$57.2
Melbourne, Australia	\$90	\$294	\$599	0.1%	0.2%	0.1%	226%	104%	0.3%	0.1%	\$126.5
Perth, Australia	\$10	\$51	\$40	0.0%	0.0%	0.0%	403%	-22%	0.1%	0.0%	\$19.8
Sydney, Australia	\$107	\$351	\$1,179	0.1%	0.2%	0.2%	227%	236%	0.3%	0.3%	\$233.7
Vienna, Austria	\$132	\$218	\$594	0.1%	0.1%	0.1%	65%	173%	0.1%	0.1%	\$214.6
Dhaka, Bangladesh	\$1	\$6	\$22	0.0%	0.0%	0.0%	505%	273%	0.0%	0.0%	\$1.2
Antwerp, Belgium	\$19	\$41	\$111	0.0%	0.0%	0.0%	119%	174%	0.0%	0.0%	\$107.3
Brussels, Belgium	\$227	\$149	\$352	0.2%	0.1%	0.1%	-34%	137%	-0.1%	0.1%	\$140.4
Charleroi, Belgium	\$43	\$66	\$47	0.0%	0.0%	0.0%	54%	-29%	0.0%	0.0%	\$108.5
Ghent, Belgium	\$192	\$82	\$212	0.2%	0.0%	0.0%	-57%	157%	-0.2%	0.0%	\$333.9
Hasselt, Belgium	\$24	\$87	\$54	0.0%	0.0%	0.0%	257%	-38%	0.1%	0.0%	\$128.4
Liege, Belgium	\$7	\$68	\$107	0.0%	0.0%	0.0%	925%	56%	0.1%	0.0%	\$151.5
Belo Horizonte, Brazil	\$3	\$47	\$49	0.0%	0.0%	0.0%	1623%	3%	0.1%	0.0%	\$8.6
Curitiba, Brazil	\$6	\$19	\$41	0.0%	0.0%	0.0%	205%	114%	0.0%	0.0%	\$11.6
Florianopolis, Brazil	\$0	\$10	\$56	0.0%	0.0%	0.0%	--	476%	0.0%	0.0%	\$47.6
Rio de Janeiro, Brazil	\$7	\$182	\$284	0.0%	0.1%	0.1%	2693%	57%	0.2%	0.0%	\$23.3
Sao Paulo, Brazil	\$15	\$789	\$1,804	0.0%	0.4%	0.4%	5320%	129%	1.1%	0.3%	\$84.9
Sofia, Bulgaria	\$4	\$4	\$45	0.0%	0.0%	0.0%	-7%	1076%	0.0%	0.0%	\$26.7
Calgary, Canada	\$71	\$226	\$217	0.1%	0.1%	0.0%	217%	-4%	0.2%	0.0%	\$156.0
Edmonton, Canada	\$36	\$35	\$64	0.0%	0.0%	0.0%	-2%	82%	0.0%	0.0%	\$48.5
Fredericton, Canada	\$18	\$13	\$19	0.0%	0.0%	0.0%	-27%	41%	0.0%	0.0%	\$183.3
Halifax, Canada	\$22	\$57	\$137	0.0%	0.0%	0.0%	155%	142%	0.0%	0.0%	\$339.1
Montreal, Canada	\$702	\$1,118	\$1,771	0.6%	0.6%	0.3%	59%	58%	0.6%	0.2%	\$432.0
Ottawa, Canada	\$588	\$300	\$492	0.5%	0.2%	0.1%	-49%	64%	-0.4%	0.1%	\$371.6
Quebec City, Canada	\$72	\$88	\$210	0.1%	0.0%	0.0%	21%	140%	0.0%	0.0%	\$262.3
Toronto, Canada	\$610	\$1,499	\$2,986	0.5%	0.8%	0.6%	146%	99%	1.3%	0.5%	\$503.7
Vancouver, Canada	\$655	\$731	\$1,256	0.5%	0.4%	0.2%	12%	72%	0.1%	0.2%	\$509.8
Victoria, Canada	\$20	\$33	\$49	0.0%	0.0%	0.0%	63%	49%	0.0%	0.0%	\$132.4
Waterloo, Canada	\$77	\$221	\$605	0.1%	0.1%	0.1%	188%	174%	0.2%	0.1%	\$1,155.2
Winnipeg, Canada	\$8	\$33	\$94	0.0%	0.0%	0.0%	309%	184%	0.0%	0.0%	\$121.1
Santiago, Chile	\$0	\$81	\$91	0.0%	0.0%	0.0%	--	12%	0.1%	0.0%	\$12.5
Beijing, China	\$1,617	\$7,205	\$72,819	1.3%	3.8%	14.2%	346%	911%	8.0%	20.5%	\$3,341.1

Geography	Capital Invested (\$M)			Share of Capital Invested			Percent Change		Contribution to Global Change in Capital Invested		Capital Invested (\$M) per 1M Residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Chengdu, China	\$15	\$79	\$264	0.0%	0.0%	0.1%	425%	235%	0.1%	0.1%	\$18.1
Guangzhou, China	\$139	\$328	\$1,590	0.1%	0.2%	0.3%	136%	384%	0.3%	0.4%	\$116.4
Hangzhou, China	\$1,049	\$533	\$11,390	0.9%	0.3%	2.2%	-49%	2035%	-0.7%	3.4%	\$1,252.7
Nanjing, China	\$13	\$302	\$1,297	0.0%	0.2%	0.3%	2217%	330%	0.4%	0.3%	\$156.9
Shanghai, China	\$777	\$2,665	\$23,839	0.6%	1.4%	4.7%	243%	794%	2.7%	6.6%	\$980.5
Shenzhen, China	\$275	\$1,038	\$4,286	0.2%	0.5%	0.8%	278%	313%	1.1%	1.0%	\$372.0
Tianjin, China	\$37	\$134	\$1,543	0.0%	0.1%	0.3%	268%	1049%	0.1%	0.4%	\$98.2
