Startup Genome

New Zealand Ecosystem Assessment

Dane Stangler
May 2018

Table of Contents

- Introduction – Structure Leading to Execution
- Ecosystem Analysis
- Exits and Triggers
- Global Connectedness and Market Reach
- Local Connectedness
- Founder Mindset & DNA
- Funding
- Sub-Sector Potential
- Actionable Insights
- Appendix

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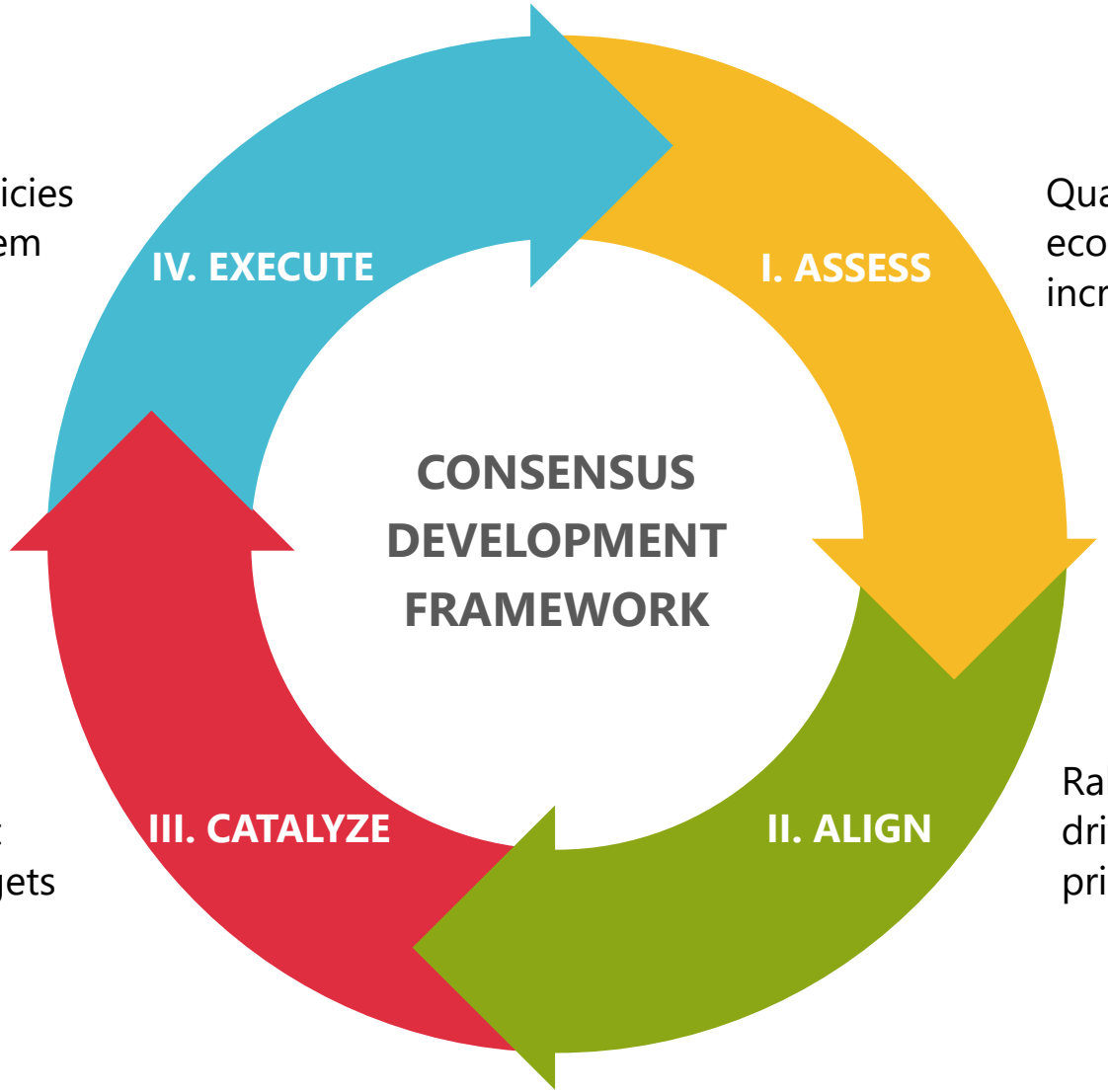
Our ecosystem development framework goes from assessment to action

Implement new or improved policies and programs that spur ecosystem growth



Quantify and understand your key ecosystem strengths and gaps, and increase its global exposure

Develop a focused strategy and action plan for maximum impact with the public and private budgets

Rally local ecosystem leaders and drive consensus around top priorities and areas of focus

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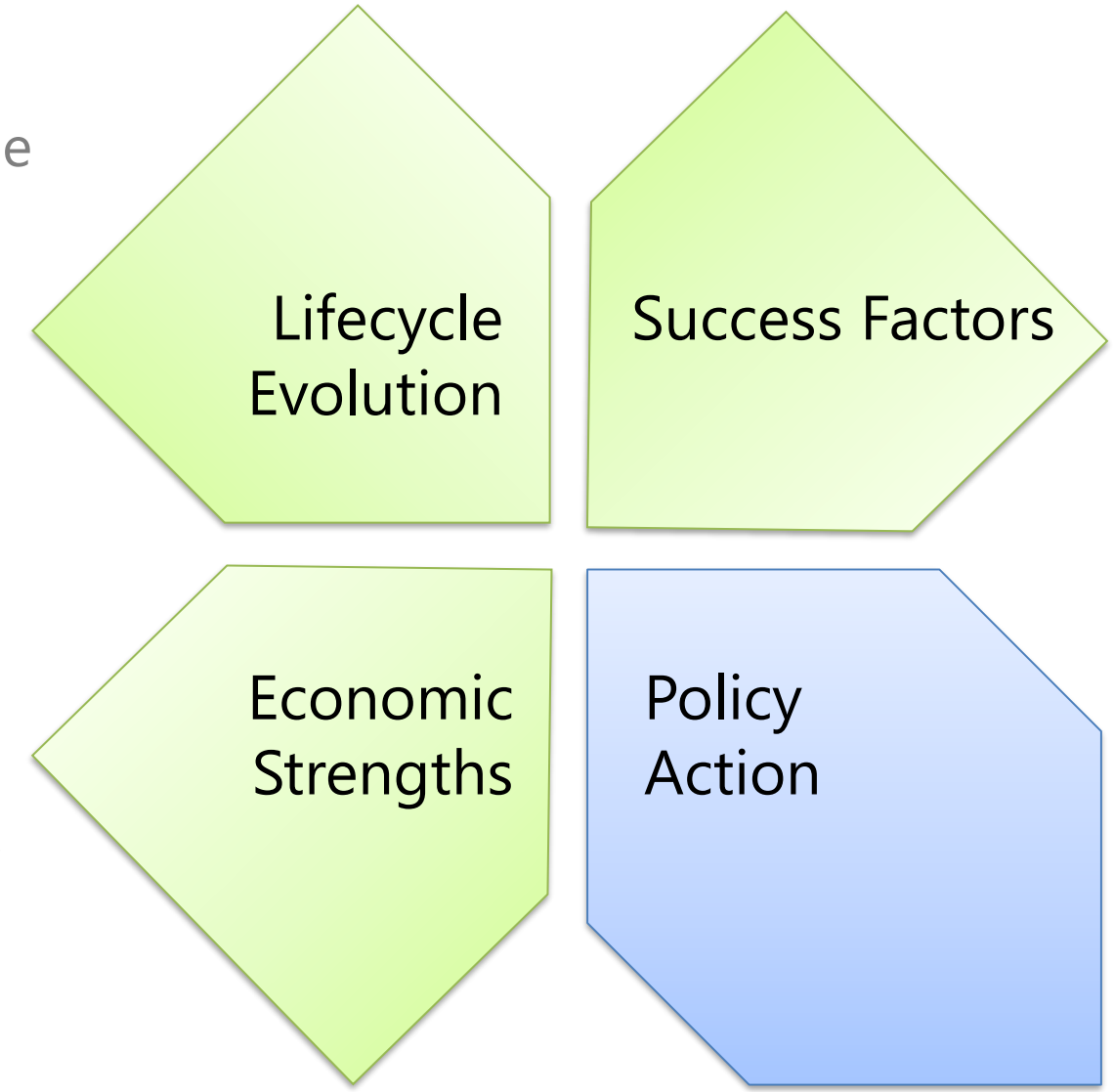
Evidence-Based Policymaking Engine – Our Approach

