

# MIAMI'S STARTUP ECOSYSTEM

Next Steps for  
Growing the Region  
as an Innovation Hub

Analysis by  Startup Genome

With support from  KNIGHT  
FOUNDATION

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## INTRODUCTION FROM KNIGHT

*When we look back on 2020, we expect to see it as a turning point for our community. As such, we must use this time to take stock of our journey in order to inform our future. Miami's transformation over the past decade goes well beyond the city's skyline. At its core, it is a story about people—those who are choosing to build and create in the Magic City. From its vibrant cultural landscape to its burgeoning startup community, Miami is home to a wide array of creators with a unique perspective.*

*Since 2013, Knight Foundation has invested more than \$30 million in Miami's startup ecosystem. This support has been a part of Miami's rapid evolution to a place where many are building and investing in world-class companies. Examples of growth are easy to spot: Last year, Ultimate Software was acquired for \$11 billion; South Florida companies raised a record \$2.4 billion, and the city ranks among the top 35 global ecosystems.*

*In 2019, Knight Foundation partnered with Startup Genome to take a closer look at Miami's startup community. This report is based on data that was collected then.*

*The data confirmed Miami's upward trajectory while showing us that much remains to be done to catapult Miami into the echelons of the world's best startup ecosystems.*

*We share this report as 2020 has brought new challenges and opportunities. The COVID-19 pandemic [accelerated conversations about the future of work](#), especially where people will choose to live should the professional opportunities available to them become less tied to specific geographies. [Knight's research](#) shows that Miami's quality of life continues to be an asset in attracting and retaining residents, which has important implications for our growing startup community.*

*With tremendous urgency, the reenergized dialogue about racial inequities in America calls on us to acknowledge and amend the reality that the tech and innovation sectors often do not look like our communities. Creating pathways for access and prosperity for all is essential if Miami's startup community is to flourish.*

*As our community adapts, this report reminds us of all that Miami has built thus far and offers a road map for next steps.*

## EXECUTIVE SUMMARY

*Startup Genome annually publishes the Global Startup Ecosystem Report comparing ecosystems across the world. This report dives deeper into Miami's positioning compared with other ecosystems.*

*Startup Genome found that Miami is in an adolescence of sorts and identified four specific opportunities where continued investment would advance a virtuous cycle of venture growth:*

- **Local Connectedness:** *Improving Miami's local connectedness by placing founders at the center and better supporting their ability to build community with peers, investors and experts.*
- **Global Connectedness:** *Diversifying Miami's global reach past Latin America can improve the flow of global knowledge and increase scale-up potential.*
- **Funding:** *Miami can close its overall funding gap by focusing on pre-seed and seed funding.*
- **Talent:** *Miami can better retain and grow talent by giving more employees more opportunity to share in upside potential.*

*Miami is positioned to level up in the coming years. To achieve this will require targeted investments that translate momentum into intentional impact that drives Miami's growth as an innovation hub.*

# ***ECOSYSTEM LIFECYCLE ANALYSIS***

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# STARTUP GENOME MODELS

*Startup Genome works to enhance startup success and ecosystem performance around the globe by comparing and uncovering key gaps and prioritizing actions to address them.*

*Startup ecosystems evolve through different phases. Each phase has different features, resource characteristics and needs. Startup Genome's **Ecosystem Lifecycle Model**, as seen on the next slide, is based on several years of data-driven analysis. It describes how startup ecosystems evolve and explains what we see unfolding in those communities.*

*The Ecosystem Lifecycle Model fills two gaps in research and practice. It addresses the observation by Brown and Mason that most models of startup ecosystems were, until now, “lacking a time dimension ... the temporally unfolding and evolutionary nature” of ecosystems.<sup>1</sup> Second, and more important, the Lifecycle Model provides guidance to decision makers and actors in startup ecosystems, helping them prioritize and focus their activities.*

*The **Success Factor Model** breaks down the different parts, each of which functions at different levels across the lifecycle. It captures broad inputs as well as the cost of those resources. It measures what supports the performance of local startups. It uses deep analytics to measure serial entrepreneurship experience and explain ecosystem performance.*

*Startup Genome proposes that a virtuous cycle takes hold as startup building and scaling continue and as resources and networks are reinvested in community. Performance drivers are defined in two buckets: networks (local, global) and resources (funding, talent).*

<sup>1</sup> Brown, R., Mason, C. Looking inside the spiky bits: a critical review and conceptualisation of entrepreneurial ecosystems. *Small Bus Econ* **49**, 11–30 (2017). <https://doi.org/10.1007/s11187-017-9865-7>

# STARTUP GENOME MODELS KEY TERMS

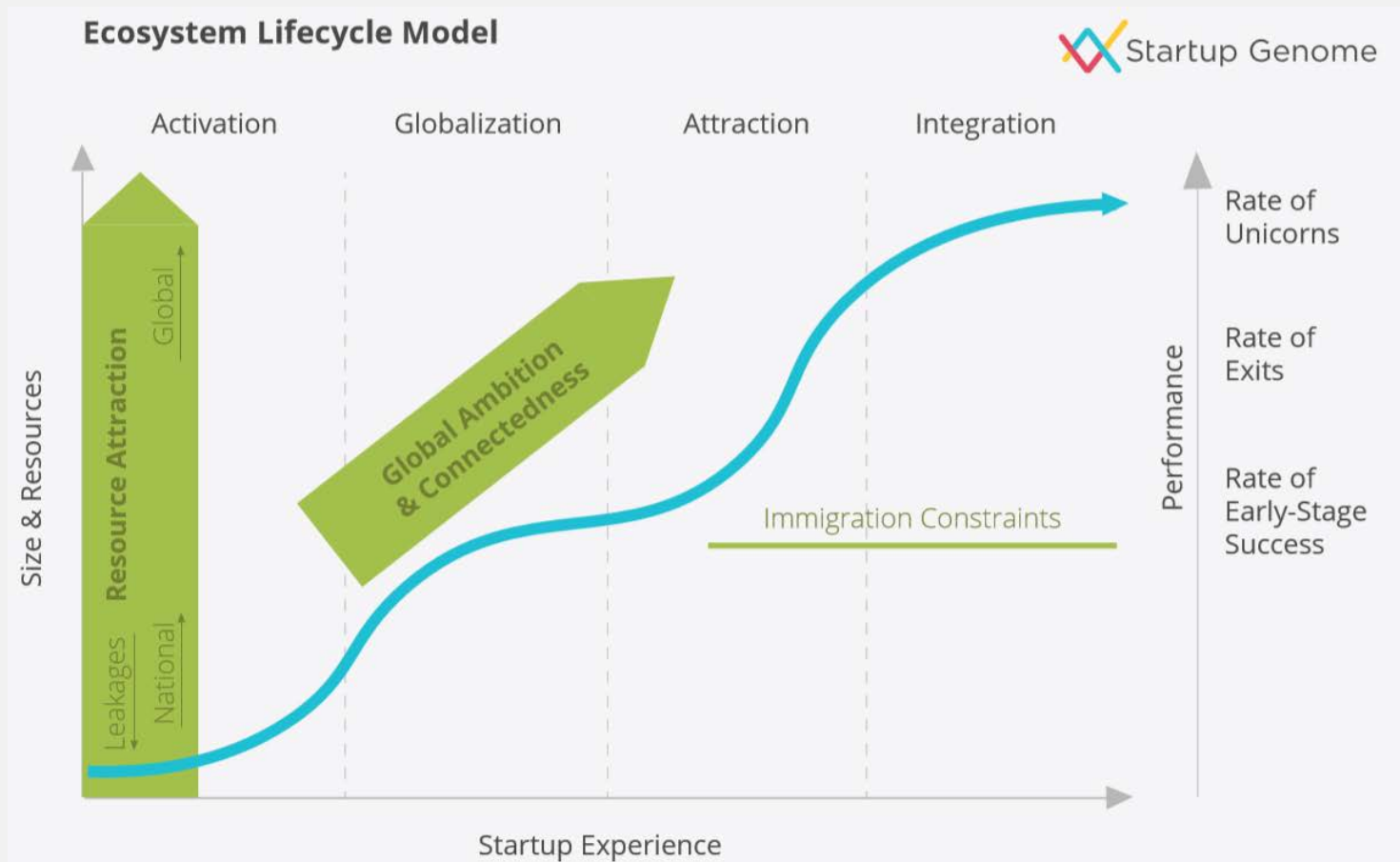
The **Ecosystem Lifecycle Model** has four phases, which are exemplified by the following:

- **Activation:** Limited startup experience, low startup output (1,000 or fewer startups). Resource leakage to later-stage top ecosystems makes it difficult to grow.
- **Globalization:** Increased experience leads to a series of regionally impressive exits (\$100 million+) but resources still leak to top ecosystems. Example cities include Atlanta and Barcelona.
- **Attraction:** Usually more than 2,000 startups, a series of globally impressive exits (\$1 billion+). In this phase, attraction of engineers is important, requiring proactive immigration policy. Example cities include Austin, Texas, and Stockholm.
- **Integration:** 3,000+ startups, high and self-sustainable global connectedness, leading-edge business models. Example cities include Boston and London.

Key components of the **Success Factors Model** include:

- **Global Connectedness:** The global fabric of knowledge, ideas, people and organizations, woven primarily by the quality of founder-to-founder relationships across communities.
- **Global Market Reach:** The extent to which startups sell to customers not only outside their home country but also outside the immediate continental region.
- **Local Connectedness:** The extent to which a startup community is tightly knit (facilitates the flow of knowledge) or not.

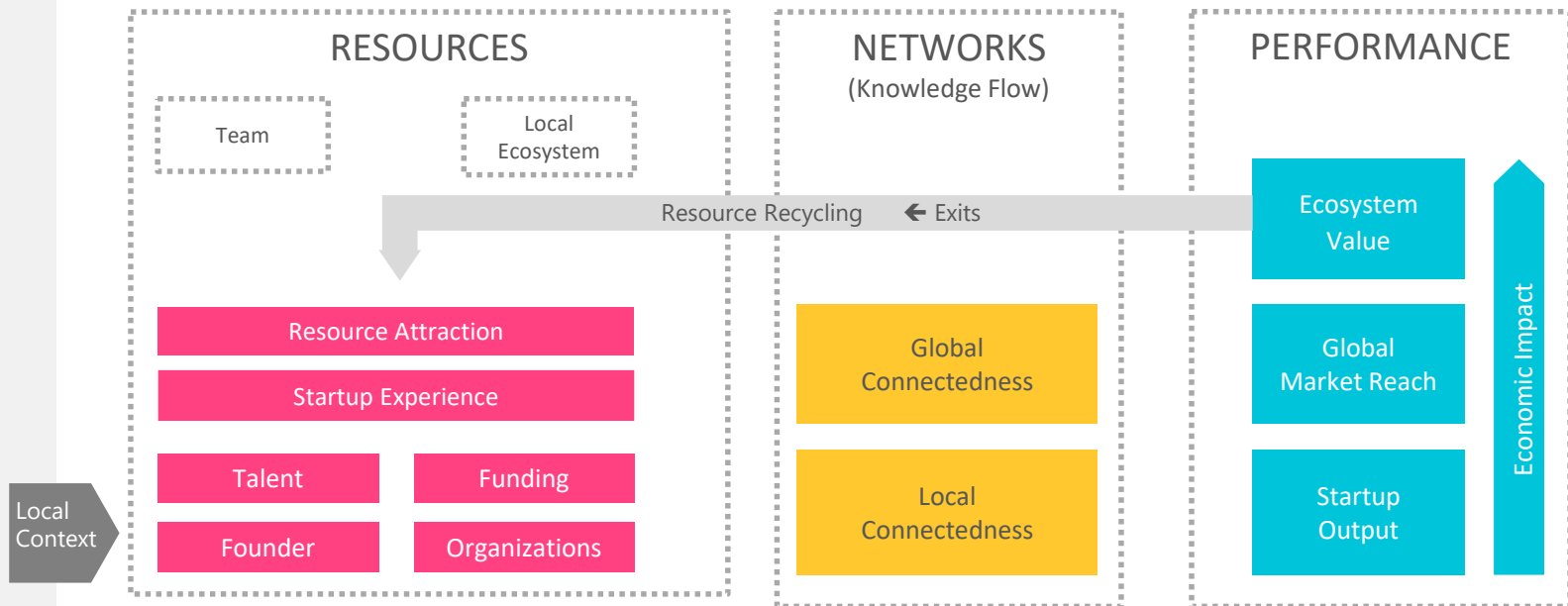
# STARTUP GENOME ECOSYSTEM LIFECYCLE MODEL