Bogota, Colombia	\$0	\$23	\$129	0.0%	0.0%	0.0%	--	451%	0.0%	0.0%	\$14.1
Prague, Czech Republic	\$32	\$12	\$104	0.0%	0.0%	0.0%	-63%	773%	0.0%	0.0%	\$40.2
Arhus, Denmark	\$34	\$79	\$66	0.0%	0.0%	0.0%	133%	-15%	0.1%	0.0%	\$76.8
Copenhagen, Denmark	\$593	\$506	\$958	0.5%	0.3%	0.2%	-15%	89%	-0.1%	0.1%	\$480.2
Cairo, Egypt	\$7	\$26	\$63	0.0%	0.0%	0.0%	303%	139%	0.0%	0.0%	\$4.3
Tallinn, Estonia	\$5	\$41	\$110	0.0%	0.0%	0.0%	653%	165%	0.1%	0.0%	\$190.4
Helsinki, Finland	\$258	\$512	\$1,163	0.2%	0.3%	0.2%	98%	127%	0.4%	0.2%	\$717.5
Oulu, Finland	\$59	\$99	\$371	0.0%	0.1%	0.1%	68%	275%	0.1%	0.1%	\$1,508.1
Tampere, Finland	\$38	\$61	\$202	0.0%	0.0%	0.0%	59%	231%	0.0%	0.0%	\$398.3
Turku, Finland	\$44	\$81	\$162	0.0%	0.0%	0.0%	86%	100%	0.1%	0.0%	\$341.4
Bordeaux, France	\$59	\$70	\$81	0.0%	0.0%	0.0%	19%	15%	0.0%	0.0%	\$51.6
Grenoble, France	\$80	\$128	\$173	0.1%	0.1%	0.0%	61%	35%	0.1%	0.0%	\$136.9
Lille, France	\$8	\$34	\$149	0.0%	0.0%	0.0%	315%	337%	0.0%	0.0%	\$56.9
Lyon, France	\$68	\$190	\$210	0.1%	0.1%	0.0%	179%	11%	0.2%	0.0%	\$114.3
Marseille, France	\$86	\$202	\$174	0.1%	0.1%	0.0%	136%	-14%	0.2%	0.0%	\$56.5
Montpellier, France	\$37	\$37	\$37	0.0%	0.0%	0.0%	1%	1%	0.0%	0.0%	\$32.8
Mulhouse, France	\$12	\$40	\$26	0.0%	0.0%	0.0%	233%	-36%	0.0%	0.0%	\$33.4
Nantes, France	\$19	\$27	\$73	0.0%	0.0%	0.0%	40%	169%	0.0%	0.0%	\$52.7
Nice, France	\$36	\$56	\$48	0.0%	0.0%	0.0%	56%	-14%	0.0%	0.0%	\$44.6
Paris, France	\$1,353	\$2,166	\$4,578	1.1%	1.1%	0.9%	60%	111%	1.2%	0.8%	\$377.0
Pau, France	\$182	\$144	\$52	0.1%	0.1%	0.0%	-21%	-64%	-0.1%	0.0%	\$77.6
Rennes, France	\$9	\$28	\$47	0.0%	0.0%	0.0%	221%	70%	0.0%	0.0%	\$44.7
Toulouse, France	\$127	\$130	\$417	0.1%	0.1%	0.1%	2%	220%	0.0%	0.1%	\$307.6
Aachen, Germany	\$15	\$29	\$76	0.0%	0.0%	0.0%	100%	160%	0.0%	0.0%	\$138.2
Berlin, Germany	\$330	\$1,458	\$7,291	0.3%	0.8%	1.4%	342%	400%	1.6%	1.8%	\$1,418.2
Bonn, Germany	\$10	\$43	\$36	0.0%	0.0%	0.0%	322%	-15%	0.0%	0.0%	\$39.8
Cologne, Germany	\$104	\$211	\$211	0.1%	0.1%	0.0%	104%	0%	0.2%	0.0%	\$107.1
Dresden, Germany	\$221	\$825	\$251	0.2%	0.4%	0.0%	274%	-70%	0.9%	-0.2%	\$187.3
Dusseldorf, Germany	\$34	\$148	\$252	0.0%	0.1%	0.0%	331%	70%	0.2%	0.0%	\$163.1
Frankfurt, Germany	\$16	\$83	\$210	0.0%	0.0%	0.0%	408%	154%	0.1%	0.0%	\$79.2
Hamburg, Germany	\$146	\$318	\$803	0.1%	0.2%	0.2%	118%	153%	0.2%	0.2%	\$247.8
Hannover, Germany	\$29	\$23	\$42	0.0%	0.0%	0.0%	-20%	86%	0.0%	0.0%	\$32.7
Heidelberg, Germany	\$119	\$231	\$65	0.1%	0.1%	0.0%	94%	-72%	0.2%	-0.1%	\$92.4

RISE OF THE GLOBAL STARTUP CITY: THE NEW MAP OF ENTREPRENEURSHIP AND VENTURE CAPITAL

Geography	Capital Invested (\$M)			Share of Capital Invested			Percent Change		Contribution to Global Change in Capital Invested		Capital Invested (\$M) per 1M Residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Karlsruhe, Germany	\$28	\$19	\$118	0.0%	0.0%	0.0%	-33%	519%	0.0%	0.0%	\$158.9
Leipzig, Germany	\$23	\$97	\$55	0.0%	0.1%	0.0%	316%	-44%	0.1%	0.0%	\$54.1
Mannheim, Germany	\$16	\$31	\$77	0.0%	0.0%	0.0%	92%	149%	0.0%	0.0%	\$65.8
Munich, Germany	\$500	\$669	\$1,506	0.4%	0.3%	0.3%	34%	125%	0.2%	0.3%	\$528.8
Nuremberg, Germany	\$31	\$43	\$69	0.0%	0.0%	0.0%	39%	59%	0.0%	0.0%	\$51.8
Regensburg, Germany	\$15	\$33	\$49	0.0%	0.0%	0.0%	125%	49%	0.0%	0.0%	\$107.4