1. FOCUS

Right Issues at the Right Time

⇒ **Maximize Impact**



2. CLARITY

Clear Gaps

=> Build Consensus for Action

3. STRATEGY

Prioritize vertical strengths

⇒ **Accelerate Growth**

4. ACTION

Policies & Private Practices

⇒ **Achieve Economic Impact**

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Table of Contents

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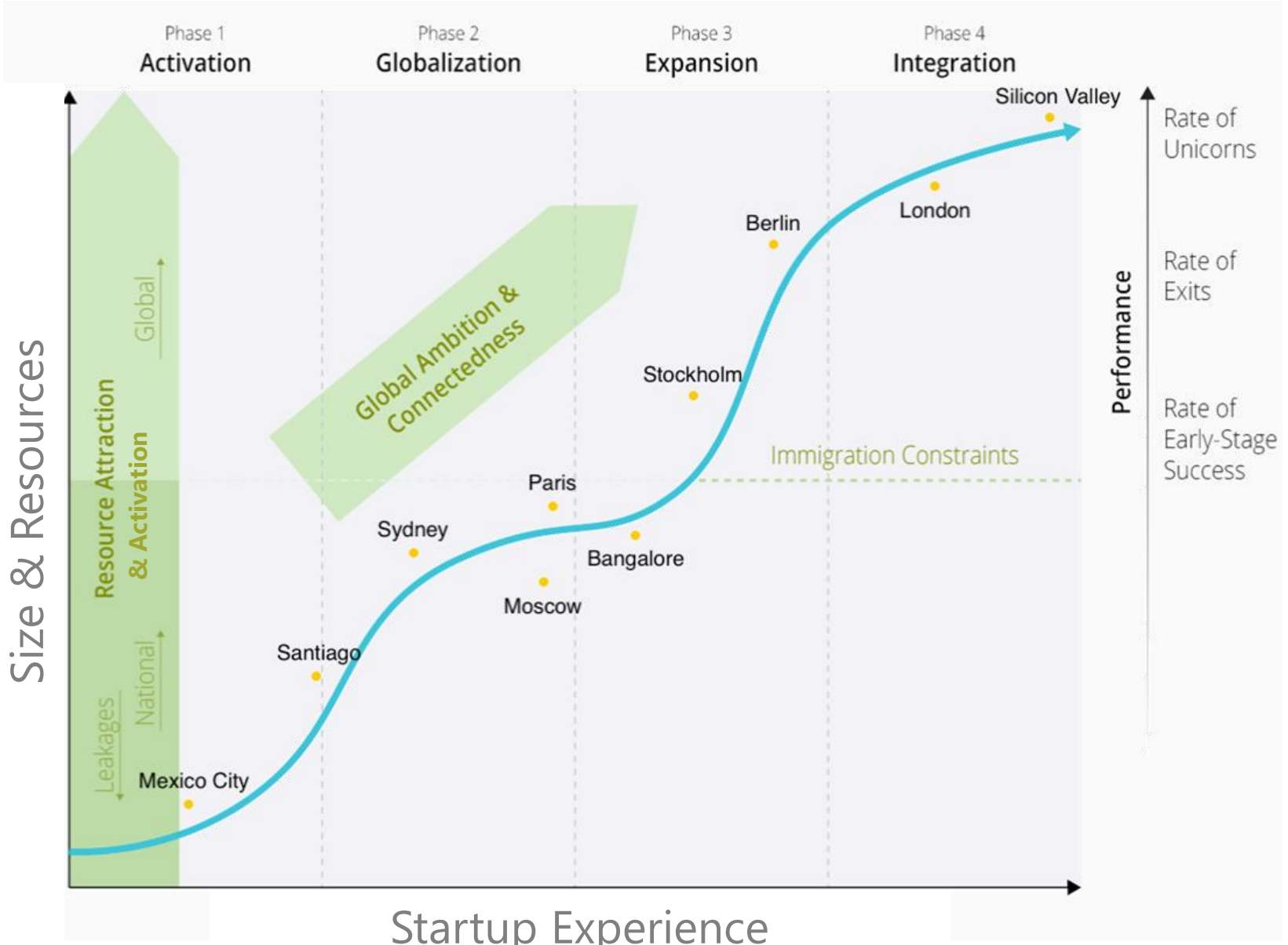
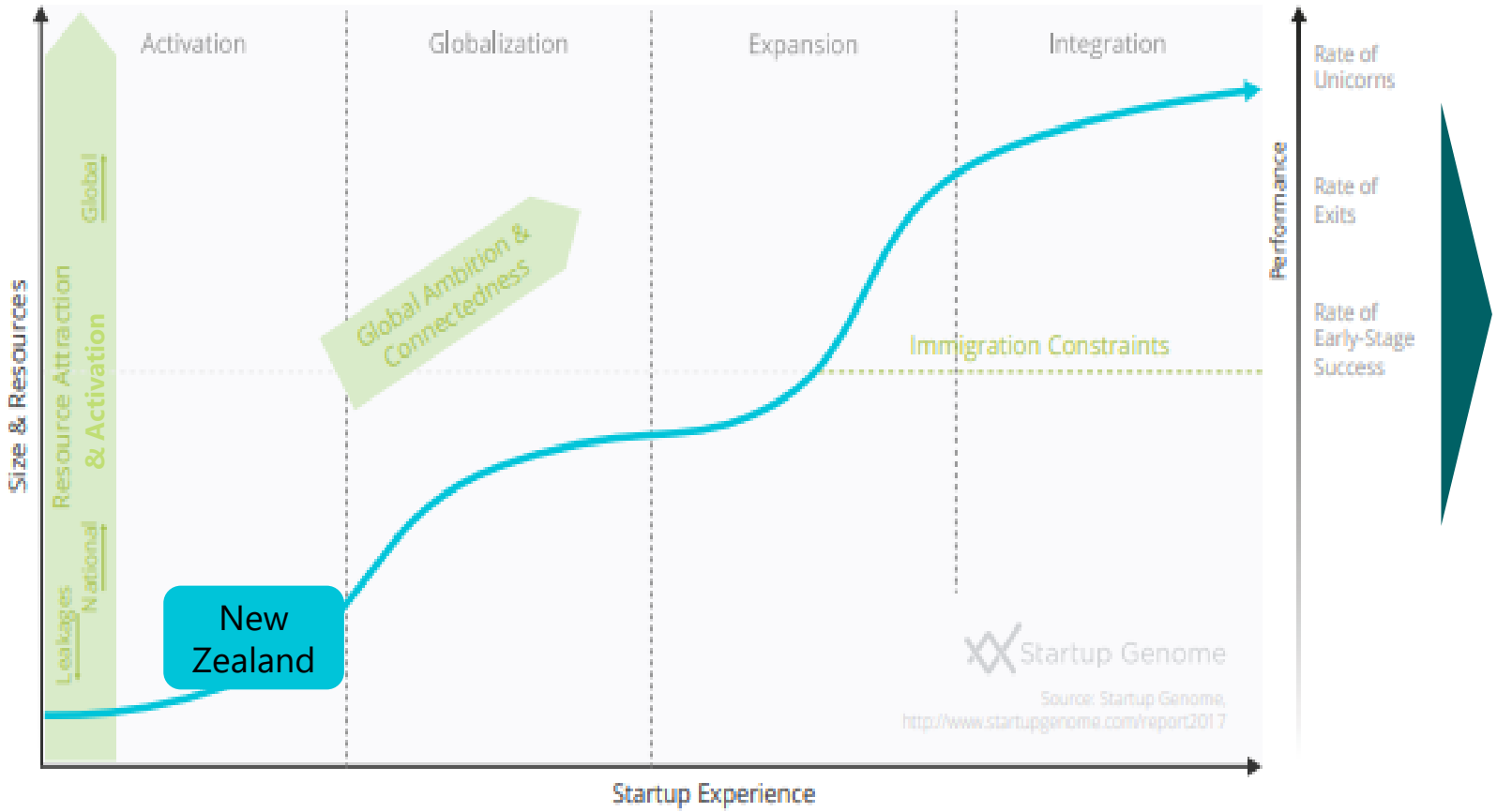
#1: The Ecosystem Lifecycle Model