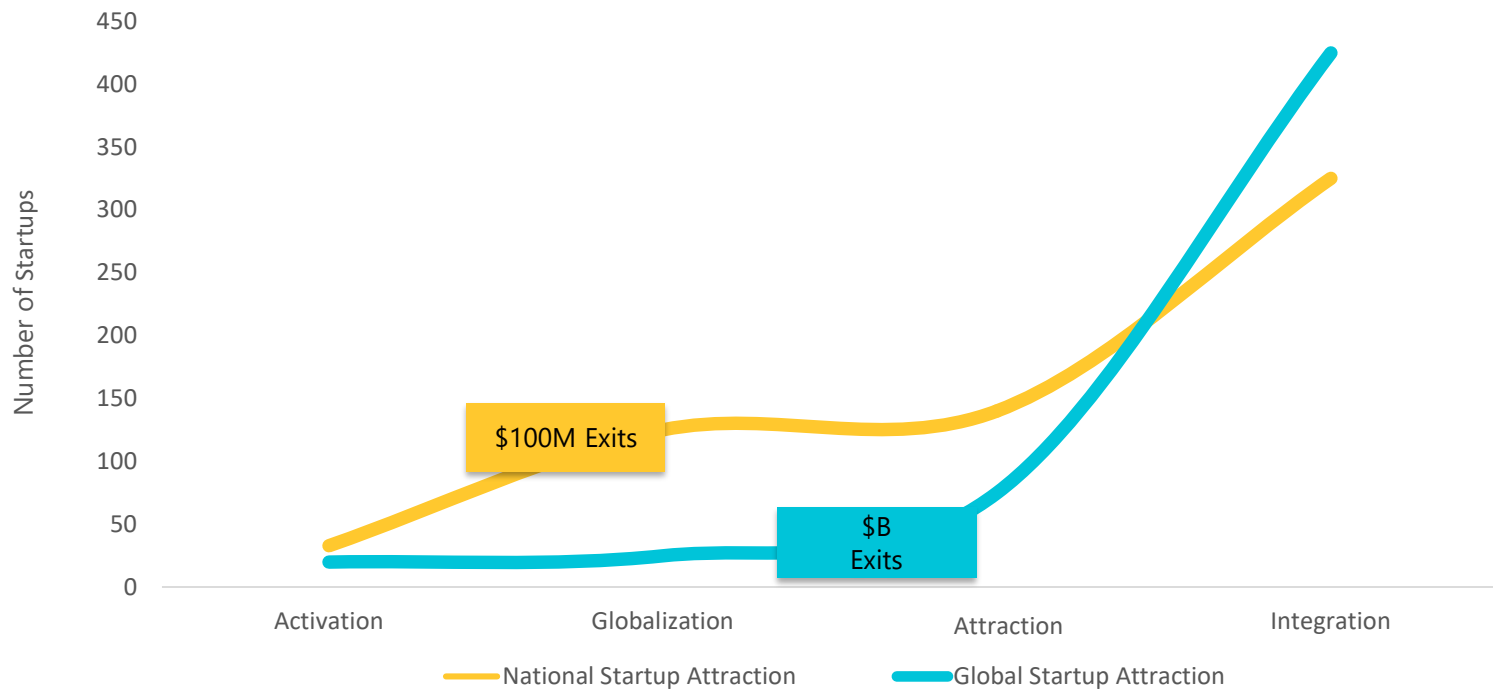
# ECOSYSTEM SUCCESS FACTORS MODEL

*Ecosystem performance is a function of a market's resources and networks. Both are required to grow a region's startup output and experience. In turn, as an ecosystem's value grows, so does a virtuous cycle of resource reinvestment.*



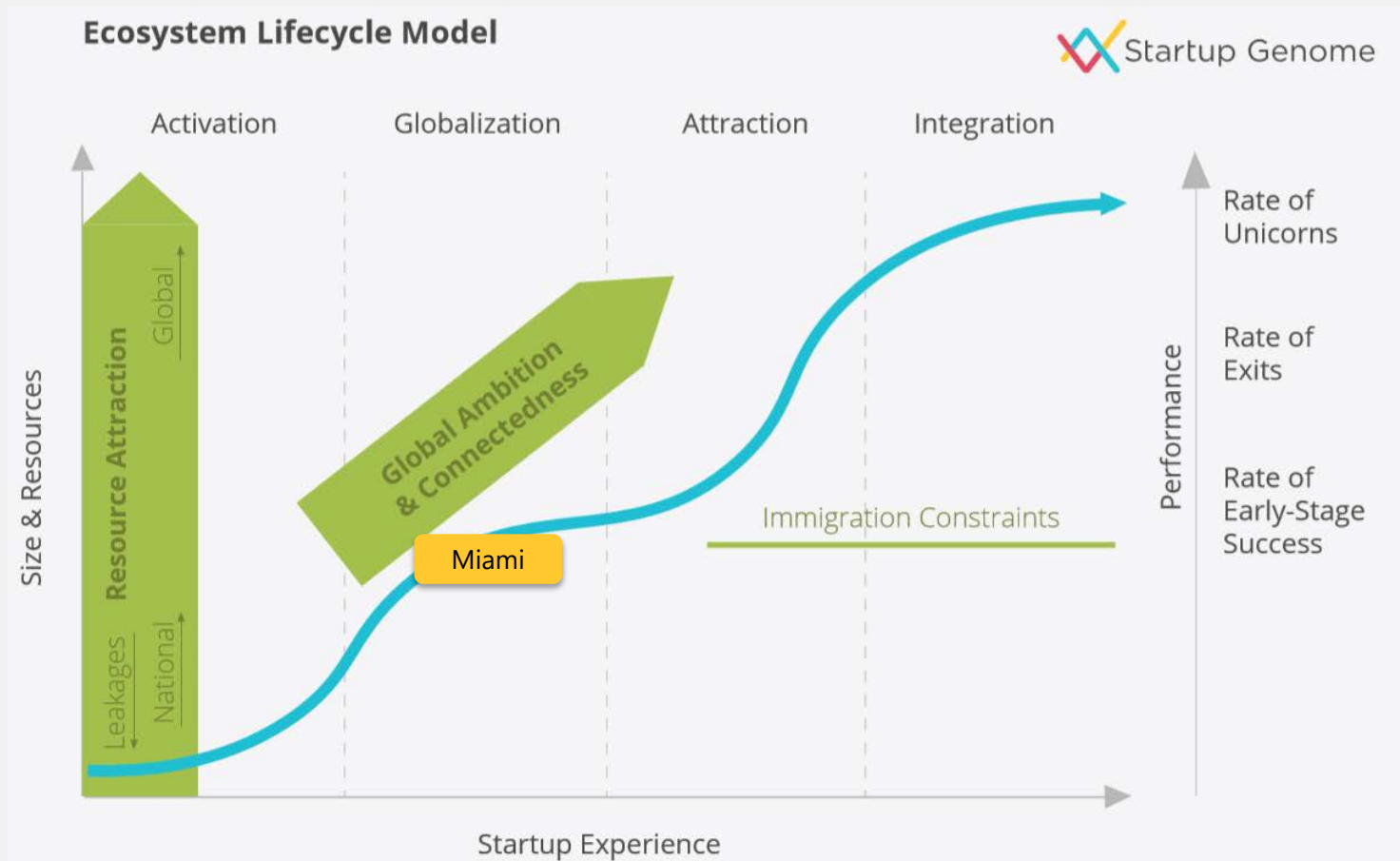
# A VIRTUOUS VENTURE CYCLE

A virtuous cycle of growth is activated when a series of large exits triggers an increase in resource attraction and activation.



# MIAMI: ECOSYSTEM LIFECYCLE MODEL

*Miami appears to be in the Globalization phase.*

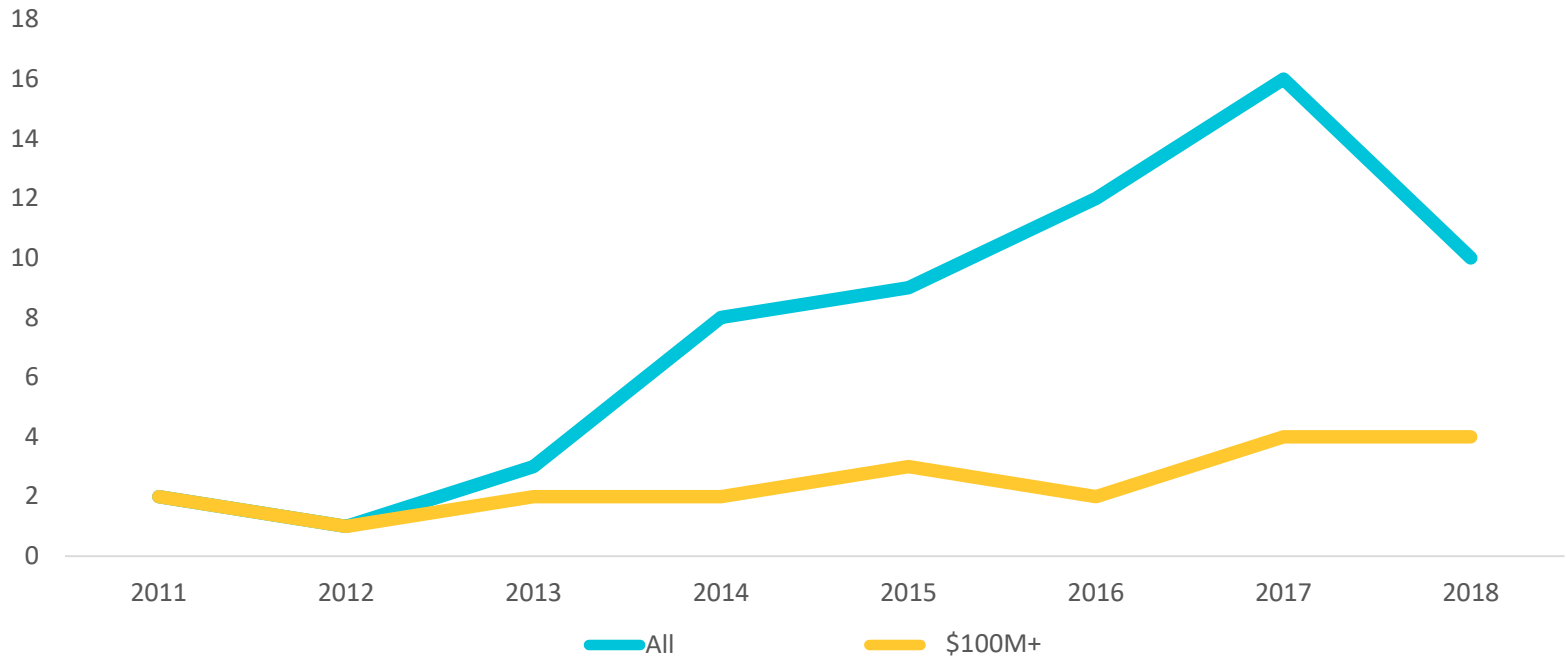


## GROWING MOMENTUM:

### Miami Exits

*Exit activity in Miami has seen steady growth over the past several years. Miami needs to continue to produce at least one tech exit over \$100 million each year.*

#### Greater Miami Exits<sup>1</sup>



<sup>1</sup> This analysis reflects PitchBook, Crunchbase and DealRoom data that was filtered by Knight Foundation for relevance. Funding and exit data are often incomplete or inconsistent because they rely on public records and/or self-reporting.

## COMPARISON CITIES

Throughout this presentation, Miami is compared with the cities below. Peers were strategically chosen to compare performance across different phases, but with contextual similarities in mind. To the left of Miami are national peers; to the right are global peers.

On the extreme ends are globally leading ecosystems:

- **Boston** is in the Integration phase and is included because of its strength in life sciences, where Miami shows promise.
- **London**, also in the Integration phase, was chosen for its leading position in fintech, where Miami has local strengths.

The second and sixth ecosystems are one phase ahead of Miami.

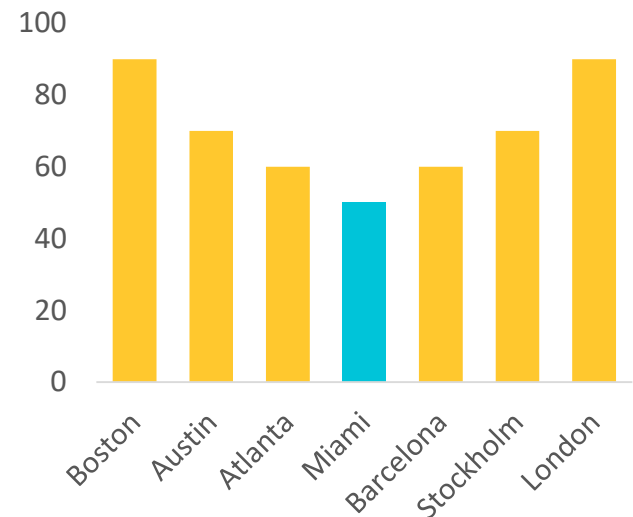
They highlight Miami's potential over the next 5 to 10 years:

- **Austin** is in the Attraction phase. It was chosen in light of its recent creation of a regular stream of scale-ups.
- **Stockholm**, also in the Attraction phase, shows the potential for smaller ecosystems to create global connections.

The ecosystems beside Miami are in the same phase as Miami:

- **Atlanta**, like Miami, is in the Globalization phase and has a similar ecosystem ranking and population size.
- **Barcelona** is also in the Globalization phase. Its global rank in the life sciences subsector is similar to that of Miami.