Ruhrgebiet, Germany	\$82	\$89	\$31	0.1%	0.0%	0.0%	9%	-65%	0.0%	0.0%	\$6.2
Stuttgart, Germany	\$40	\$107	\$100	0.0%	0.1%	0.0%	167%	-7%	0.1%	0.0%	\$36.7
Accra, Ghana	\$0	\$29	\$102	0.0%	0.0%	0.0%	--	255%	0.0%	0.0%	\$44.8
Athens, Greece	\$6	\$21	\$48	0.0%	0.0%	0.0%	239%	128%	0.0%	0.0%	\$12.7
Hong Kong, Hong Kong	\$170	\$353	\$2,241	0.1%	0.2%	0.4%	108%	536%	0.3%	0.6%	\$306.5
Budapest, Hungary	\$6	\$60	\$222	0.0%	0.0%	0.0%	900%	271%	0.1%	0.1%	\$74.1
Reykjavik, Iceland	\$7	\$64	\$142	0.0%	0.0%	0.0%	786%	121%	0.1%	0.0%	\$662.5
Ahmedabad, India	\$12	\$17	\$150	0.0%	0.0%	0.0%	46%	755%	0.0%	0.0%	\$20.0
Bangalore, India	\$422	\$1,426	\$10,568	0.3%	0.7%	2.1%	238%	641%	1.4%	2.8%	\$1,022.1
Calcutta, India	\$0	\$23	\$159	0.0%	0.0%	0.0%	4904%	606%	0.0%	0.0%	\$10.9
Chennai, India	\$109	\$201	\$646	0.1%	0.1%	0.1%	84%	222%	0.1%	0.1%	\$64.5
Delhi, India	\$296	\$932	\$8,749	0.2%	0.5%	1.7%	215%	839%	0.9%	2.4%	\$460.0
Hyderabad, India	\$157	\$219	\$231	0.1%	0.1%	0.0%	40%	6%	0.1%	0.0%	\$25.6
Mumbai, India	\$316	\$567	\$2,757	0.3%	0.3%	0.5%	80%	387%	0.4%	0.7%	\$138.5
Pune, India	\$76	\$102	\$311	0.1%	0.1%	0.1%	34%	204%	0.0%	0.1%	\$53.2
Jakarta, Indonesia	\$0	\$175	\$2,828	0.0%	0.1%	0.6%	--	1513%	0.3%	0.8%	\$89.3
Cork, Ireland	\$85	\$191	\$80	0.1%	0.1%	0.0%	126%	-58%	0.2%	0.0%	\$116.2
Dublin, Ireland	\$432	\$676	\$1,388	0.4%	0.4%	0.3%	57%	105%	0.3%	0.2%	\$738.7
Galway, Ireland	\$16	\$74	\$152	0.0%	0.0%	0.0%	356%	106%	0.1%	0.0%	\$1,277.0
Limerick, Ireland	\$12	\$41	\$152	0.0%	0.0%	0.0%	229%	272%	0.0%	0.0%	\$780.5
Haifa, Israel	\$160	\$146	\$388	0.1%	0.1%	0.1%	-9%	166%	0.0%	0.1%	\$420.2
Jerusalem, Israel	\$66	\$147	\$351	0.1%	0.1%	0.1%	123%	139%	0.1%	0.1%	\$280.0
Tel Aviv, Israel	\$1,307	\$2,780	\$5,280	1.1%	1.5%	1.0%	113%	90%	2.1%	0.8%	\$1,370.1
Bologna, Italy	\$9	\$69	\$37	0.0%	0.0%	0.0%	646%	-47%	0.1%	0.0%	\$36.4
Cagliari, Italy	\$0	\$23	\$26	0.0%	0.0%	0.0%	--	10%	0.0%	0.0%	\$45.6
Milan, Italy	\$77	\$100	\$284	0.1%	0.1%	0.1%	30%	183%	0.0%	0.1%	\$65.9
Rome, Italy	\$2	\$30	\$45	0.0%	0.0%	0.0%	1176%	52%	0.0%	0.0%	\$10.4
Turin, Italy	\$4	\$28	\$23	0.0%	0.0%	0.0%	682%	-19%	0.0%	0.0%	\$10.0
Tokyo, Japan	\$211	\$1,117	\$3,066	0.2%	0.6%	0.6%	429%	174%	1.3%	0.6%	\$81.4
Amman, Jordan	\$1	\$60	\$36	0.0%	0.0%	0.0%	6017%	-41%	0.1%	0.0%	\$30.8
Nairobi, Kenya	\$4	\$30	\$323	0.0%	0.0%	0.1%	686%	990%	0.0%	0.1%	\$82.4
Riga, Latvia	\$13	\$17	\$102	0.0%	0.0%	0.0%	29%	512%	0.0%	0.0%	\$159.2
Beirut, Lebanon	\$1	\$11	\$83	0.0%	0.0%	0.0%	1037%	641%	0.0%	0.0%	\$37.1
Vilnius, Lithuania	\$15	\$39	\$86	0.0%	0.0%	0.0%	154%	123%	0.0%	0.0%	\$107.1

Geography	Capital Invested (\$M)			Share of Capital Invested			Percent Change		Contribution to Global Change in Capital Invested		Capital Invested (\$M) per 1M Residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Luxembourg, Luxembourg	\$41	\$69	\$738	0.0%	0.0%	0.1%	68%	969%	0.0%	0.2%	\$1,280.9
Kuala Lumpur, Malaysia	\$20	\$45	\$382	0.0%	0.0%	0.1%	125%	744%	0.0%	0.1%	\$53.8
Mexico City, Mexico	\$0	\$94	\$341	0.0%	0.0%	0.1%	--	262%	0.1%	0.1%	\$16.0
Monterrey, Mexico	\$0	\$64	\$39	0.0%	0.0%	0.0%	--	-39%	0.1%	0.0%	\$8.8
Amsterdam, Netherlands	\$180	\$340	\$1,133	0.1%	0.2%	0.2%	89%	233%	0.2%	0.2%	\$419.0