Based on the following analysis, New Zealand is currently in the Activation Phase

The Ecosystem Lifecycle Model



Lifecycle Overview

1. Experience levels in the ecosystem are slightly lower than the Activation average
2. Ecosystem Size (Output) is close to Activation phase average
3. Resource Attraction is close to Activation phase average

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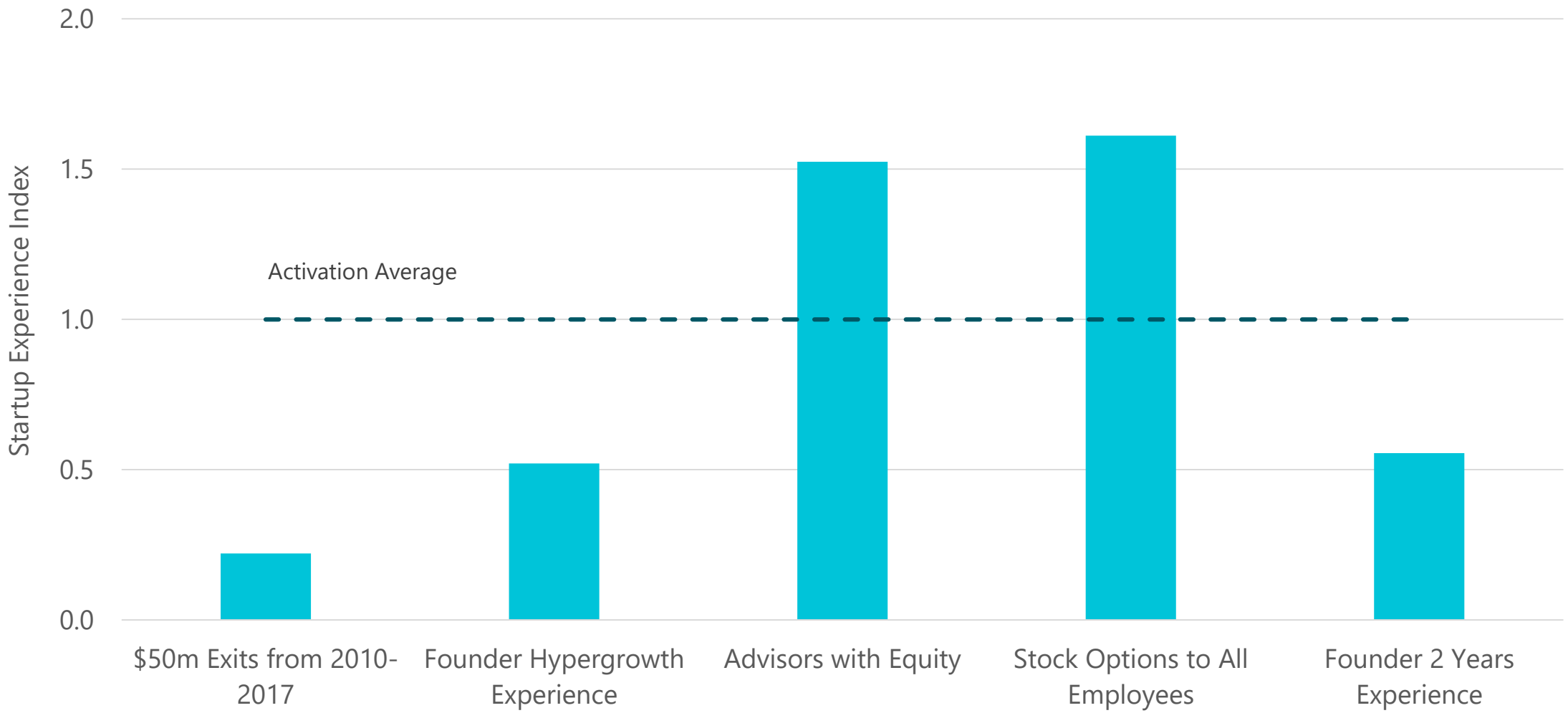
New Zealand's Startup Experience is slightly lower than the Activation average