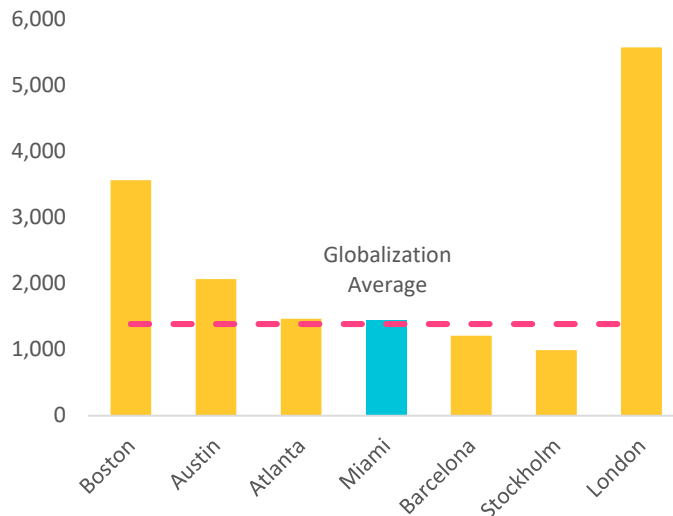
*How Miami measures up*



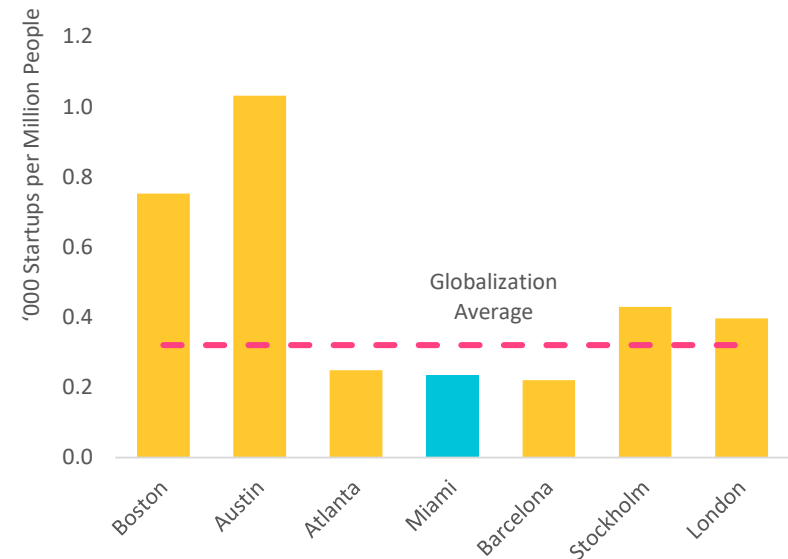
# A VIRTUOUS VENTURE CYCLE

*Miami exceeds Globalization levels of Startup Output, while Startup Density indicates room for organic growth.*

**Startup Output:** Estimate of the number of software startups in the ecosystem, excluding life sciences and hardware companies<sup>1</sup>



**Startup Density:** Number of startups in an ecosystem relative to its total population



<sup>1</sup> Life sciences and hardware companies were excluded because their costs and timetables are significantly different from software startups.

# MIAMI'S ECOSYSTEM CAN MATURE

## In Four Critical Areas

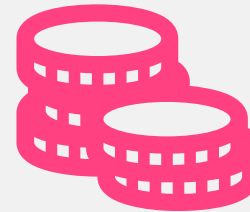
*Local  
Connectedness*



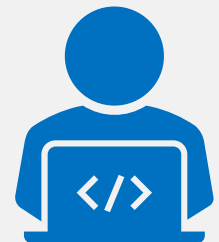
*Global  
Connectedness*



*Funding  
Access*



*Talent  
Access*



NETWORKS

RESOURCES

# ***NETWORKS***

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## *Local Connectedness*





*Local Connectedness is a measure of community between entrepreneurs, investors and experts within an ecosystem.*

*It captures the extent to which founders and others in a startup community not only interact but also support one another.*

*Ecosystems with high levels of Local Connectedness see higher levels of individual startup success, in the form of faster rates of revenue and employment growth.*

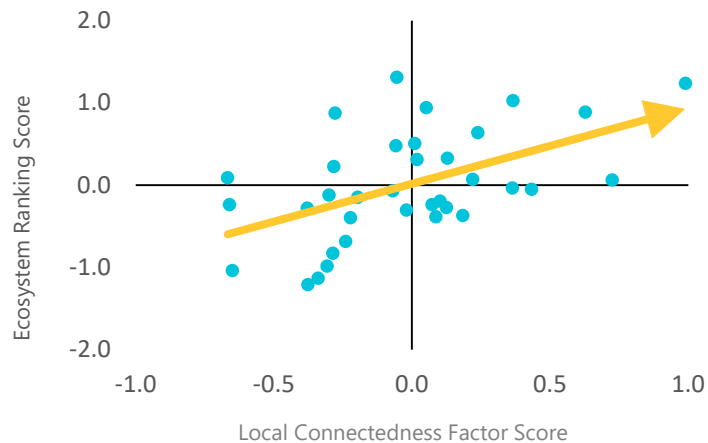
### **Key Insights**

- *Compared with peer communities, Miami demonstrates a lower number of relationships between founders, investors and mentors.*
- *Since it is not related to size, shaping the community's culture early on is important and will pay off for years to come.*

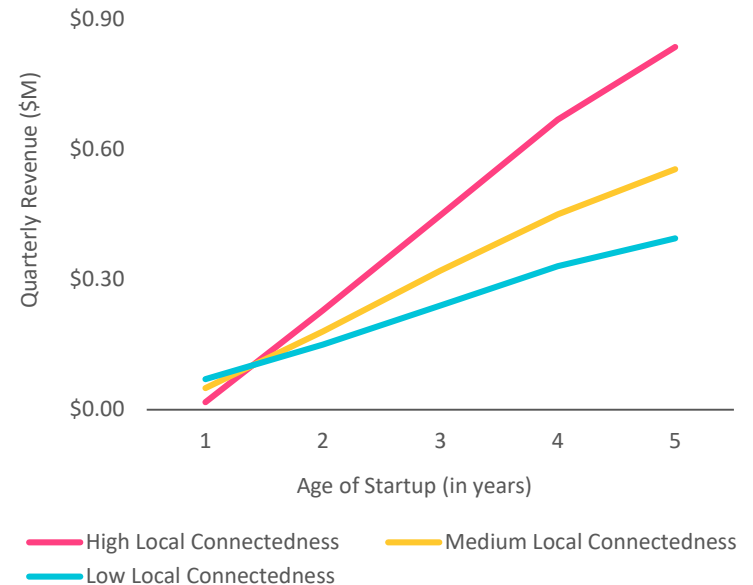
## A CONNECTED COMMUNITY

Based on a multivariate analysis across nearly 100 metrics, higher Local Connectedness is directly linked with the success of an ecosystem. There is a 53% correlation between Local Connectedness and the ecosystem's rank. Startups with high Local Connectedness see 2x revenue growth.

**Local Connectedness and Ecosystem Ranking**



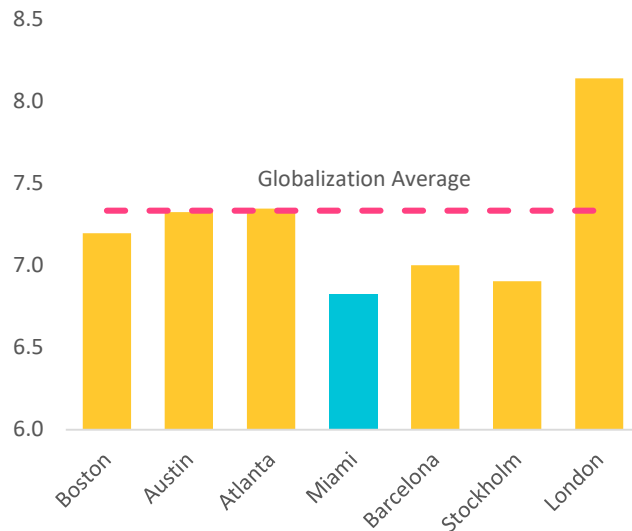
**Local Connectedness, Quarterly Revenue and Startup Age**



# A CONNECTED COMMUNITY

*Miami can benefit from a more closely knit, cohesive community.*

## Local Connectedness Index



## Local Connectedness: Subfactors

*The next few slides will detail how Miami performs on the following components of Local Connectedness:*

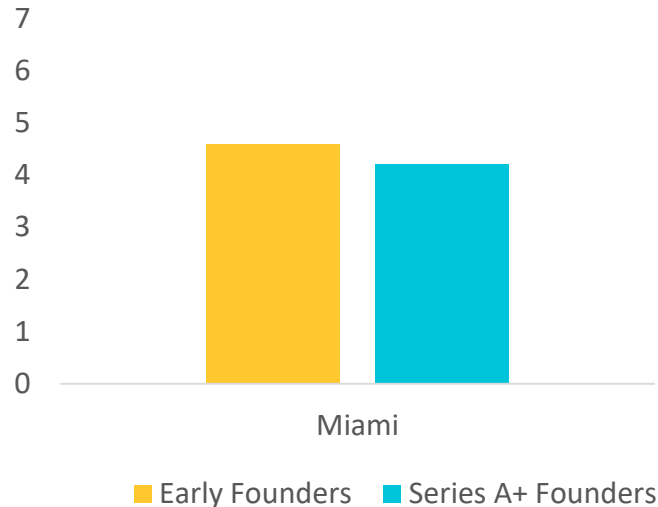
- *Sense of community (“people helping people”)*
  - *Founders helping founders*
  - *Local investor and expert help*
- *Number of founder relationships*
  - *With their peers*
  - *With investors*
  - *With experts*

Local Connectedness metrics were calculated using founder and executive survey responses from 2018 (first year of introduction) and 2019.

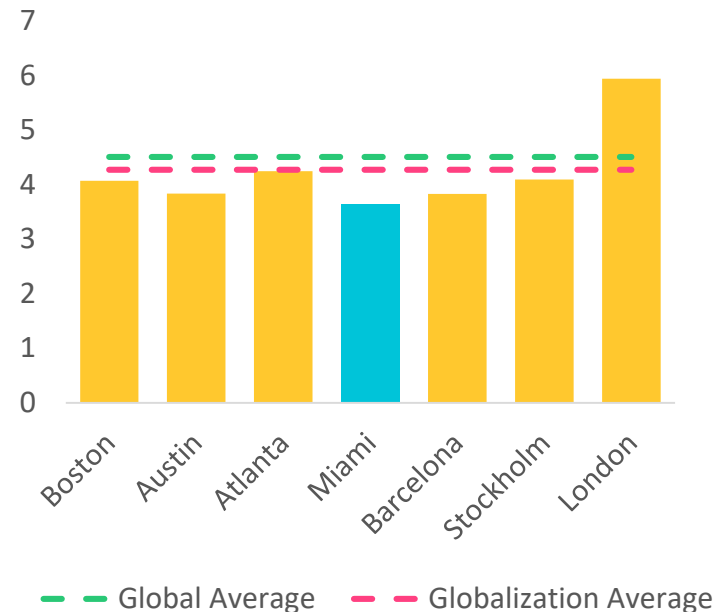
## SENSE OF COMMUNITY

*Experienced entrepreneurs in Miami show a lower rate of getting help from other founders, experts and investors. This was confirmed by interviews with later-stage and more experienced founders.*

**Founders Helping Founders**



**Local Investor and Expert Help**

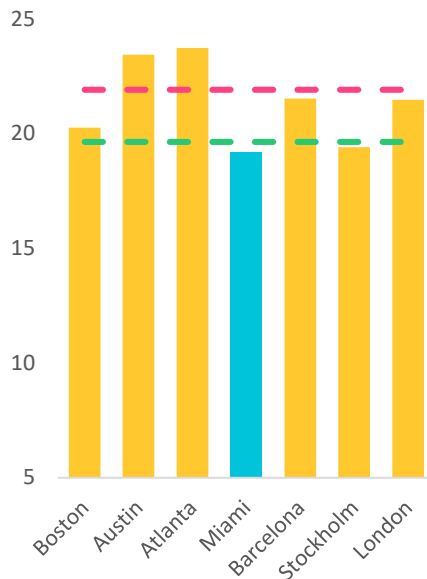


*These charts reflect Startup Genome's scoring index for these questions. The Global Average includes all startup ecosystems studied. The Globalization Average includes all ecosystems in the Globalization phase with Miami.*

# FOUNDER RELATIONSHIPS

*Miami's less connected community is reflected in the fact that founders have fewer relationships with peers, investors and experts.*

**Relationships with Peers**



**Relationships with Investors**



**Relationships with Experts**



— Globalization Average — Global Average

# ***NETWORKS***

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## *GLOBAL CONNECTEDNESS*



*Global connectedness measures how tied in a startup community is to the global flow of knowledge from top ecosystems (e.g., San Francisco, London, Beijing) and is a key driver in realizing an ecosystem's scale-up potential.*

*Miami's global connectedness is on par with other U.S. ecosystems, but low when focused purely on connections to top ecosystems globally.*

### **Key Insights**

- *Miami startups have above-average access to top accelerators.*
- *Miami's international connections and sales are driven primarily by Latin America.*

## GOING GLOBAL

Using founder and executive survey responses from 2017 to 2019, we see that startups that go global early see their revenue grow 2X faster, attract larger funding rounds and achieve scale more frequently. These regression lines showing the difference in how revenue increases over time for the globally focused are based on thousands of startups.