Arnhem-Nijmegen, Netherlands	\$8	\$51	\$77	0.0%	0.0%	0.0%	525%	50%	0.1%	0.0%	\$106.0
Eindhoven, Netherlands	\$59	\$93	\$158	0.0%	0.0%	0.0%	58%	70%	0.0%	0.0%	\$208.5
Enschede, Netherlands	\$10	\$48	\$98	0.0%	0.0%	0.0%	370%	107%	0.1%	0.0%	\$157.0
Rotterdam, Netherlands	\$13	\$14	\$92	0.0%	0.0%	0.0%	9%	559%	0.0%	0.0%	\$64.0
The Hague, Netherlands	\$31	\$78	\$262	0.0%	0.0%	0.1%	149%	234%	0.1%	0.1%	\$309.2
Utrecht, Netherlands	\$66	\$114	\$318	0.1%	0.1%	0.1%	73%	179%	0.1%	0.1%	\$249.9
Auckland, New Zealand	\$36	\$73	\$387	0.0%	0.0%	0.1%	104%	433%	0.1%	0.1%	\$246.1
Wellington, New Zealand	\$2	\$30	\$90	0.0%	0.0%	0.0%	1735%	197%	0.0%	0.0%	\$216.7
Lagos, Nigeria	\$1	\$41	\$148	0.0%	0.0%	0.0%	4078%	262%	0.1%	0.0%	\$10.9
Bergen, Norway	\$25	\$40	\$107	0.0%	0.0%	0.0%	60%	170%	0.0%	0.0%	\$108.4
Oslo, Norway	\$318	\$268	\$454	0.3%	0.1%	0.1%	-16%	70%	-0.1%	0.1%	\$362.2
Rogaland, Norway	\$58	\$59	\$87	0.0%	0.0%	0.0%	3%	46%	0.0%	0.0%	\$185.0
South Trondelag, Norway	\$34	\$79	\$49	0.0%	0.0%	0.0%	135%	-38%	0.1%	0.0%	\$156.3
Lima, Peru	\$0	\$8	\$39	0.0%	0.0%	0.0%	--	382%	0.0%	0.0%	\$3.5
Manila, Philippines	\$8	\$9	\$95	0.0%	0.0%	0.0%	14%	918%	0.0%	0.0%	\$7.2
Krakow, Poland	\$7	\$28	\$112	0.0%	0.0%	0.0%	283%	301%	0.0%	0.0%	\$76.7
Poznan, Poland	\$4	\$17	\$35	0.0%	0.0%	0.0%	358%	111%	0.0%	0.0%	\$29.9
Warsaw, Poland	\$55	\$90	\$439	0.0%	0.0%	0.1%	64%	390%	0.0%	0.1%	\$131.2
Wroclaw, Poland	\$1	\$17	\$40	0.0%	0.0%	0.0%	2326%	137%	0.0%	0.0%	\$63.5
Lisbon, Portugal	\$44	\$22	\$90	0.0%	0.0%	0.0%	-50%	317%	0.0%	0.0%	\$32.0
Porto, Portugal	\$9	\$16	\$34	0.0%	0.0%	0.0%	78%	113%	0.0%	0.0%	\$19.9
Moscow, Russia	\$93	\$1,792	\$642	0.1%	0.9%	0.1%	1824%	-64%	2.4%	-0.4%	\$52.1
Saint Petersburg, Russia	\$10	\$80	\$68	0.0%	0.0%	0.0%	725%	-15%	0.1%	0.0%	\$13.0
Singapore, Singapore	\$249	\$794	\$4,720	0.2%	0.4%	0.9%	219%	494%	0.8%	1.2%	\$845.1
Bratislava, Slovakia	\$4	\$10	\$82	0.0%	0.0%	0.0%	146%	700%	0.0%	0.0%	\$129.0
Cape Town, South Africa	\$28	\$88	\$326	0.0%	0.0%	0.1%	212%	269%	0.1%	0.1%	\$80.7
Johannesburg, South Africa	\$4	\$43	\$69	0.0%	0.0%	0.0%	1019%	58%	0.1%	0.0%	\$14.1
Seoul, South Korea	\$174	\$401	\$2,848	0.1%	0.2%	0.6%	130%	611%	0.3%	0.8%	\$113.2
Barcelona, Spain	\$269	\$561	\$1,064	0.2%	0.3%	0.2%	108%	90%	0.4%	0.2%	\$195.5
Bilbao, Spain	\$14	\$158	\$39	0.0%	0.1%	0.0%	1025%	-75%	0.2%	0.0%	\$34.1
Madrid, Spain	\$136	\$300	\$753	0.1%	0.2%	0.1%	121%	151%	0.2%	0.1%	\$117.3
Palma de Mallorca, Spain	\$0	\$5	\$54	0.0%	0.0%	0.0%	--	927%	0.0%	0.0%	\$61.4
Pamplona, Spain	\$28	\$109	\$40	0.0%	0.1%	0.0%	290%	-64%	0.1%	0.0%	\$62.4
Valencia, Spain	\$49	\$117	\$31	0.0%	0.1%	0.0%	142%	-74%	0.1%	0.0%	\$12.2
Gavleborgs, Sweden	\$1	\$20	\$76	0.0%	0.0%	0.0%	1615%	281%	0.0%	0.0%	\$269.2

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Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Gothenberg, Sweden	\$61	\$137	\$314	0.1%	0.1%	0.1%	125%	130%	0.1%	0.1%	\$190.7
Malmö, Sweden	\$144	\$224	\$383	0.1%	0.1%	0.1%	55%	71%	0.1%	0.0%	\$293.4
Norrbottnens, Sweden	\$19	\$24	\$44	0.0%	0.0%	0.0%	28%	84%	0.0%	0.0%	\$176.2
Ostergötland, Sweden	\$44	\$75	\$100	0.0%	0.0%	0.0%	71%	33%	0.0%	0.0%	\$223.4
Stockholm, Sweden	\$617	\$1,101	\$2,641	0.5%	0.6%	0.5%	78%	140%	0.7%	0.5%	\$1,183.2