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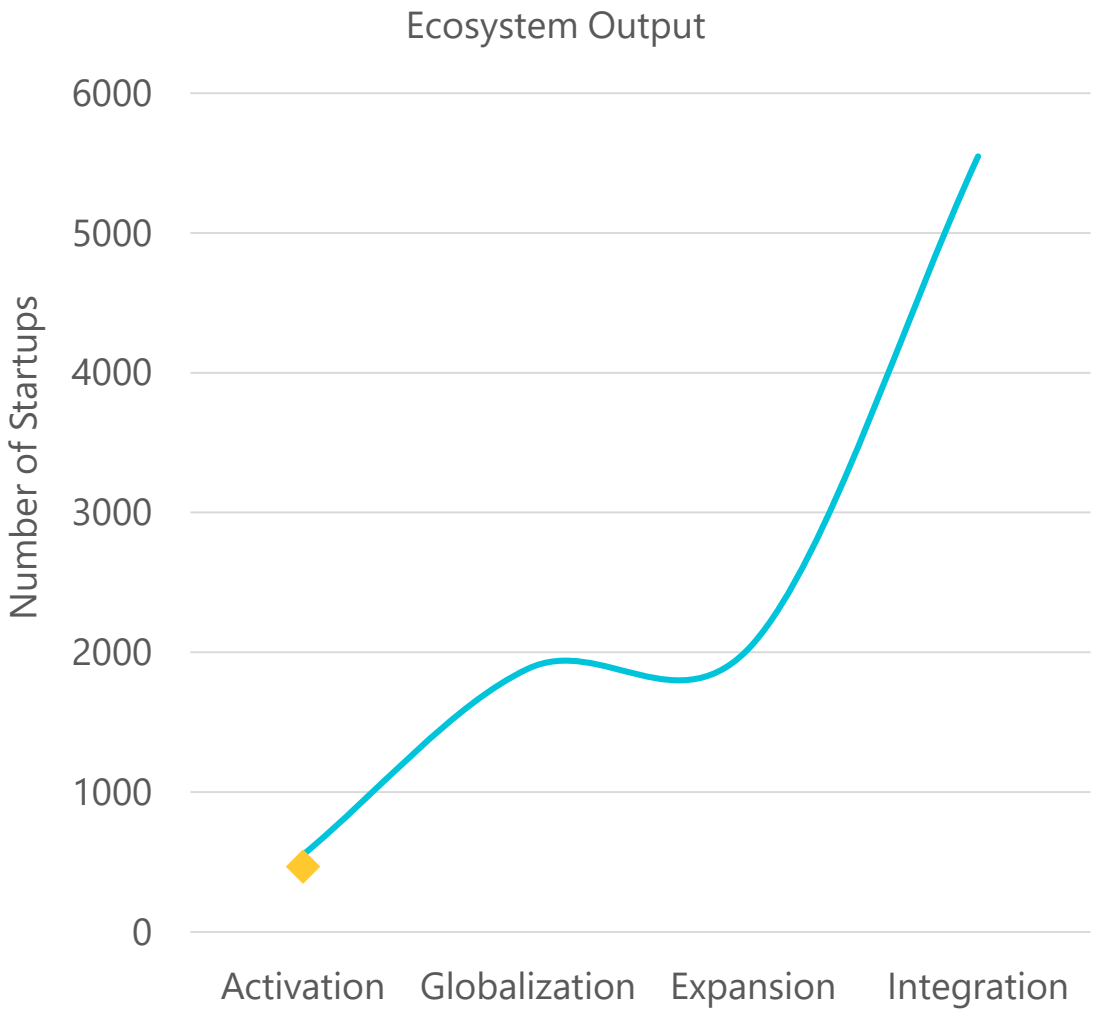
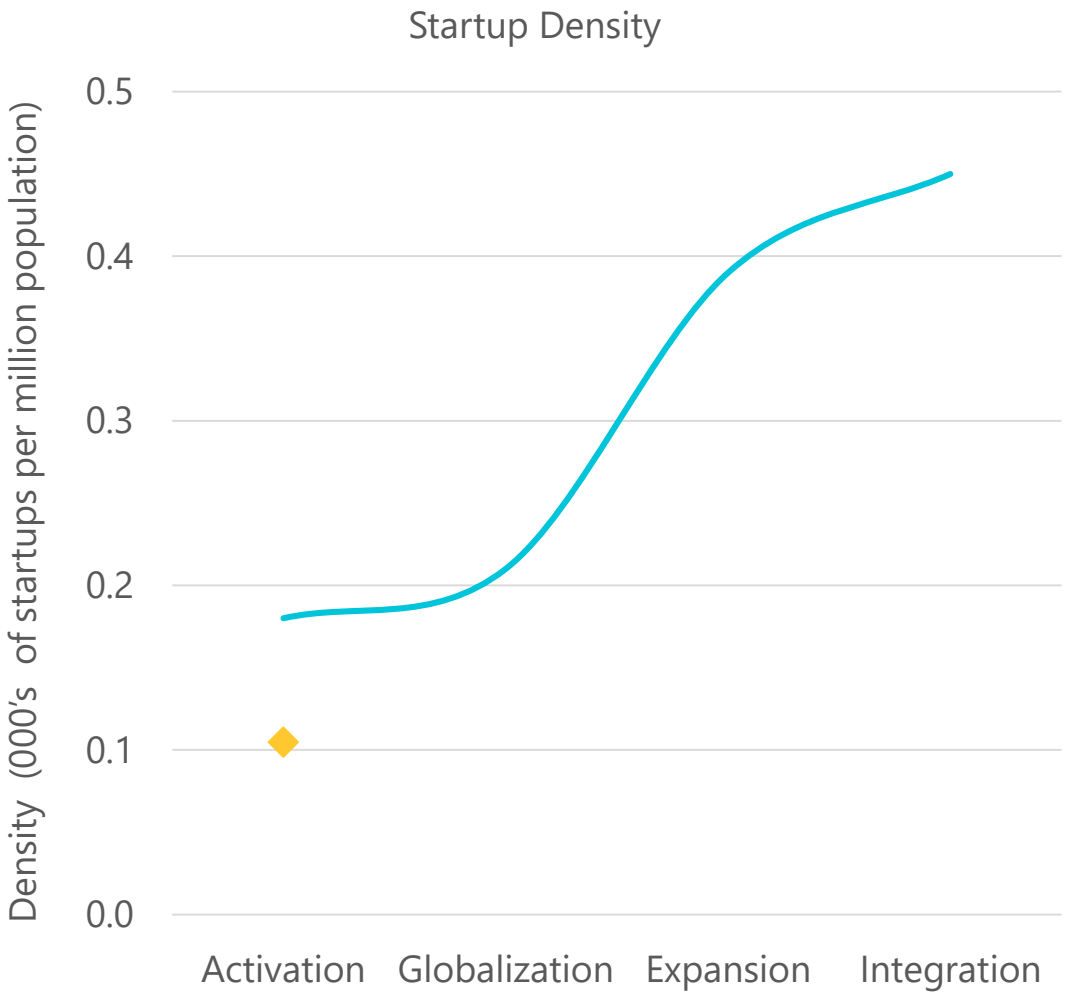
Startup Output close to Activation average; Low Startup Density shows its potential to grow