### **B2B startup revenue growth for globally focused compared with nationally focused startups**



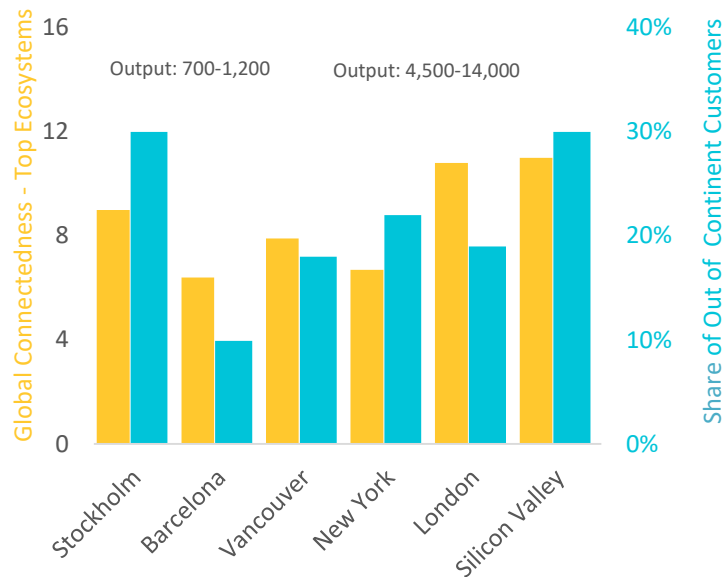


# GOING GLOBAL

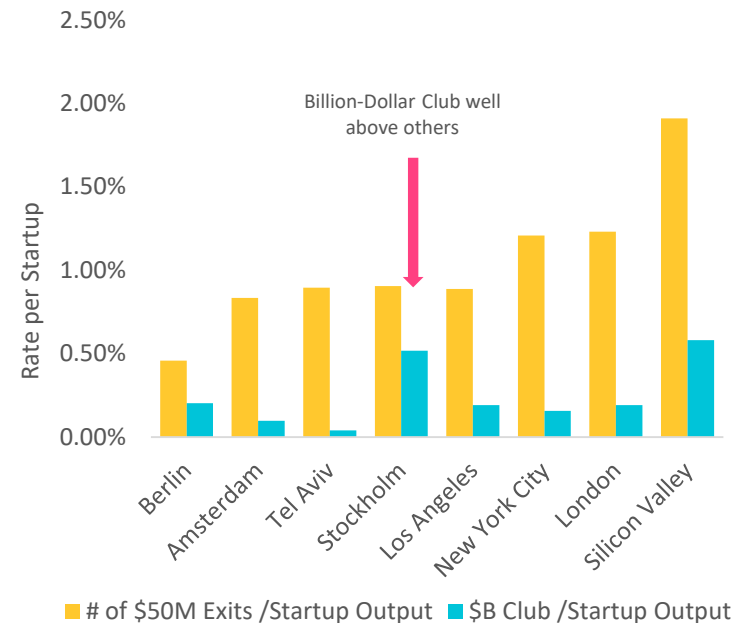
## The Stockholm Case Study

Why does Stockholm produce scale-ups at such a high rate? Despite its size, Stockholm startups have high Global Connectedness and Global Market Reach.

**Global Connectedness vs. Global Market Reach**

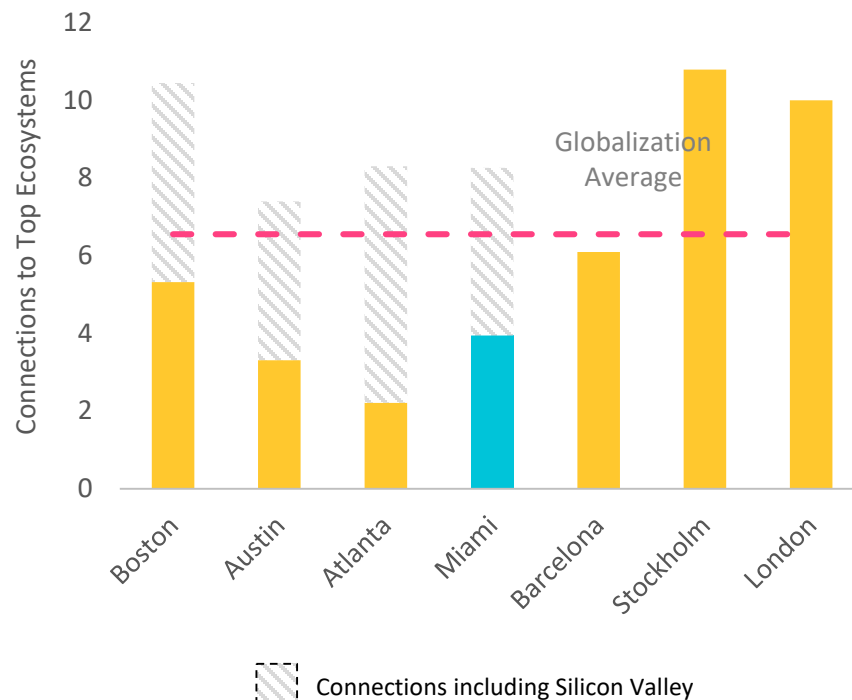


**Number of Exits and Unicorns**



# CONNECTIONS TO TOP ECOSYSTEMS

*Miami's Global Connectedness is about average when compared with U.S. ecosystems, but low when focusing purely on international connections.*



## Global Connectedness: Subfactors

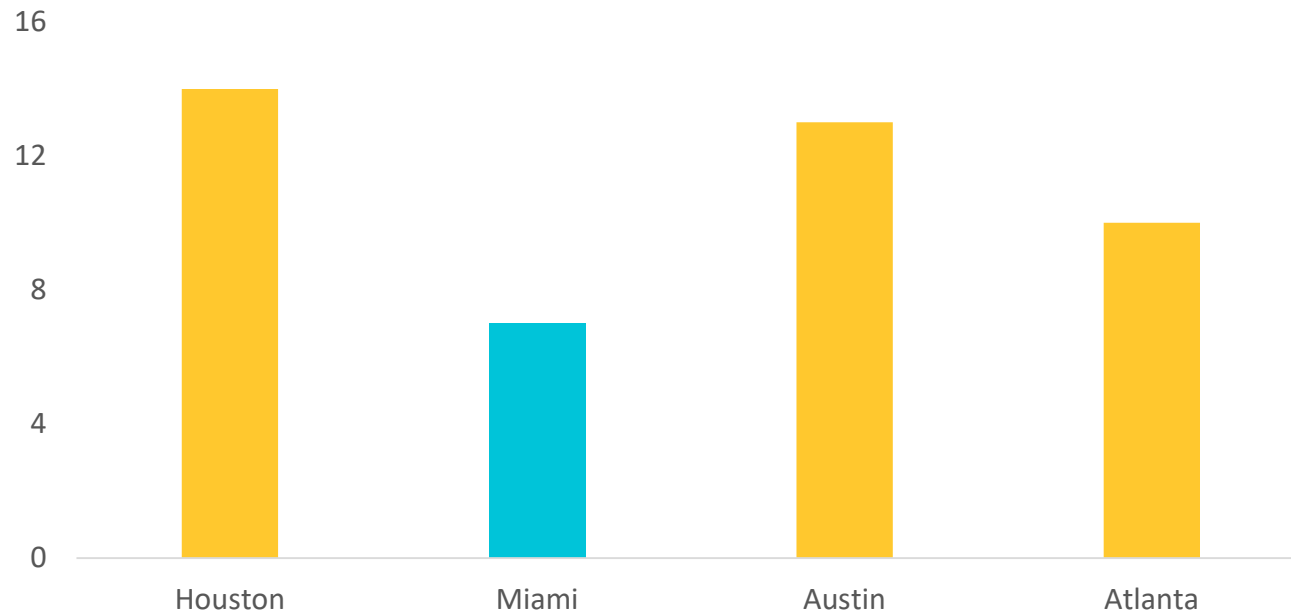
*The next slides will detail how Miami performs on the following components of Global Connectedness:*

- Global Venture Capital
- Global Accelerators
- Global Networking
- Entrepreneur Attraction
- Global Market Reach

## GLOBAL VENTURE CAPITAL

*Miami has fewer venture capital firms from top ecosystems than its peers. These can be a source of global knowledge fostering Global Market Reach. Fewer firms can also lead to a gap in Series A round size and numbers and therefore the rate of early startups.*

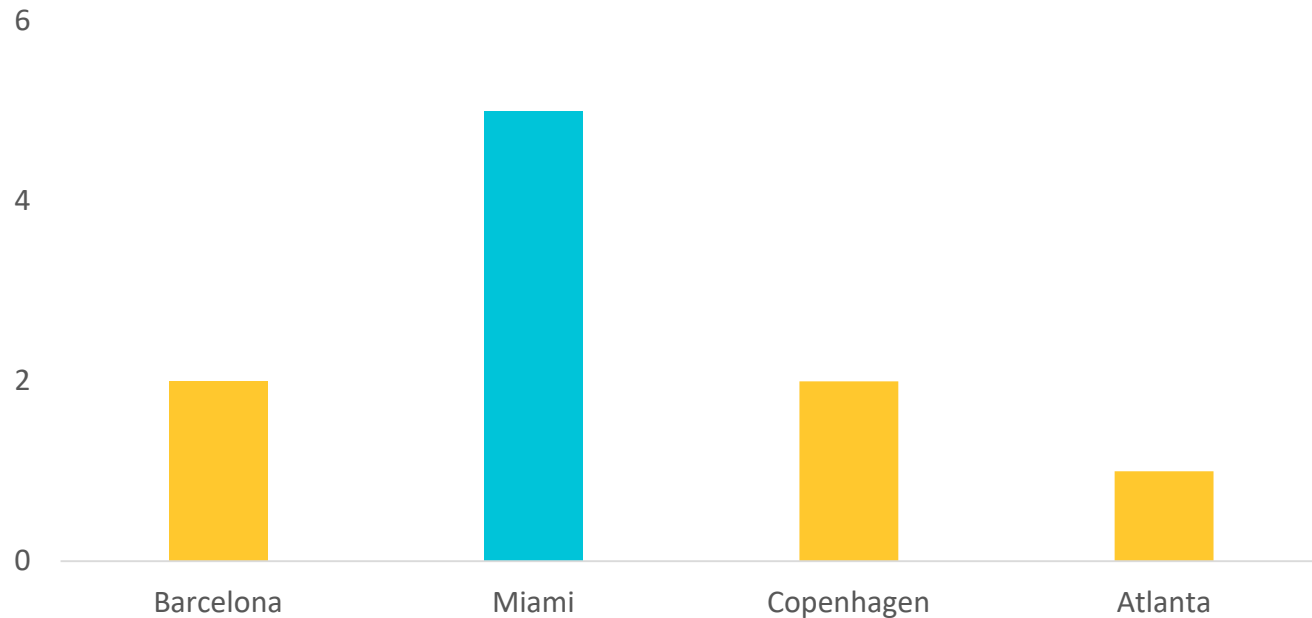
**Number of VC firms from top ecosystems**



## GLOBAL ACCELERATORS FROM TOP ECOSYSTEMS

*Miami startups have good access to globally oriented accelerators. Less than half of Miami's startup support organization leaders have experience as founders or startup executives, which is typical of earlier stage ecosystems.*

**Number of accelerators from top ecosystems**

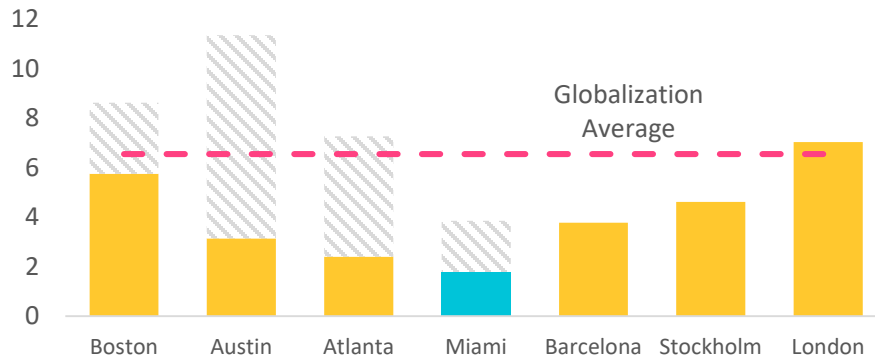


Source: PitchBook

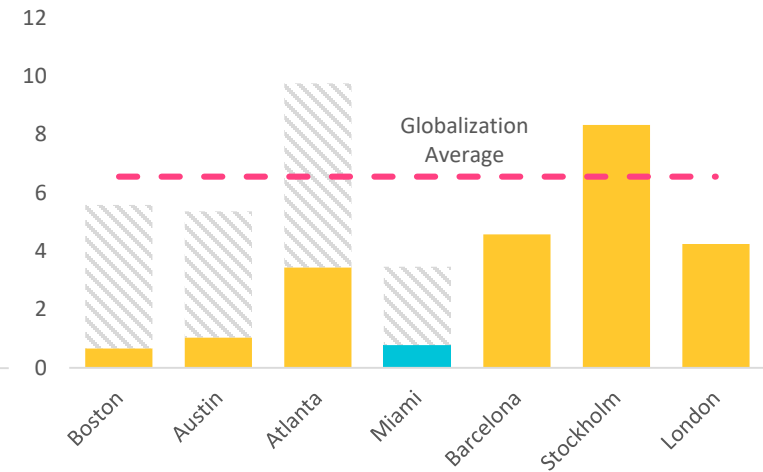
# GLOBAL NETWORKING


*Miami has room for growth in connections between local entrepreneurs and peers from top ecosystems. Improving founder relationships with other leading ecosystems could expand Miami's Global Market Reach.*