Umeå, Sweden	\$40	\$66	\$52	0.0%	0.0%	0.0%	66%	-22%	0.0%	0.0%	\$420.5
Uppsala, Sweden	\$91	\$68	\$43	0.1%	0.0%	0.0%	-25%	-37%	0.0%	0.0%	\$121.3
Basel, Switzerland	\$96	\$77	\$470	0.1%	0.0%	0.1%	-19%	506%	0.0%	0.1%	\$669.0
Geneva, Switzerland	\$282	\$144	\$214	0.2%	0.1%	0.0%	-49%	49%	-0.2%	0.0%	\$442.1
Lausanne, Switzerland	\$119	\$252	\$1,035	0.1%	0.1%	0.2%	112%	311%	0.2%	0.2%	\$1,337.3
Zurich, Switzerland	\$114	\$247	\$656	0.1%	0.1%	0.1%	118%	165%	0.2%	0.1%	\$447.1
Taipei, Taiwan	\$69	\$86	\$346	0.1%	0.0%	0.1%	25%	303%	0.0%	0.1%	\$48.8
Bangkok, Thailand	\$0	\$4	\$336	0.0%	0.0%	0.1%	--	7775%	0.0%	0.1%	\$20.8
Istanbul, Turkey	\$15	\$170	\$236	0.0%	0.1%	0.0%	1000%	39%	0.2%	0.0%	\$16.2
Dubai, UAE	\$33	\$149	\$1,745	0.0%	0.1%	0.3%	346%	1075%	0.2%	0.5%	\$597.7
Aberdeen, UK	\$29	\$98	\$127	0.0%	0.1%	0.0%	237%	29%	0.1%	0.0%	\$256.2
Belfast, UK	\$81	\$58	\$80	0.1%	0.0%	0.0%	-28%	38%	0.0%	0.0%	\$116.8
Birmingham, UK	\$33	\$78	\$62	0.0%	0.0%	0.0%	138%	-20%	0.1%	0.0%	\$24.7
Brighton, UK	\$3	\$15	\$57	0.0%	0.0%	0.0%	323%	294%	0.0%	0.0%	\$200.0
Bristol, UK	\$347	\$159	\$393	0.3%	0.1%	0.1%	-54%	147%	-0.3%	0.1%	\$349.8
Cambridge, UK	\$401	\$548	\$1,371	0.3%	0.3%	0.3%	37%	150%	0.2%	0.3%	\$2,109.6
Cardiff, UK	\$62	\$79	\$116	0.1%	0.0%	0.0%	28%	46%	0.0%	0.0%	\$103.2
Central Hampshire, UK	\$205	\$106	\$95	0.2%	0.1%	0.0%	-48%	-11%	-0.1%	0.0%	\$175.9
Cheshire East, UK	\$4	\$40	\$37	0.0%	0.0%	0.0%	925%	-8%	0.1%	0.0%	\$97.8
Coventry, UK	\$31	\$73	\$101	0.0%	0.0%	0.0%	139%	37%	0.1%	0.0%	\$111.3
Doncaster, UK	\$47	\$20	\$43	0.0%	0.0%	0.0%	-57%	113%	0.0%	0.0%	\$53.8
East Kent, UK	\$24	\$31	\$59	0.0%	0.0%	0.0%	32%	89%	0.0%	0.0%	\$113.3
Edinburgh, UK	\$137	\$253	\$274	0.1%	0.1%	0.1%	84%	8%	0.2%	0.0%	\$314.4
Exeter, UK	\$8	\$8	\$36	0.0%	0.0%	0.0%	2%	358%	0.0%	0.0%	\$46.5
Glasgow, UK	\$74	\$110	\$140	0.1%	0.1%	0.0%	47%	28%	0.0%	0.0%	\$76.5
Gloucestershire, UK	\$17	\$56	\$54	0.0%	0.0%	0.0%	231%	-3%	0.1%	0.0%	\$87.7
Ipswich, UK	\$51	\$41	\$60	0.0%	0.0%	0.0%	-19%	47%	0.0%	0.0%	\$81.2
Leeds, UK	\$23	\$25	\$217	0.0%	0.0%	0.0%	6%	777%	0.0%	0.1%	\$195.0
Leicester, UK	\$52	\$67	\$27	0.0%	0.0%	0.0%	29%	-60%	0.0%	0.0%	\$19.3
Liverpool, UK	\$72	\$68	\$103	0.1%	0.0%	0.0%	-6%	53%	0.0%	0.0%	\$67.6
London, UK	\$2,210	\$4,096	\$15,650	1.8%	2.1%	3.1%	85%	282%	2.7%	3.6%	\$1,114.7
Manchester, UK	\$205	\$146	\$333	0.2%	0.1%	0.1%	-29%	129%	-0.1%	0.1%	\$102.0
Newcastle, UK	\$60	\$147	\$137	0.0%	0.1%	0.0%	147%	-7%	0.1%	0.0%	\$117.3
North Hampshire, UK	\$21	\$65	\$79	0.0%	0.0%	0.0%	213%	21%	0.1%	0.0%	\$217.6
Nottingham, UK	\$92	\$72	\$30	0.1%	0.0%	0.0%	-21%	-59%	0.0%	0.0%	\$93.2
Oxford, UK	\$418	\$676	\$1,806	0.3%	0.4%	0.4%	62%	167%	0.4%	0.4%	\$2,656.0

Geography	Capital Invested (\$M)			Share of Capital Invested			Percent Change		Contribution to Global Change in Capital Invested		Capital Invested (\$M) per 1M Residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Sheffield, UK	\$26	\$20	\$28	0.0%	0.0%	0.0%	-22%	41%	0.0%	0.0%	\$49.3
Stoke-on-Trent, UK	\$7	\$50	\$24	0.0%	0.0%	0.0%	610%	-52%	0.1%	0.0%	\$21.3
Sunderland, UK	\$0	\$5	\$27	0.0%	0.0%	0.0%	--	455%	0.0%	0.0%	\$98.7
Swansea, UK	\$22	\$52	\$36	0.0%	0.0%	0.0%	132%	-30%	0.0%	0.0%	\$68.9
West Sussex (North East), UK	\$50	\$23	\$86	0.0%	0.0%	0.0%	-54%	268%	0.0%	0.0%	\$218.2