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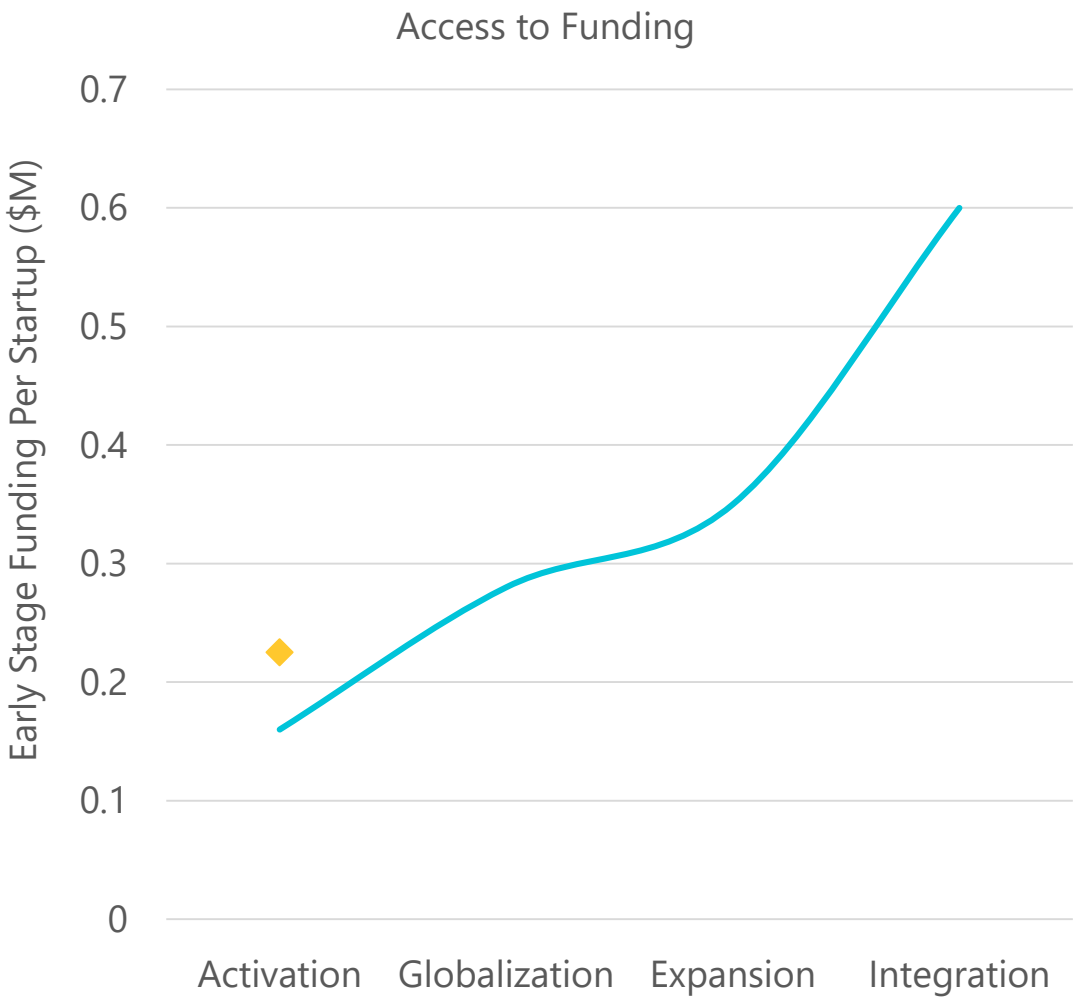
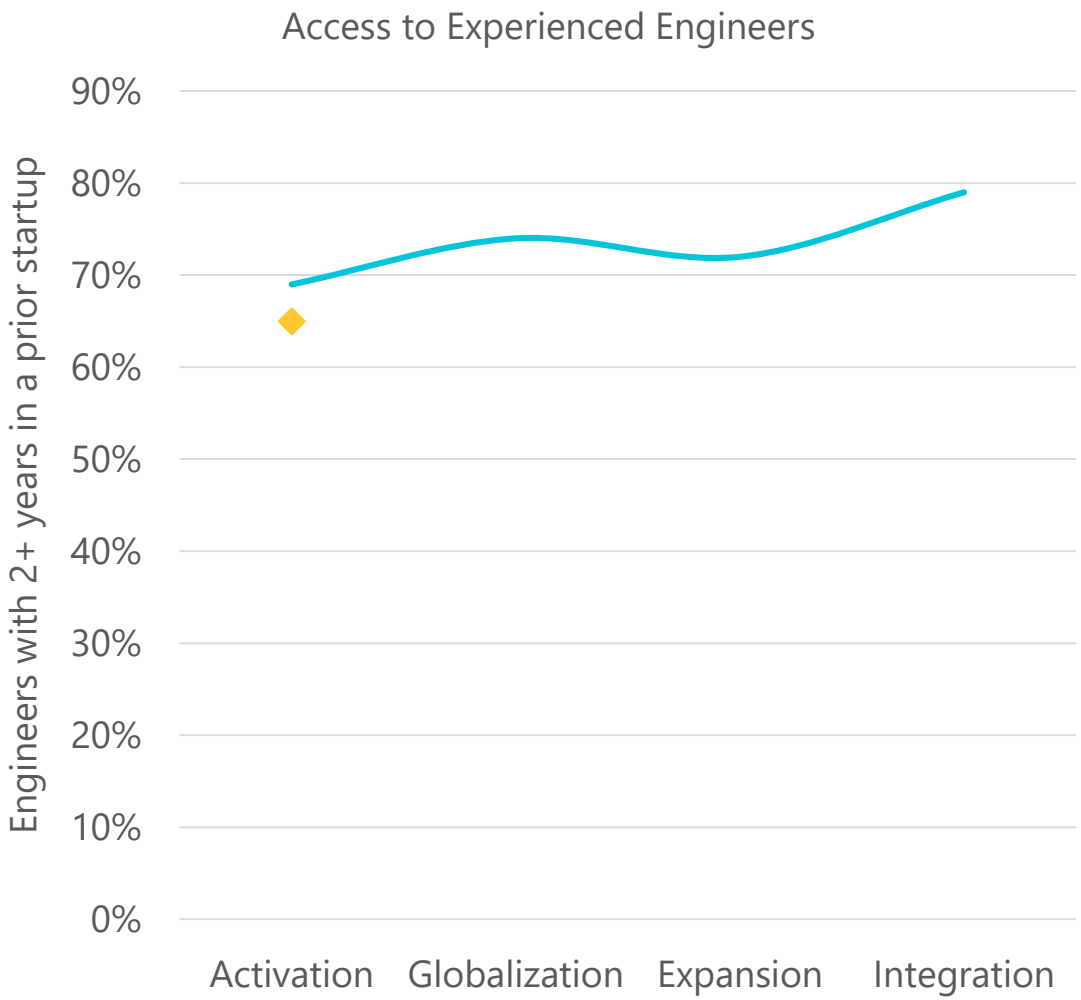