## Local Meetings



## International Travel



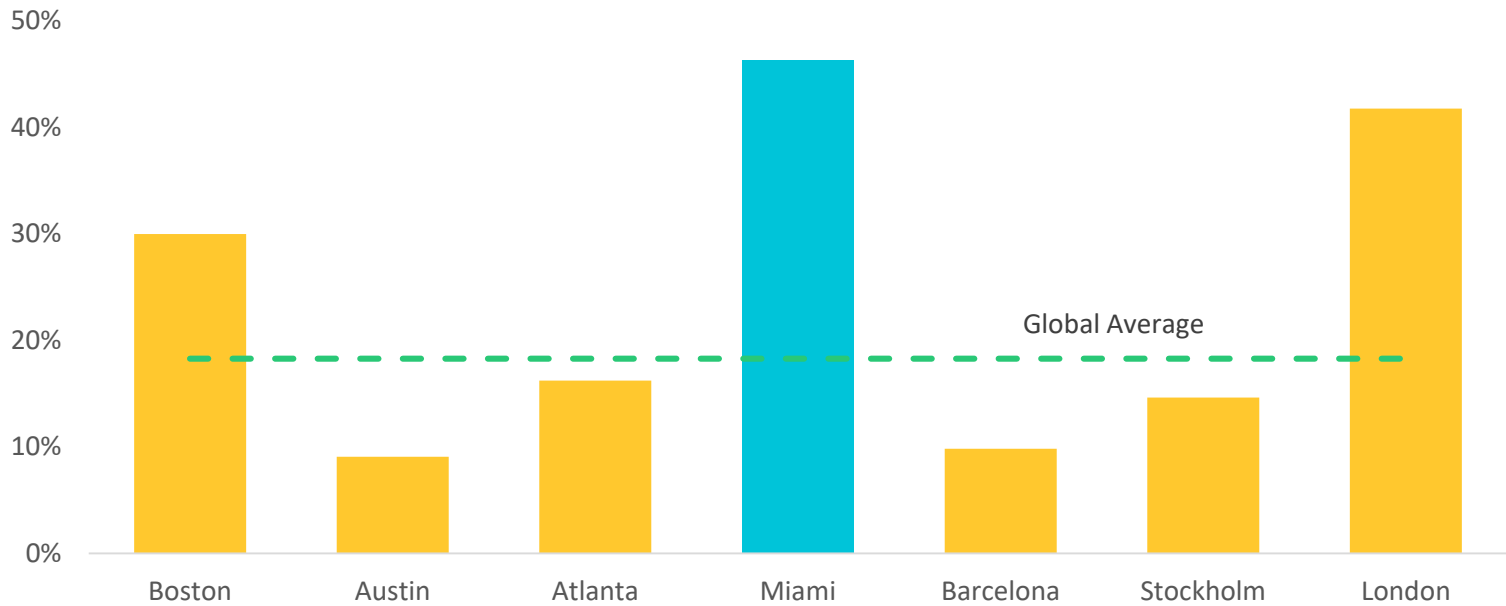
 Connections including Silicon Valley

*Local Meetings: Average number of startup leaders from top ecosystems that entrepreneurs from Miami ecosystem have met locally.*

*International Travel: Average number of startup leaders who have traveled 2 or more times to top ecosystems in the past 2 years.*

## ENTREPRENEUR ATTRACTION

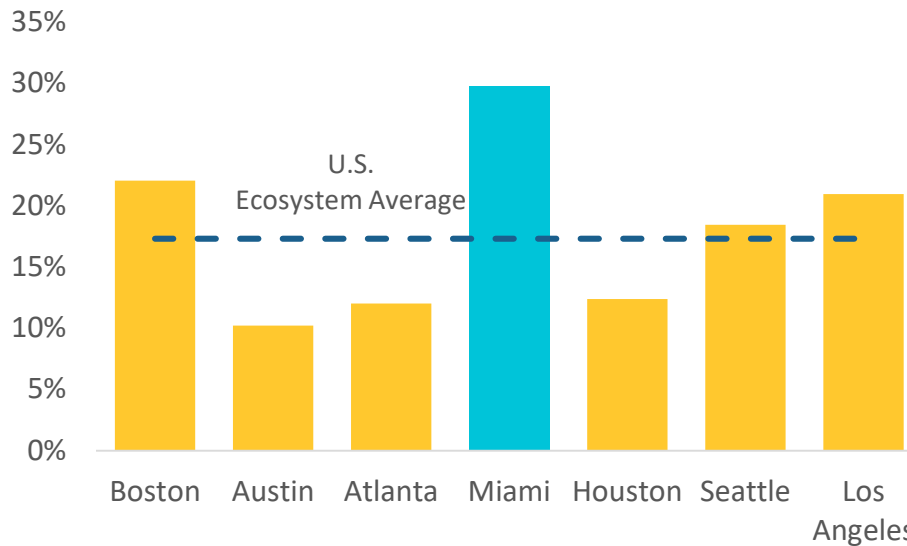
*Miami has a high proportion of immigrant founders compared with peers.*



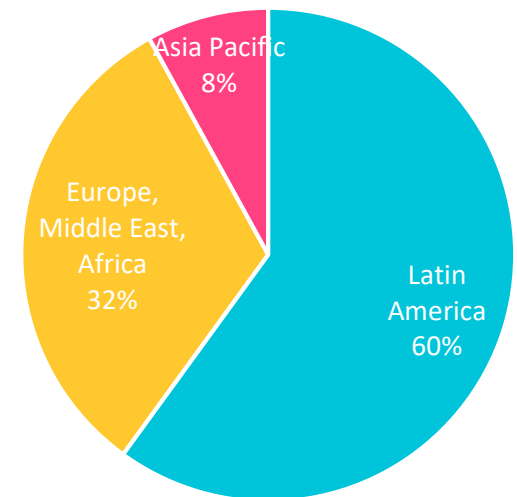
## GLOBAL MARKET REACH

*Miami startups have a high share of international customers. However, its sales and international connections are heavily skewed toward Latin America, which does not have any top ecosystems.*

**Share of Foreign Customers**

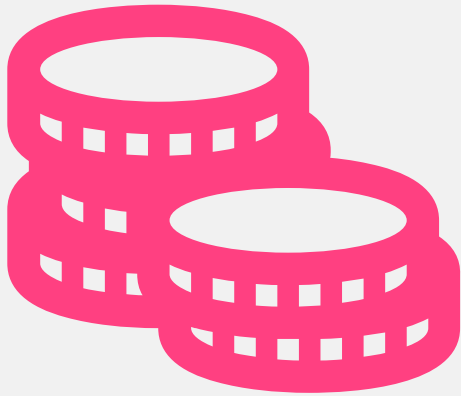


**International Connections**



# ***RESOURCES***

## *Funding*





*Capital is the lifeblood of an early-stage venture, be it in the form of investment or revenue.*

*Miami has seen a consistent rise in venture capital deployed in market.*

*This section takes a deeper dive into early-stage funding in Miami, where there might be gaps, and how those gaps could get filled.*

*Funding gaps at any point in a startup lifecycle can have negative downstream impacts.*

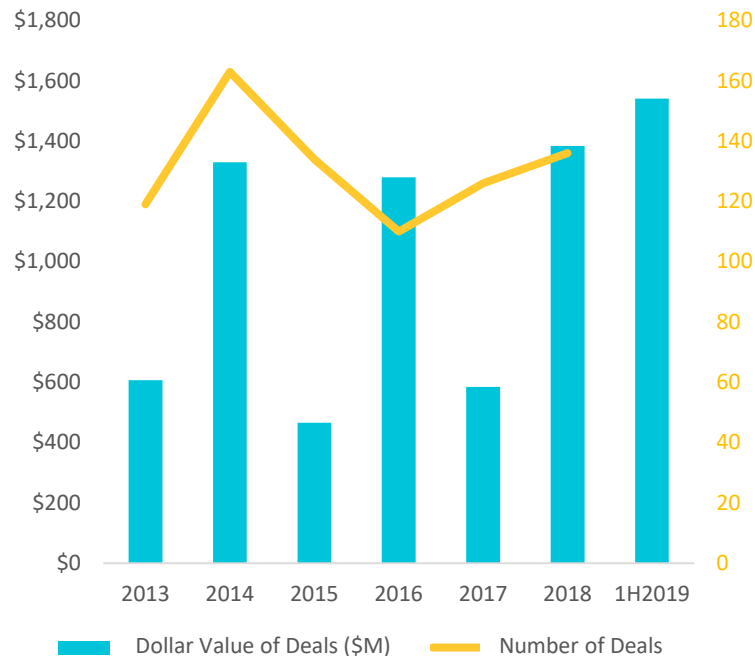
### **Key Insights**

- *Miami shows a need for more early-stage funding for a market of its size. Miami's Series A funding gap is inherited from its seed funding gap.*
- *Miami founders also bootstrap their companies at a higher level than entrepreneurs in other cities and indicate less familiarity with where to find external capital.*

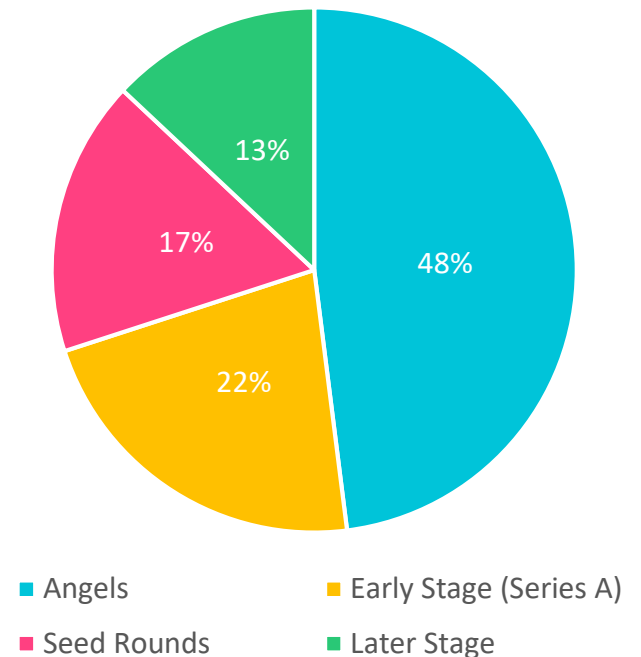
# GREATER MIAMI VENTURE ACTIVITY

*South Florida has attracted increasing amounts of venture capital in the past several years, with the first half of 2019 surpassing the total amount of funding the region drew in 2018.*

**Deal Flow Through the Years**



**2018 South Florida Funding Rounds**

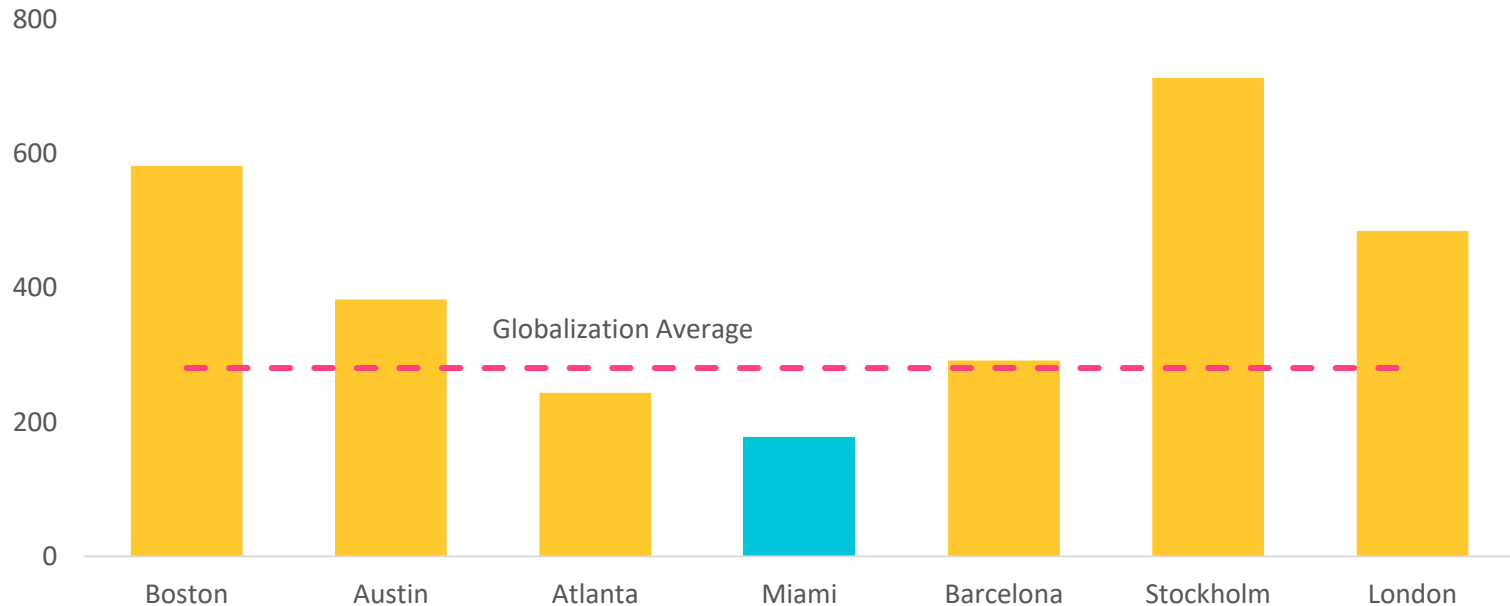


Source: eMerge Americas 2019 Mid-Year Report, analysis of PitchBook

## EARLY-STAGE FUNDING GAP

*While the overall trajectory of venture funding is positive, Miami shows a need for more early-stage funding for a market of its size.*

**Early-Stage Funding per Startup (\$K) \***  
**(2016-2018 H1)**

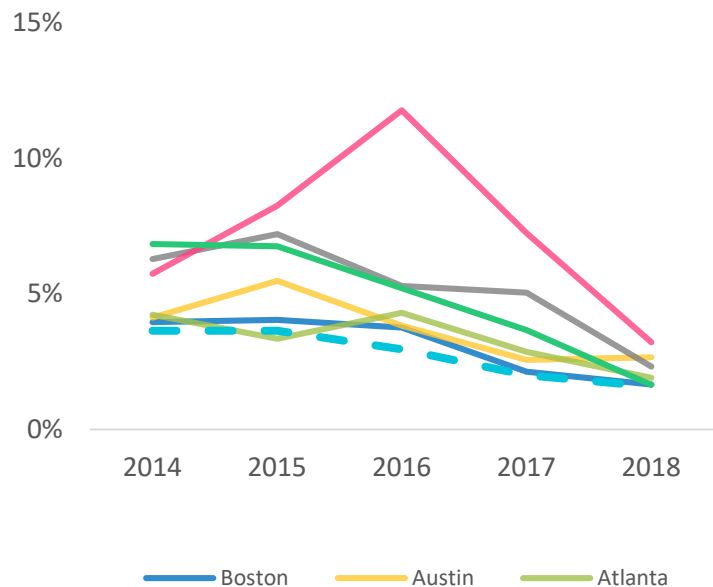


\* Not based on Startup Genome data. Based on Crunchbase, PitchBook and DealRoom and subject to normal issues with funding data.