Wiltshire, UK	\$35	\$37	\$138	0.0%	0.0%	0.0%	5%	276%	0.0%	0.0%	\$282.8
Akron, USA	\$16	\$24	\$36	0.0%	0.0%	0.0%	47%	49%	0.0%	0.0%	\$50.8
Albany (NY), USA	\$124	\$55	\$92	0.1%	0.0%	0.0%	-55%	66%	-0.1%	0.0%	\$104.0
Albuquerque, USA	\$228	\$150	\$239	0.2%	0.1%	0.0%	-34%	59%	-0.1%	0.0%	\$261.7
Allentown, USA	\$145	\$114	\$51	0.1%	0.1%	0.0%	-21%	-55%	0.0%	0.0%	\$61.1
Ann Arbor, USA	\$158	\$290	\$566	0.1%	0.2%	0.1%	84%	95%	0.2%	0.1%	\$1,554.6
Atlanta, USA	\$1,360	\$1,542	\$3,036	1.1%	0.8%	0.6%	13%	97%	0.3%	0.5%	\$524.0
Austin, USA	\$2,052	\$2,522	\$3,635	1.7%	1.3%	0.7%	23%	44%	0.7%	0.3%	\$1,766.3
Baltimore, USA	\$642	\$525	\$1,292	0.5%	0.3%	0.3%	-18%	146%	-0.2%	0.2%	\$461.2
Bend, USA	\$0	\$46	\$56	0.0%	0.0%	0.0%	--	22%	0.1%	0.0%	\$308.3
Birmingham, USA	\$43	\$47	\$124	0.0%	0.0%	0.0%	7%	167%	0.0%	0.0%	\$108.4
Boise, USA	\$41	\$36	\$190	0.0%	0.0%	0.0%	-14%	431%	0.0%	0.0%	\$274.7
Boston, USA	\$9,709	\$11,891	\$24,567	8.0%	6.2%	4.8%	22%	107%	3.1%	4.0%	\$5,120.4
Boulder, USA	\$1,022	\$993	\$1,187	0.8%	0.5%	0.2%	-3%	20%	0.0%	0.1%	\$3,676.3
Bozeman, USA	\$1	\$10	\$94	0.0%	0.0%	0.0%	1155%	832%	0.0%	0.0%	\$894.8
Bridgeport, USA	\$489	\$701	\$538	0.4%	0.4%	0.1%	43%	-23%	0.3%	-0.1%	\$569.2
Buffalo, USA	\$104	\$78	\$202	0.1%	0.0%	0.0%	-25%	159%	0.0%	0.0%	\$178.4
Burlington (VT), USA	\$20	\$127	\$39	0.0%	0.1%	0.0%	519%	-69%	0.2%	0.0%	\$180.6
Charleston (SC), USA	\$110	\$100	\$144	0.1%	0.1%	0.0%	-9%	44%	0.0%	0.0%	\$189.6
Charlotte, USA	\$139	\$221	\$980	0.1%	0.1%	0.2%	59%	343%	0.1%	0.2%	\$395.9
Charlottesville, USA	\$57	\$62	\$190	0.0%	0.0%	0.0%	9%	209%	0.0%	0.0%	\$826.7
Chattanooga, USA	\$11	\$17	\$88	0.0%	0.0%	0.0%	55%	406%	0.0%	0.0%	\$160.5
Chicago, USA	\$1,280	\$3,985	\$5,148	1.1%	2.1%	1.0%	211%	29%	3.9%	0.4%	\$540.9
Cincinnati, USA	\$307	\$351	\$474	0.3%	0.2%	0.1%	14%	35%	0.1%	0.0%	\$219.2
Claremont-Lebanon (NH), USA	\$27	\$39	\$45	0.0%	0.0%	0.0%	46%	16%	0.0%	0.0%	\$207.8
Cleveland, USA	\$206	\$426	\$624	0.2%	0.2%	0.1%	106%	46%	0.3%	0.1%	\$303.6
Colorado Springs, USA	\$58	\$37	\$49	0.0%	0.0%	0.0%	-37%	33%	0.0%	0.0%	\$68.8
Columbia (SC), USA	\$29	\$15	\$51	0.0%	0.0%	0.0%	-46%	230%	0.0%	0.0%	\$62.4
Columbus, USA	\$331	\$175	\$389	0.3%	0.1%	0.1%	-47%	123%	-0.2%	0.1%	\$190.5
Dallas, USA	\$1,700	\$2,128	\$1,701	1.4%	1.1%	0.3%	25%	-20%	0.6%	-0.1%	\$235.1
Dayton, USA	\$10	\$65	\$108	0.0%	0.0%	0.0%	553%	66%	0.1%	0.0%	\$134.5
Denver, USA	\$1,072	\$1,167	\$2,581	0.9%	0.6%	0.5%	9%	121%	0.1%	0.4%	\$903.6
Des Moines, USA	\$1	\$26	\$61	0.0%	0.0%	0.0%	4902%	131%	0.0%	0.0%	\$95.5
Detroit, USA	\$200	\$439	\$478	0.2%	0.2%	0.1%	119%	9%	0.3%	0.0%	\$111.1
Durham, USA	\$539	\$593	\$1,353	0.4%	0.3%	0.3%	10%	128%	0.1%	0.2%	\$2,415.4

RISE OF THE GLOBAL STARTUP CITY: THE NEW MAP OF ENTREPRENEURSHIP AND VENTURE CAPITAL

Geography	Capital Invested (\$M)			Share of Capital Invested			Percent Change		Contribution to Global Change in Capital Invested		Capital Invested (\$M) per 1M Residents
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Fayetteville, USA	\$1	\$21	\$56	0.0%	0.0%	0.0%	3713%	169%	0.0%	0.0%	\$107.0
Fort Collins, USA	\$18	\$207	\$137	0.0%	0.1%	0.0%	1041%	-34%	0.3%	0.0%	\$402.5