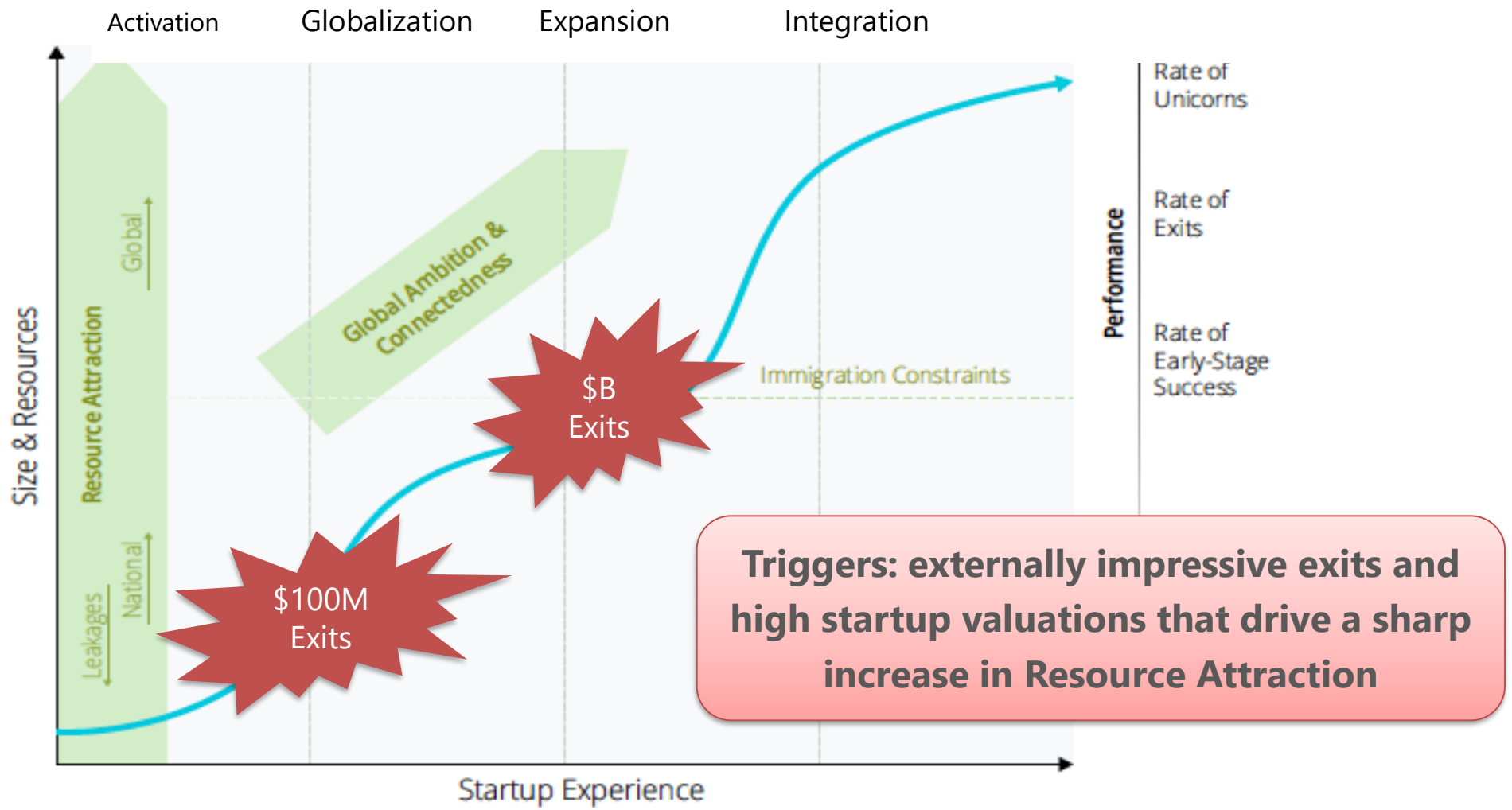
Resources: New Zealand is above phase average in Funding, slightly lower in Experienced Engineers