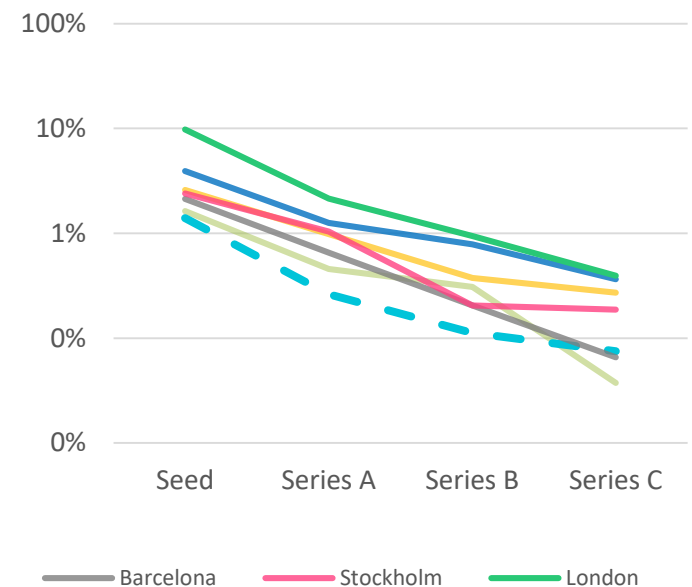
## PRIMARY FUNDING GAP

*The proportion of seed-funded startups in Miami is low and is a primary factor in the ecosystem's low scale-up rate.*

**Proportion of Seed Funding Rounds**  
(# of Seed Rounds / # of Startups)



**Funding Attrition Rate (2014-16)**  
Funding Rounds Across Stages (# of Rounds / # of Startups)

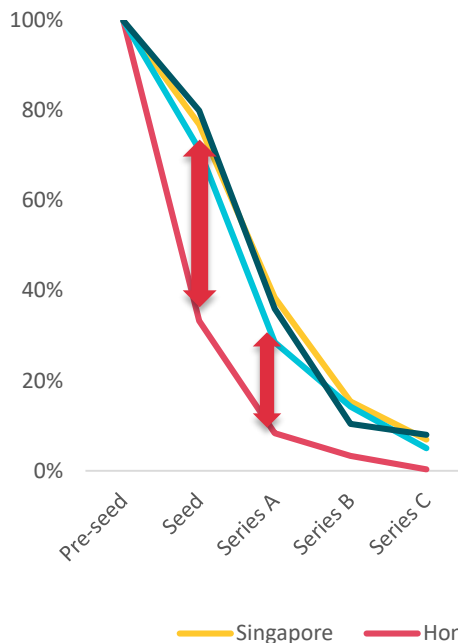


# FUNDING GAPS

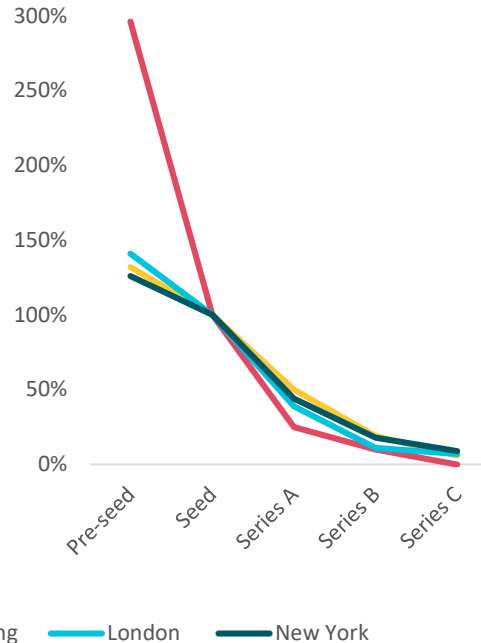
## The Hong Kong Case Study

*By first addressing pre-seed and seed stage funding gaps, downstream gaps will also be narrowed.*

**Attrition Funnel: Normalized at Pre-Seed**



**Attrition Funnel: Normalized at Seed**



*Hong Kong has a robust capital market, yet it suffers from a large seed gap.*

*A funding gap at the Series A stage is also present.*

*At first glance, these gaps might appear to be independent of each other and therefore inspire intervention at each stage.*

*When normalizing at the Seed stage, we see that 75% of the Series A gap is due to the upstream seed gap.*

*It is preferable to first address upstream funding gaps, as this also has positive effects downstream in later stages of funding.*

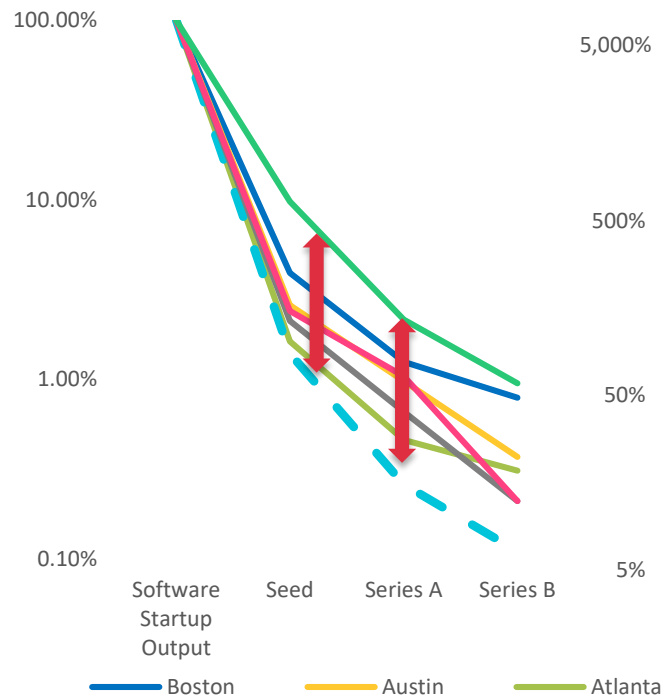
Note: For the normalization analysis, Startup Genome indexed the number of rounds (at Pre-seed in the left chart, Seed in the chart on the right) to 1 and compared the ratios with that index: downstream only in the left chart, upstream and downstream in the right chart.

# FUNDING GAPS

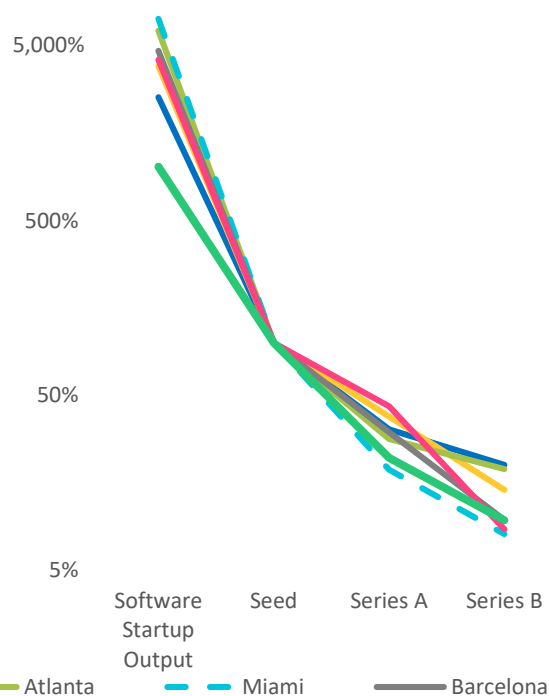
Miami

*Miami's Series A funding gap is largely a result of underfunding in the pre-seed and seed stages of a startup's life. By addressing these funding deficits first, gaps at the Series A level and beyond will see noticeable improvement.*

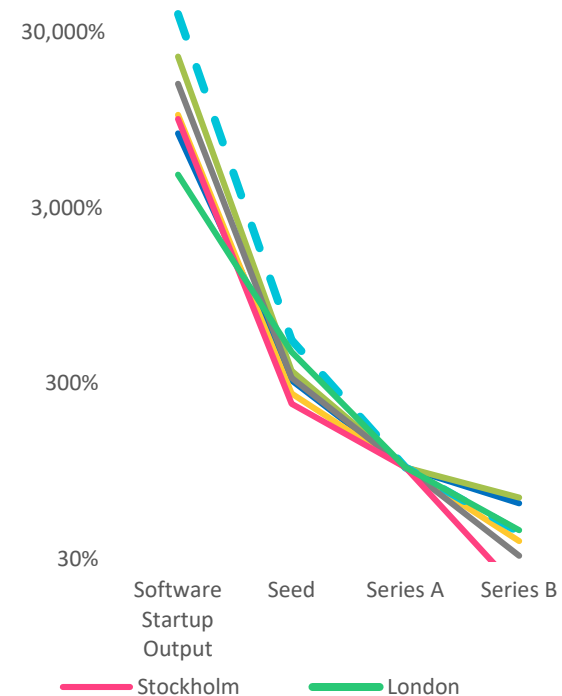
**Attrition Funnel: Normalized at Software Startup Output**



**Attrition Funnel: Normalized at Seed**



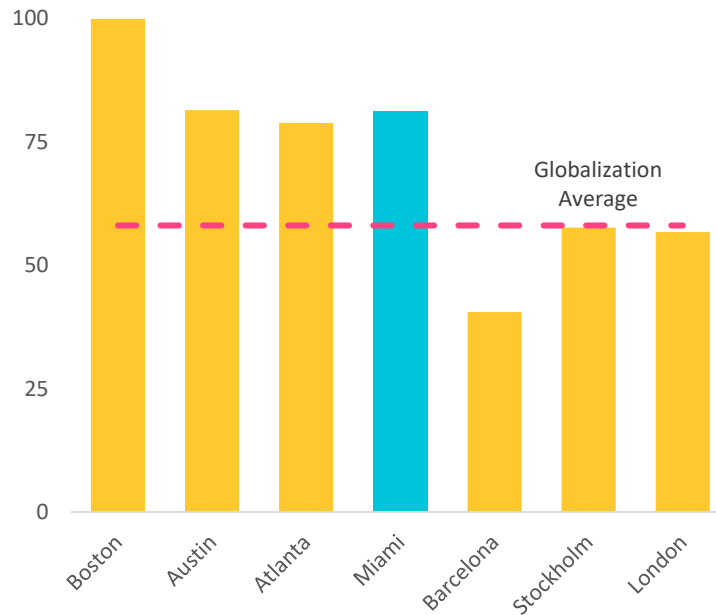
**Attrition Funnel: Normalized at Series A**



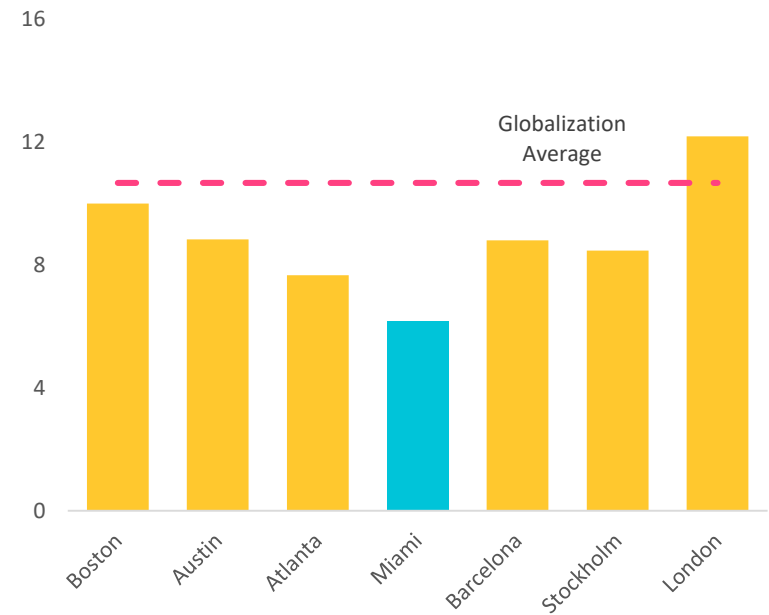
## TECH SALARIES

*Miami's funding gap is amplified by technical FTE salaries that are comparable to those in peer cities. This means that startups hire fewer technical FTEs, as there are no cost savings to mitigate the effects of lower funding.*

**Average Engineer Salaries (\$K)**



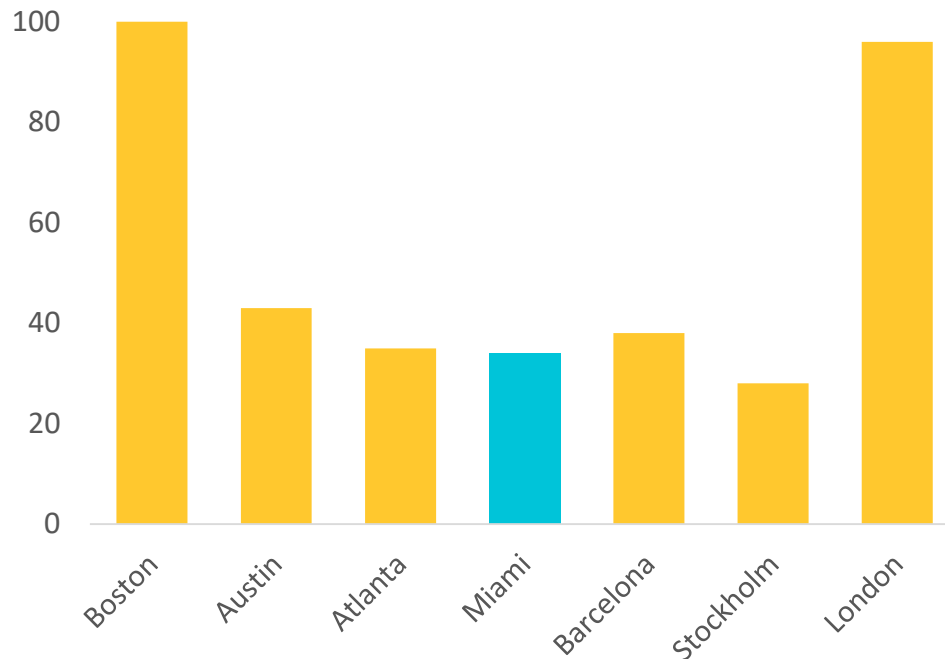
**Number of Technical FTEs Funded**



# INVESTOR EXPERIENCE

*Strengthening early-stage investor knowledge and experience in the ecosystem will help correct the seed and pre-seed gaps.*

**Investor Experience Index (0-100)<sup>1</sup>**



- Many angels in the ecosystem do not have backgrounds in technology.
- Many angel groups in the ecosystem do not lead rounds.
- Low experience in the ecosystem underscores the need to build investor know-how.