Gainesville, USA	\$67	\$117	\$68	0.1%	0.1%	0.0%	75%	-41%	0.1%	0.0%	\$242.3
Grand Rapids, USA	\$20	\$40	\$106	0.0%	0.0%	0.0%	103%	166%	0.0%	0.0%	\$101.0
Greenville (SC), USA	\$30	\$49	\$57	0.0%	0.0%	0.0%	66%	16%	0.0%	0.0%	\$64.3
Hartford, USA	\$59	\$172	\$240	0.0%	0.1%	0.0%	193%	39%	0.2%	0.0%	\$198.8
Honolulu, USA	\$136	\$147	\$60	0.1%	0.1%	0.0%	8%	-59%	0.0%	0.0%	\$60.4
Houston, USA	\$560	\$877	\$1,571	0.5%	0.5%	0.3%	57%	79%	0.5%	0.2%	\$231.6
Huntsville, USA	\$34	\$88	\$56	0.0%	0.0%	0.0%	157%	-36%	0.1%	0.0%	\$125.0
Indianapolis, USA	\$159	\$463	\$437	0.1%	0.2%	0.1%	191%	-6%	0.4%	0.0%	\$218.1
Iowa City, USA	\$1	\$13	\$95	0.0%	0.0%	0.0%	977%	616%	0.0%	0.0%	\$561.3
Ithaca, USA	\$42	\$62	\$49	0.0%	0.0%	0.0%	48%	-22%	0.0%	0.0%	\$462.1
Jacksonville, USA	\$179	\$220	\$120	0.1%	0.1%	0.0%	23%	-45%	0.1%	0.0%	\$81.2
Kalamazoo, USA	\$11	\$75	\$127	0.0%	0.0%	0.0%	601%	69%	0.1%	0.0%	\$376.9
Kansas City, USA	\$157	\$406	\$349	0.1%	0.2%	0.1%	159%	-14%	0.4%	0.0%	\$165.7
Knoxville, USA	\$9	\$88	\$53	0.0%	0.0%	0.0%	905%	-39%	0.1%	0.0%	\$61.2
Lansing, USA	\$6	\$22	\$22	0.0%	0.0%	0.0%	250%	1%	0.0%	0.0%	\$45.8
Las Vegas, USA	\$134	\$60	\$297	0.1%	0.0%	0.1%	-55%	397%	-0.1%	0.1%	\$137.7
Lexington (KY), USA	\$0	\$51	\$56	0.0%	0.0%	0.0%	78877%	10%	0.1%	0.0%	\$111.2
Lincoln, USA	\$3	\$22	\$172	0.0%	0.0%	0.0%	741%	676%	0.0%	0.0%	\$525.6
Little Rock, USA	\$26	\$14	\$47	0.0%	0.0%	0.0%	-47%	237%	0.0%	0.0%	\$63.6
Los Angeles, USA	\$6,158	\$7,613	\$17,391	5.1%	4.0%	3.4%	24%	128%	2.1%	3.0%	\$1,304.8
Louisville, USA	\$246	\$174	\$214	0.2%	0.1%	0.0%	-29%	22%	-0.1%	0.0%	\$166.2
Madison, USA	\$173	\$348	\$450	0.1%	0.2%	0.1%	101%	29%	0.2%	0.0%	\$693.4
Manchester, USA	\$115	\$173	\$253	0.1%	0.1%	0.0%	51%	46%	0.1%	0.0%	\$619.2
Memphis, USA	\$95	\$66	\$79	0.1%	0.0%	0.0%	-30%	20%	0.0%	0.0%	\$58.8
Miami, USA	\$766	\$994	\$2,540	0.6%	0.5%	0.5%	30%	156%	0.3%	0.5%	\$418.4
Milwaukee, USA	\$77	\$98	\$151	0.1%	0.1%	0.0%	28%	54%	0.0%	0.0%	\$95.9
Minneapolis, USA	\$1,026	\$1,110	\$1,757	0.8%	0.6%	0.3%	8%	58%	0.1%	0.2%	\$494.6
Missoula, USA	\$2	\$10	\$31	0.0%	0.0%	0.0%	523%	193%	0.0%	0.0%	\$264.7
Nashville, USA	\$303	\$452	\$867	0.2%	0.2%	0.2%	49%	92%	0.2%	0.1%	\$464.7
New Haven, USA	\$550	\$438	\$591	0.5%	0.2%	0.1%	-20%	35%	-0.2%	0.0%	\$689.5
New Orleans, USA	\$5	\$66	\$149	0.0%	0.0%	0.0%	1271%	124%	0.1%	0.0%	\$117.3
New York, USA	\$5,862	\$10,150	\$33,763	4.8%	5.3%	6.6%	73%	233%	6.1%	7.4%	\$1,673.7
Ogden, USA	\$15	\$73	\$46	0.0%	0.0%	0.0%	379%	-36%	0.1%	0.0%	\$70.7
Oklahoma City, USA	\$74	\$112	\$103	0.1%	0.1%	0.0%	51%	-8%	0.1%	0.0%	\$74.7
Omaha, USA	\$63	\$41	\$70	0.1%	0.0%	0.0%	-36%	72%	0.0%	0.0%	\$75.5
Orlando, USA	\$185	\$309	\$383	0.2%	0.2%	0.1%	67%	24%	0.2%	0.0%	\$156.7
Oxnard-Ventura, USA	\$201	\$290	\$320	0.2%	0.2%	0.1%	45%	10%	0.1%	0.0%	\$375.8
Palm Bay, USA	\$40	\$72	\$152	0.0%	0.0%	0.0%	80%	112%	0.0%	0.0%	\$263.3

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	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017	2005-07 to 2010-12	2010-12 to 2015-17	2005-07 to 2010-12	2010-12 to 2015-17	2015-2017
Global	\$121,221	\$191,315	\$512,097	100%	100%	100%	58%	168%	100%	100%	\$68.8
Philadelphia, USA	\$2,115	\$1,784	\$2,985	1.7%	0.9%	0.6%	-16%	67%	-0.5%	0.4%	\$491.4