A series of large exits "Trigger" ecosystem growth



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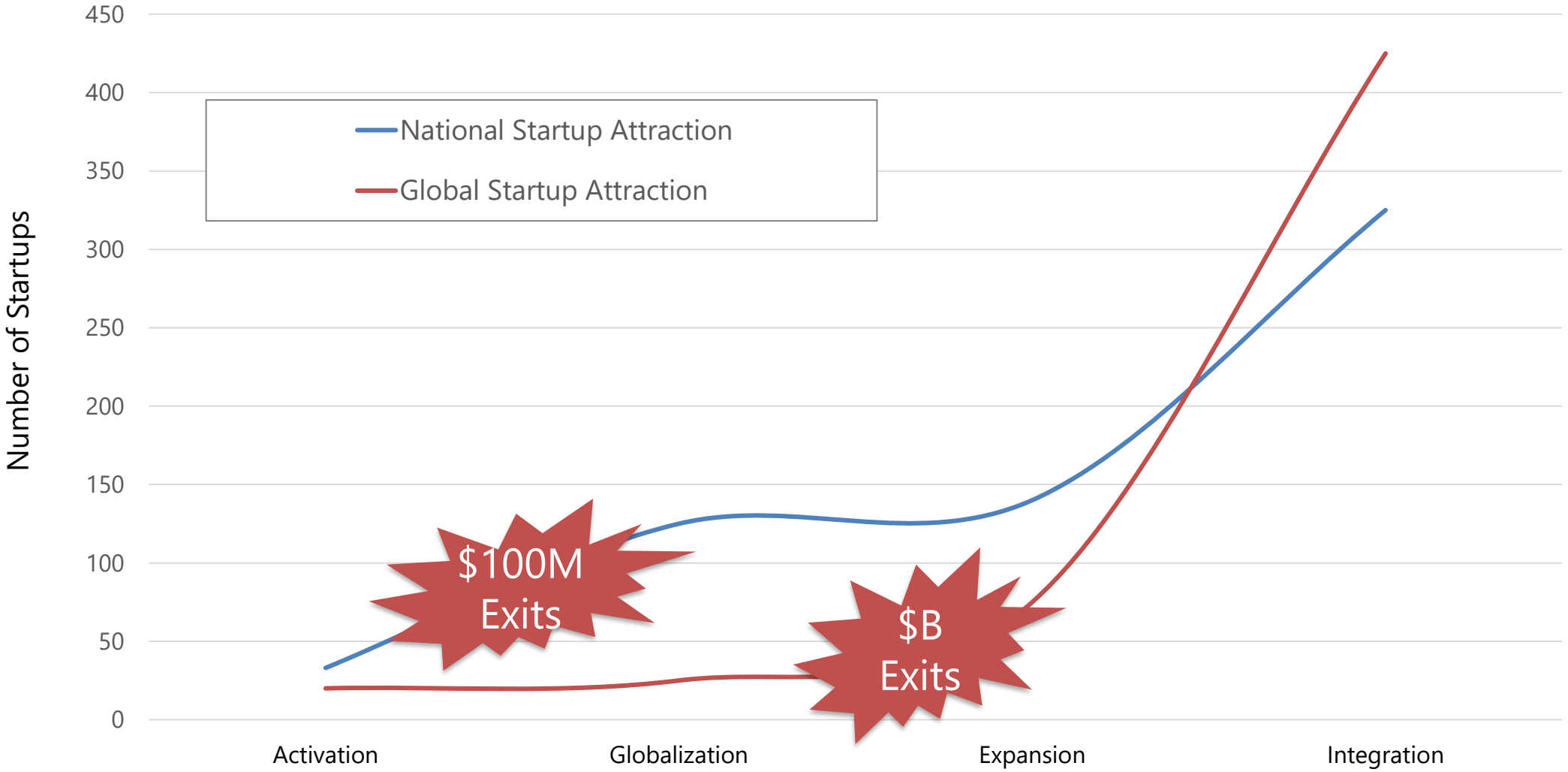
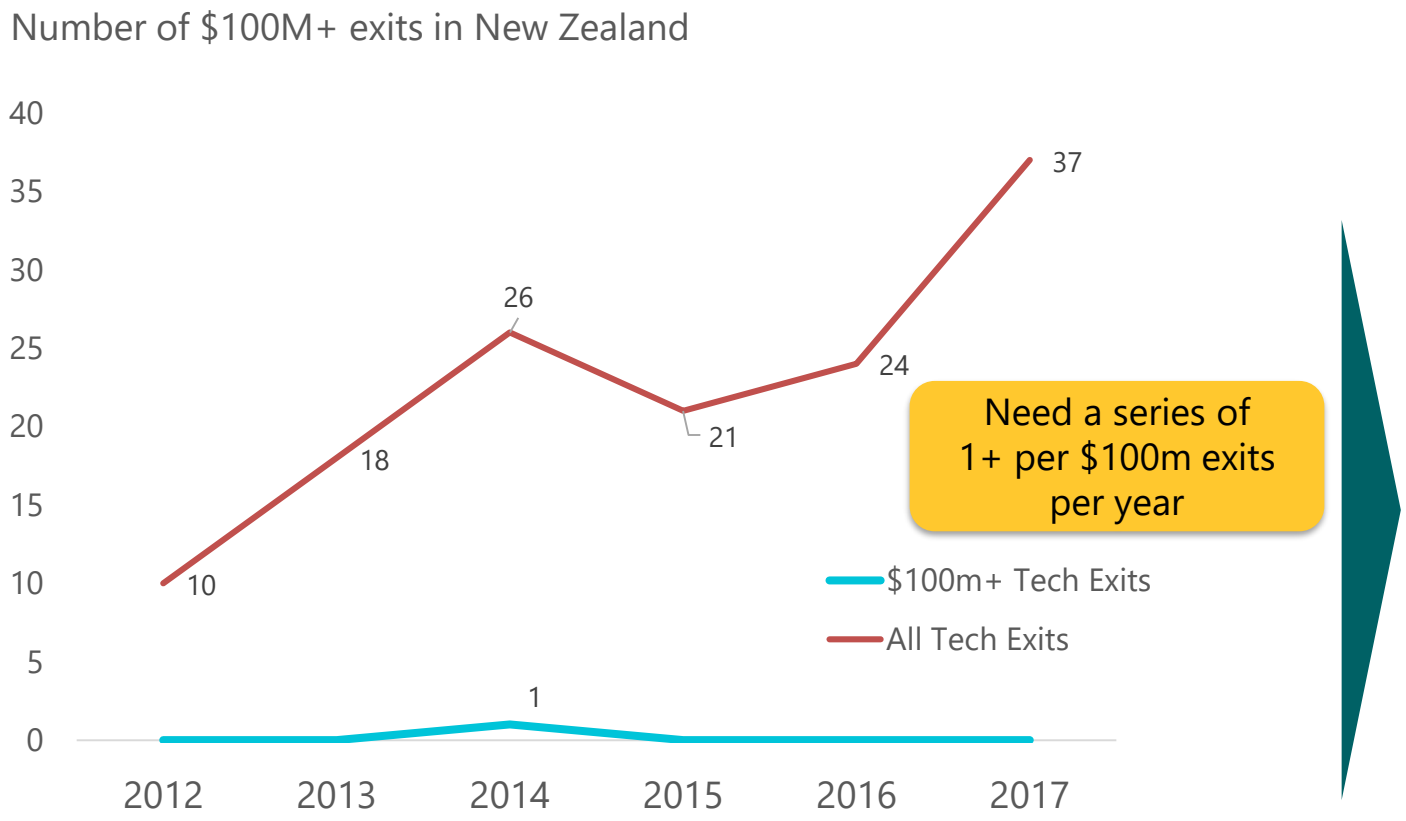
Ecosystems grow faster when a series of large exits "Trigger" steep increase in Global Resource Attraction and National Resource Activation



Increasing number of exits overall—not yet a series of $100m+ exits



Exits

- The total volume of exits has grown substantially since 2012
- However, more $100m+ exits are a must for Resource Attraction

Must focus on driving valuations and achieving multiple $100m+ exits to enter the Globalization Phase

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New Zealand has great potential to produce increased economic value

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Table of Contents

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- Founder Mindset & DNA
- Funding
- Sub-Sector Potential
- Actionable Insights
- Appendix