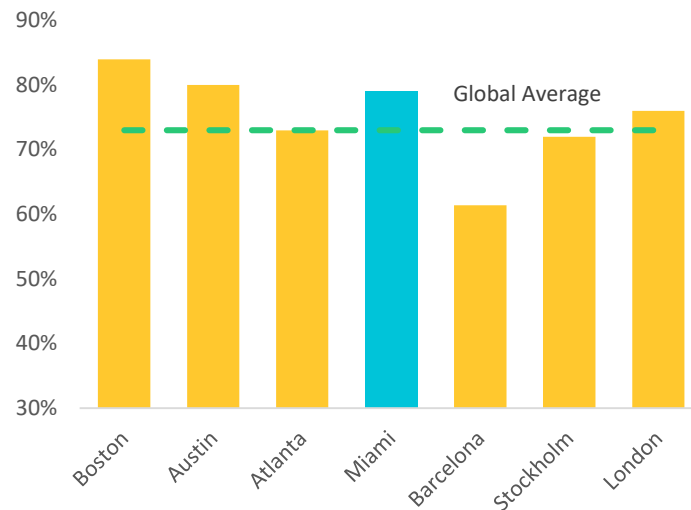
<sup>1</sup> Measure of the current level of investor experience in the ecosystem. Consists of number of investors with above-average exit rates (80%), number of investors with exits (10%), average years of experience of investors (5%) and average exit ratio for portfolios (5%). The cities in this chart are all in the Globalization phase, a better comparison cohort for investor experience.



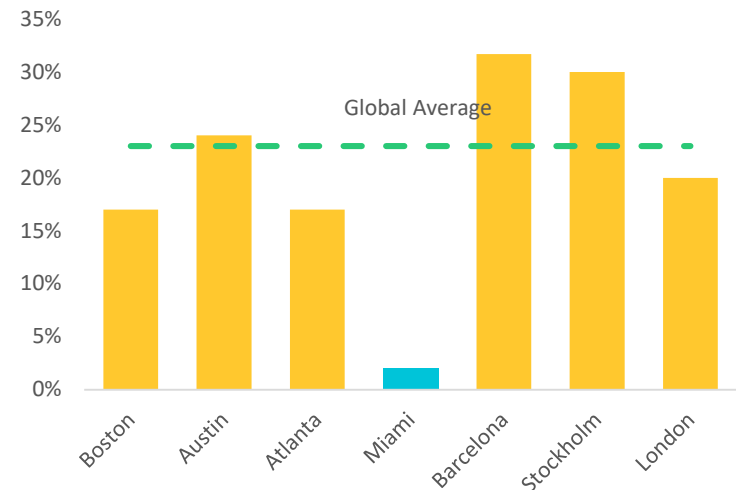
# ACCESSING EARLY-STAGE CAPITAL

*Strengthening early-stage investor knowledge and experience in the ecosystem will help correct the seed and pre-seed gaps.*

**Founders with Personal Financial Support at Formation**



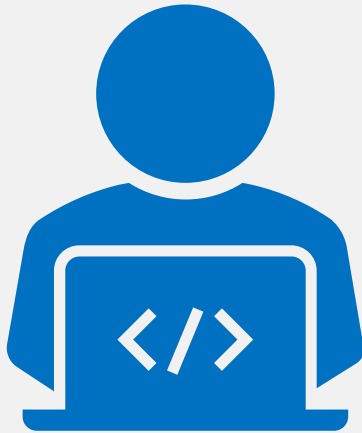
**Founders Aware of External Capital Sources at Formation**



# ***RESOURCES***

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## *Talent*



*People are the cornerstone of all ventures, from the founders and team members to the investors and advisers.*

*Startup Genome's research has found a close correlation between an ecosystem's talent base and its performance.*

*This section measures two aspects of Miami's startup talent base:*

- *How much startup experience founding teams bring to new ventures and how they adopt best practices associated with startup success.*
- *The accessibility, quality, and cost of expertise, specifically for engineering and growth talent.*

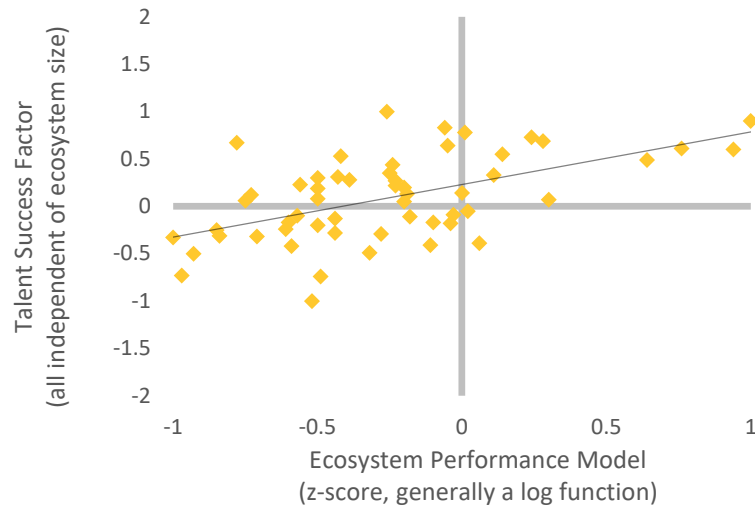
### **Key Insights**

- *When compared with other ecosystems, few Miami startups give stock options to all their employees.*
- *Among global ecosystems, Miami ranks 7th for share of female founders at 19%.*

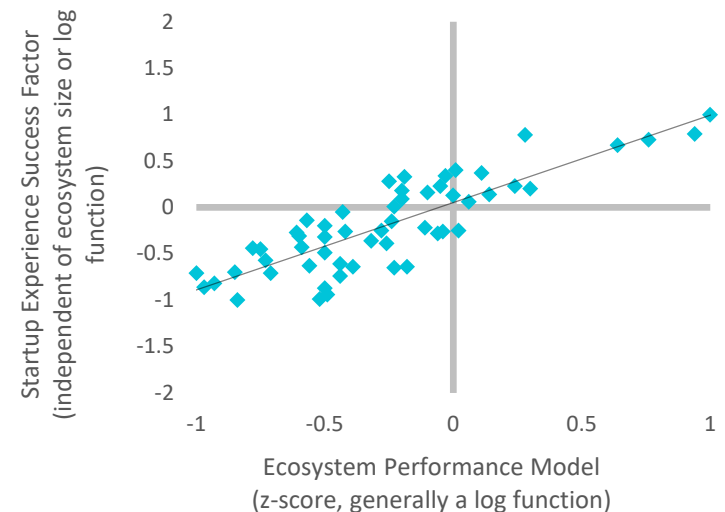
# TALENT + EXPERIENCE PERFORMANCE IMPACTS

Across our research, the quality of talent and the amount of startup experience that talent has closely correlates with a startup ecosystem's overall performance.

**Talent Success Factor vs.  
Ecosystem Performance Model**



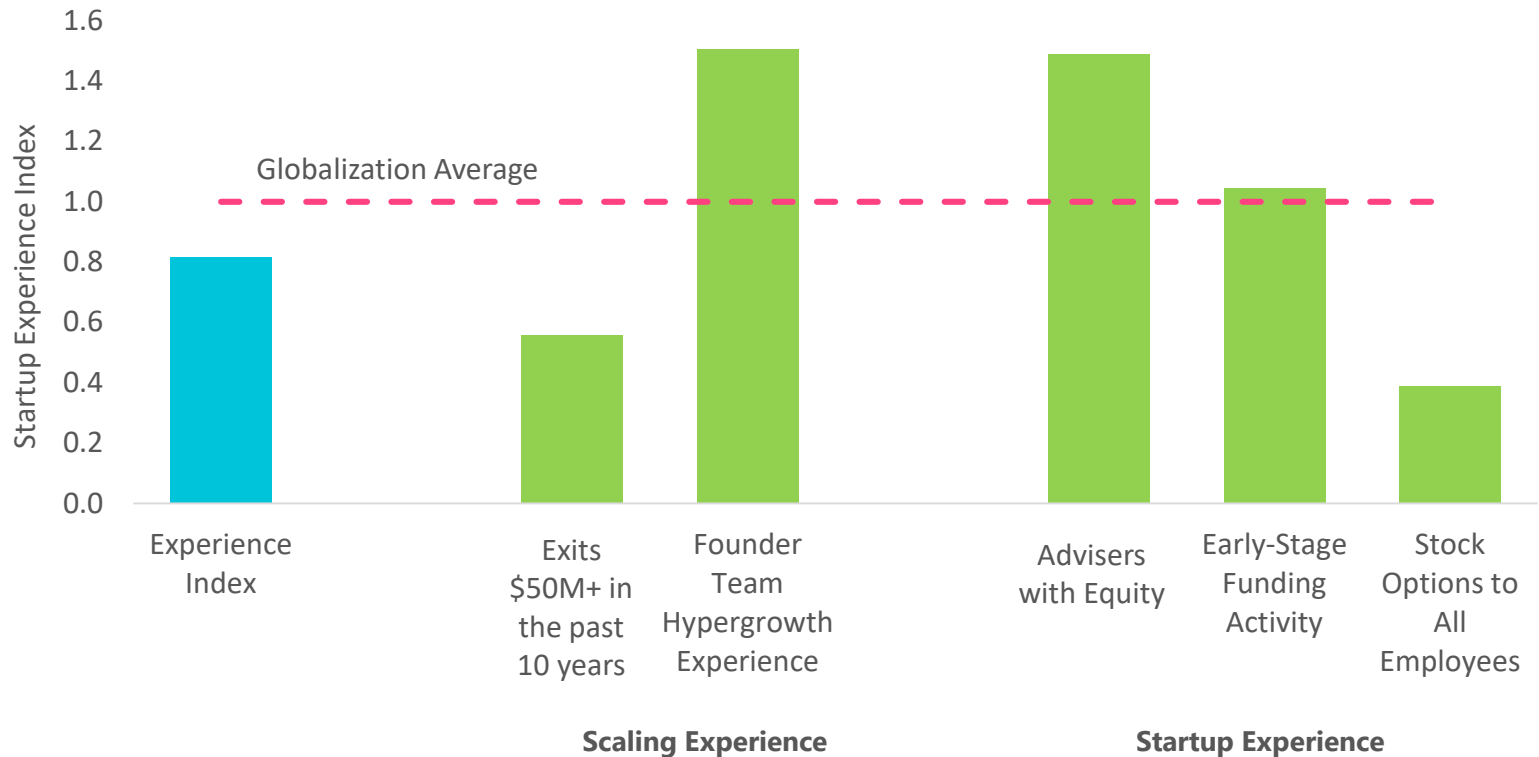
**Startup Experience Success Factor vs.  
Ecosystem Performance Model**



Note: In the charts above, each point is an ecosystem.