Phoenix, USA	\$689	\$791	\$801	0.6%	0.4%	0.2%	15%	1%	0.1%	0.0%	\$171.8
Pittsburgh, USA	\$384	\$927	\$896	0.3%	0.5%	0.2%	141%	-3%	0.8%	0.0%	\$382.2
Portland (ME), USA	\$89	\$88	\$338	0.1%	0.0%	0.1%	-2%	285%	0.0%	0.1%	\$638.7
Portland (OR), USA	\$453	\$711	\$1,094	0.4%	0.4%	0.2%	57%	54%	0.4%	0.1%	\$450.9
Providence, USA	\$316	\$370	\$239	0.3%	0.2%	0.0%	17%	-35%	0.1%	0.0%	\$148.1
Provo, USA	\$192	\$342	\$1,352	0.2%	0.2%	0.3%	78%	295%	0.2%	0.3%	\$2,245.7
Raleigh, USA	\$572	\$819	\$639	0.5%	0.4%	0.1%	43%	-22%	0.4%	-0.1%	\$490.3
Reno, USA	\$2	\$50	\$132	0.0%	0.0%	0.0%	2001%	163%	0.1%	0.0%	\$287.8
Richmond, USA	\$29	\$92	\$136	0.0%	0.0%	0.0%	223%	47%	0.1%	0.0%	\$105.8
Riverside, USA	\$31	\$37	\$38	0.0%	0.0%	0.0%	19%	4%	0.0%	0.0%	\$8.4
Rochester, USA	\$136	\$97	\$223	0.1%	0.1%	0.0%	-28%	129%	-0.1%	0.0%	\$206.6
Sacramento, USA	\$151	\$245	\$375	0.1%	0.1%	0.1%	62%	53%	0.1%	0.0%	\$163.0
Salisbury (MD), USA	\$1	\$8	\$22	0.0%	0.0%	0.0%	615%	175%	0.0%	0.0%	\$54.4
Salt Lake City, USA	\$496	\$664	\$1,242	0.4%	0.3%	0.2%	34%	87%	0.2%	0.2%	\$1,047.4
San Antonio, USA	\$93	\$274	\$226	0.1%	0.1%	0.0%	195%	-17%	0.3%	0.0%	\$93.0
San Diego, USA	\$4,408	\$4,132	\$6,030	3.6%	2.2%	1.2%	-6%	46%	-0.4%	0.6%	\$1,815.7
San Francisco, USA	\$14,639	\$29,790	\$81,808	12.1%	15.6%	16.0%	103%	175%	21.6%	16.2%	\$17,458.0
San Jose, USA	\$15,941	\$15,908	\$24,857	13.2%	8.3%	4.9%	0%	56%	0.0%	2.8%	\$12,535.1
San Luis Obispo, USA	\$17	\$76	\$99	0.0%	0.0%	0.0%	340%	29%	0.1%	0.0%	\$348.9
Santa Barbara, USA	\$565	\$656	\$958	0.5%	0.3%	0.2%	16%	46%	0.1%	0.1%	\$2,144.0
Santa Cruz, USA	\$75	\$79	\$393	0.1%	0.0%	0.1%	6%	395%	0.0%	0.1%	\$1,427.6
Santa Fe, USA	\$4	\$7	\$26	0.0%	0.0%	0.0%	76%	270%	0.0%	0.0%	\$173.9
Santa Rosa, USA	\$485	\$361	\$270	0.4%	0.2%	0.1%	-26%	-25%	-0.2%	0.0%	\$535.8
Sarasota, USA	\$17	\$37	\$91	0.0%	0.0%	0.0%	116%	146%	0.0%	0.0%	\$115.4
Seattle, USA	\$4,380	\$3,019	\$5,710	3.6%	1.6%	1.1%	-31%	89%	-1.9%	0.8%	\$1,503.1
Spokane, USA	\$101	\$26	\$21	0.1%	0.0%	0.0%	-75%	-16%	-0.1%	0.0%	\$38.6
Springfield (MA), USA	\$34	\$37	\$46	0.0%	0.0%	0.0%	12%	23%	0.0%	0.0%	\$72.9
St. Louis, USA	\$203	\$392	\$802	0.2%	0.2%	0.2%	93%	105%	0.3%	0.1%	\$285.2
Tampa, USA	\$269	\$207	\$413	0.2%	0.1%	0.1%	-23%	99%	-0.1%	0.1%	\$136.2
Toledo, USA	\$11	\$59	\$35	0.0%	0.0%	0.0%	451%	-40%	0.1%	0.0%	\$58.1
Trenton, USA	\$383	\$325	\$343	0.3%	0.2%	0.1%	-15%	6%	-0.1%	0.0%	\$924.8
Tucson, USA	\$77	\$133	\$142	0.1%	0.1%	0.0%	72%	7%	0.1%	0.0%	\$139.5
Tulsa, USA	\$7	\$20	\$34	0.0%	0.0%	0.0%	192%	71%	0.0%	0.0%	\$34.8
Urbana-Champaign, USA	\$5	\$47	\$40	0.0%	0.0%	0.0%	887%	-15%	0.1%	0.0%	\$165.6
Washington, USA	\$2,797	\$3,472	\$4,359	2.3%	1.8%	0.9%	24%	26%	1.0%	0.3%	\$710.0
Wilmington (DE), USA	\$2	\$6	\$55	0.0%	0.0%	0.0%	271%	860%	0.0%	0.0%	\$193.9
Winston-Salem, USA	\$196	\$121	\$39	0.2%	0.1%	0.0%	-38%	-67%	-0.1%	0.0%	\$59.7
Worcester, USA	\$397	\$561	\$299	0.3%	0.3%	0.1%	41%	-47%	0.2%	-0.1%	\$319.0
Ho Chi Minh City, Vietnam	\$4	\$79	\$213	0.0%	0.0%	0.0%	1829%	168%	0.1%	0.0%	\$25.1

Source: Authors' analysis of PitchBook and various statistical authorities' data (see Methodology). **Note:** Figures in this table for shares, percent changes, and contributions to global change cannot be reproduced from levels due to rounding.