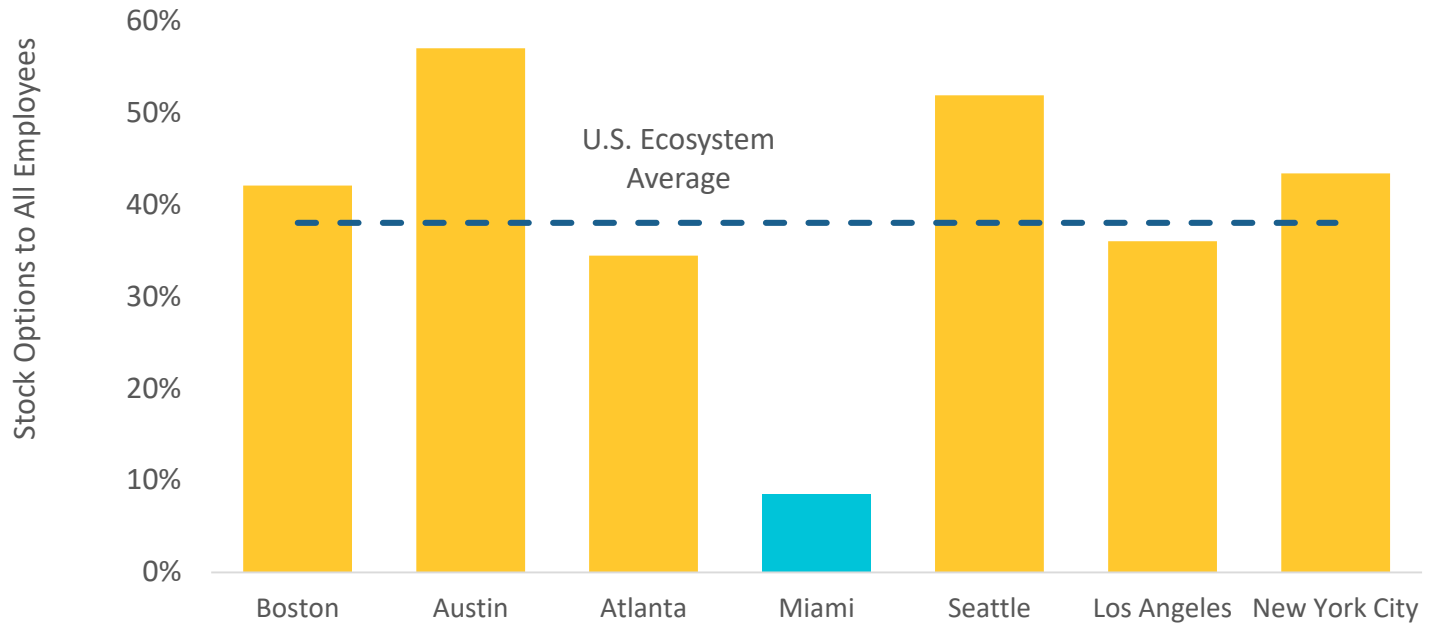
## MIAMI'S EXPERIENCE PROFILE

*Miami's overall experience is near the Globalization average. However, on the components of the Experience Index, Miami performs either very high or very low. In particular, Miami has gaps in the number of exits over \$50 million and stock option offers to all employees.*



## ALIGNING INCENTIVES

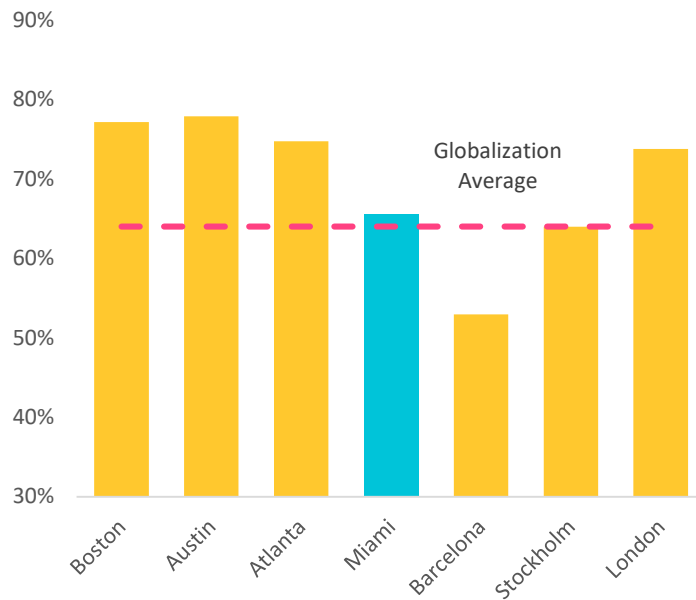
*When compared with other U.S. ecosystems, surprisingly few Miami startups give stock options to all employees.*



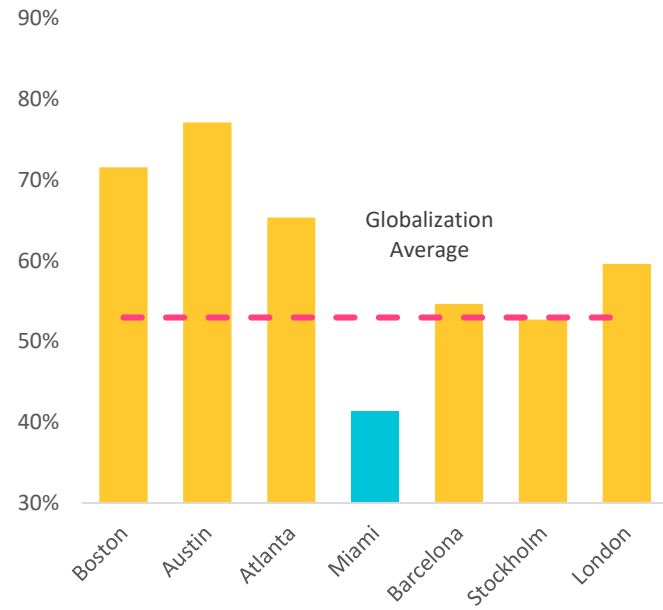
## TEAM EXPERIENCE

*When compared with other ecosystems, Miami has a low share of experienced growth employees. Some of this may be attributed to lack of retention when employees don't participate in upside potential.*

**Experienced Engineers**



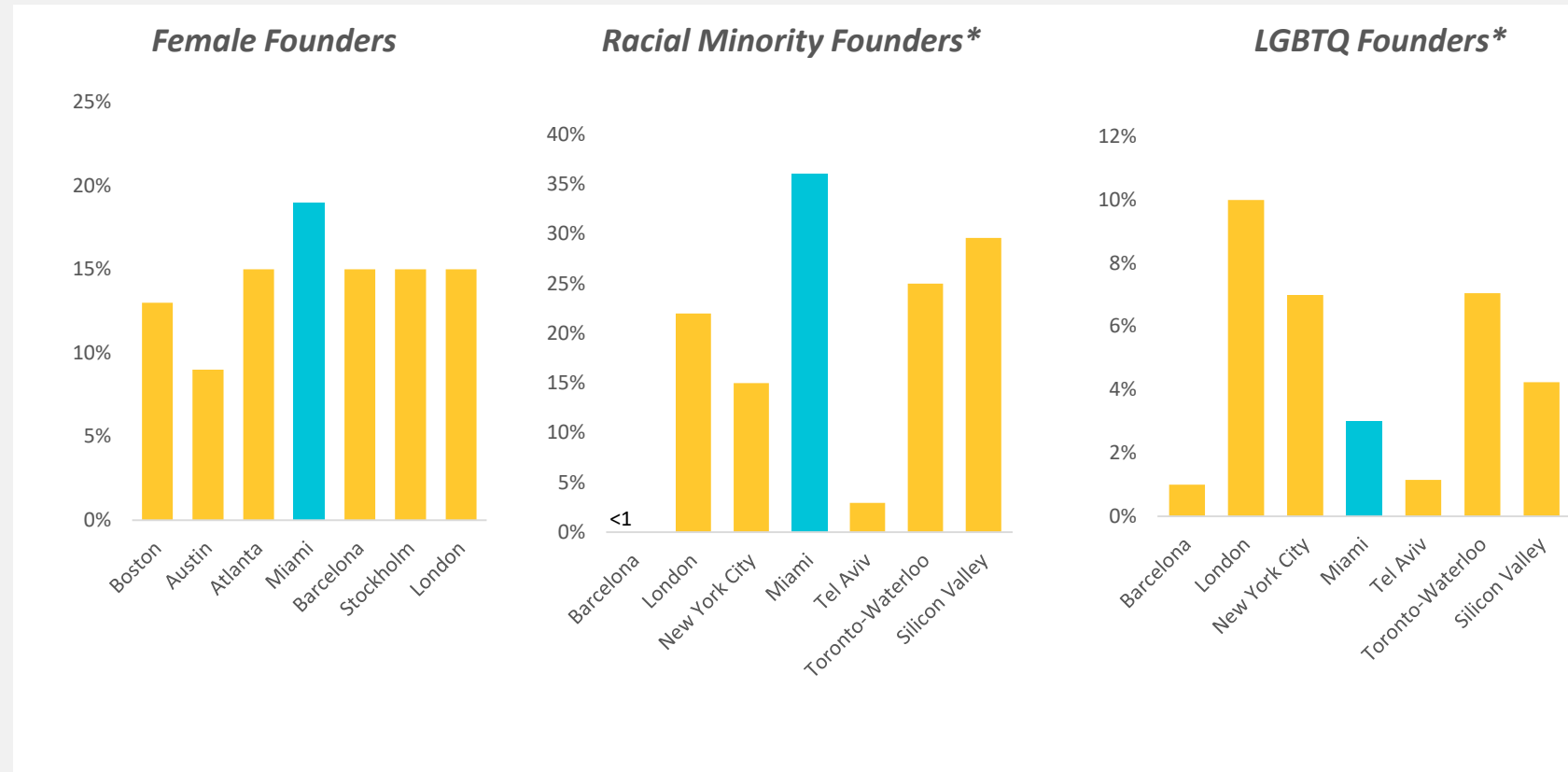
**Experienced Growth Employees**



*Percentage with 2+ years experience in a startup*

# FOUNDER PARTICIPATION

*Miami has a comparatively diverse talent pool with a high share of founders with racial minority backgrounds and a high share of female founders.*



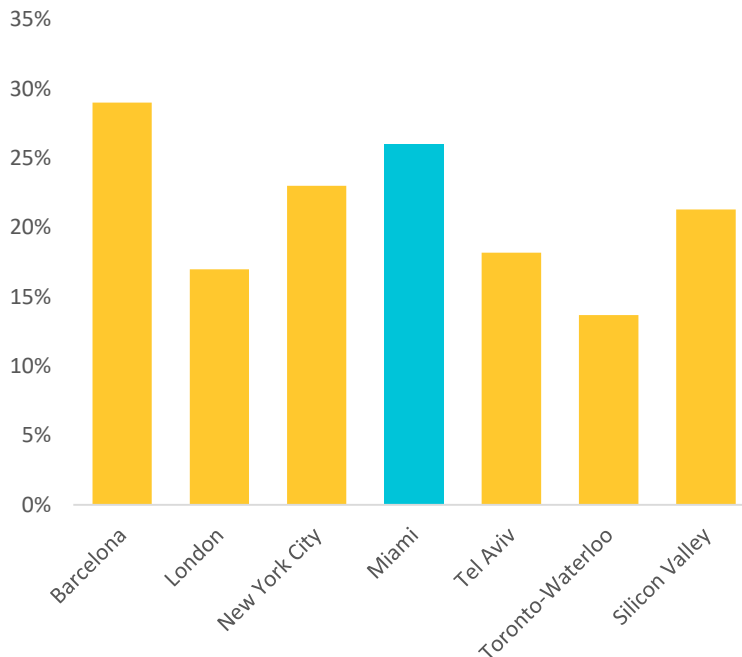
*\*Comparison cohort changed because these questions were new additions to the 2018-19 survey. There is not sufficient data on these for all the chosen peers, as the founder survey in these ecosystems was administered in previous research cycles. For this reason, and because of lower response rates for this set of questions, suitable peers with reasonable response rates are presented as benchmarks.*



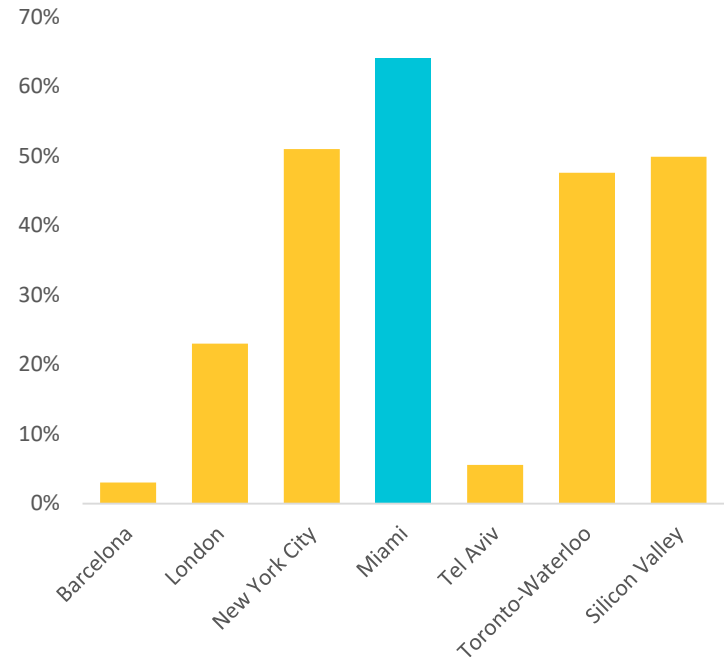
# TECHNICAL FTE PARTICIPATION

*Miami also has a diverse technical FTE talent pool with a high share identifying as coming from a racial and/or ethnic minority.*

**Female Technical FTEs\***



**Racial Minority Technical FTEs\***



*\*Comparison cohort changed because these questions were new additions to the 2018-19 survey. There is not sufficient data on these for all the chosen peers, as the founder survey in these ecosystems was administered in previous research cycles. For this reason, and because of lower response rates for this set of questions, suitable peers with reasonable response rates are presented as benchmarks.*

# CONCLUSION

## Translating Momentum Into Intentional Impact

*Miami's rapid rise as a home for innovation and high-impact entrepreneurship is a testament to what is possible when community works in unison. To achieve continued and sustained success, Miami's startup community should consider investing in the following opportunities:*

### **Close Remaining Gaps**

*Giving stock options to more employees could help with talent retention and give Miami the opportunity to grow more talent with startup growth experience.*

*Increasing the funding available to early-stage startups would have positive effects downstream, closing funding gaps at the Series A stage and beyond.*

*By placing founders at the center and better supporting their ability to build community with other founders, investors and experts, Miami would improve the ecosystem's sense of community and retention of entrepreneurs.*

### **Globalize the Ecosystem**

*Globally connected ecosystems achieve greater Global Market Reach, more fully realizing their potential. Diversifying Miami's global reach beyond Latin America and growing ties to top ecosystems would improve the flow of global knowledge coming to the region and increase overall scale-up potential.*