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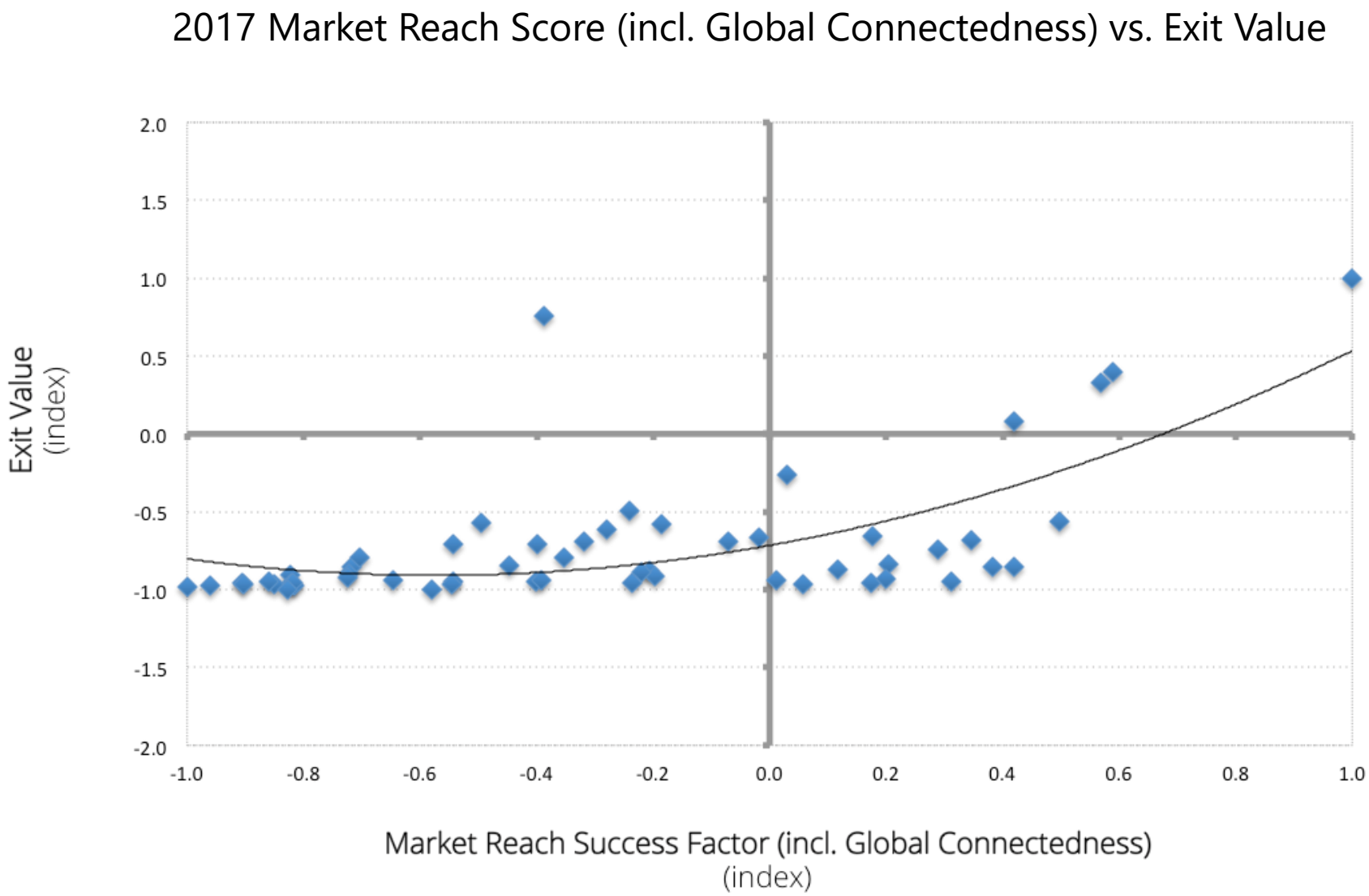
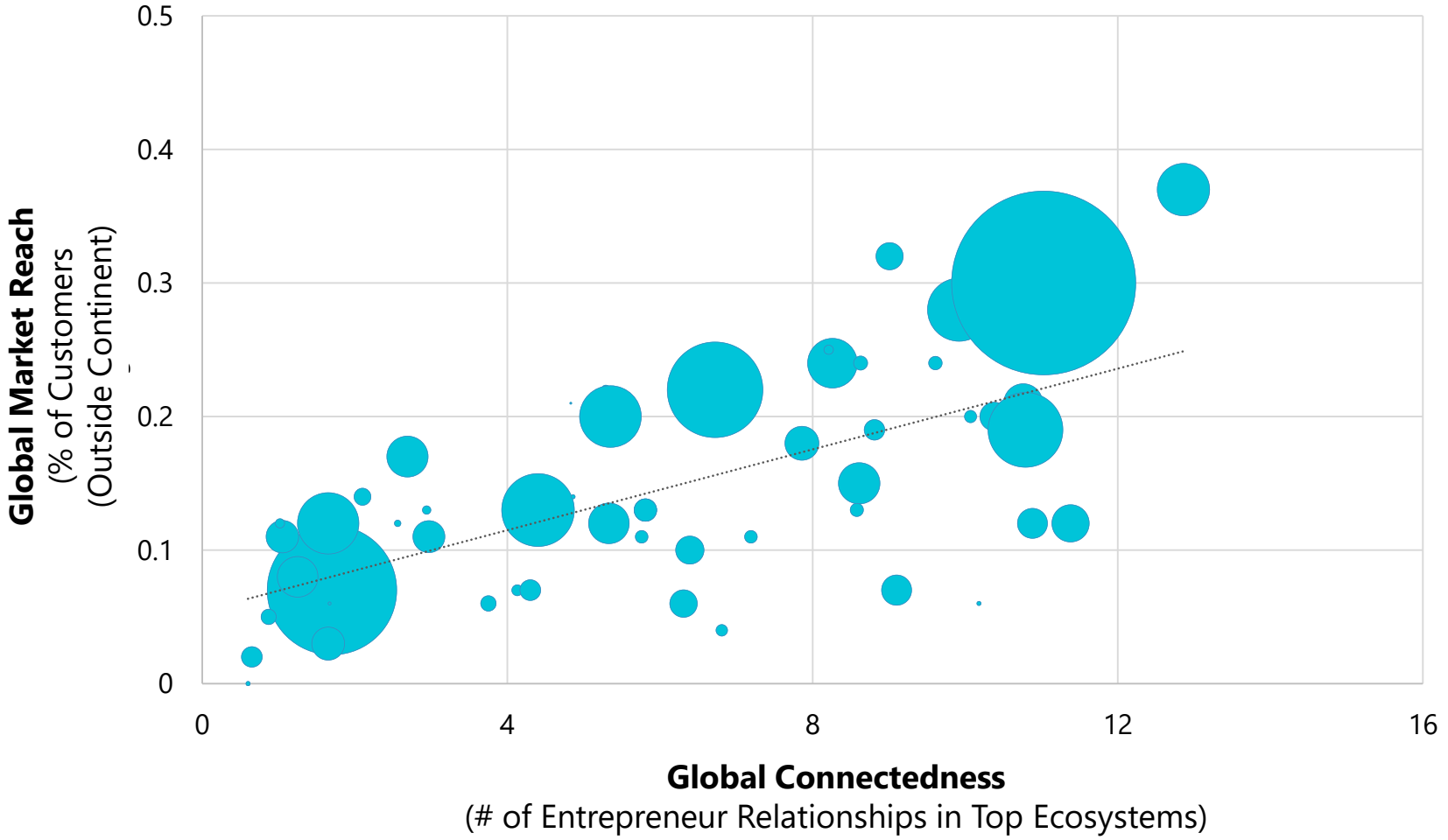
Market Reach is the single metric most closely related to ecosystem production of scaleups and exits



Global Market Reach is Driven by Global Connectedness

Connections to globally-leading ecosystems in particular are the most useful



Overview

- There is a clear relationship between Global Market Reach and founder's connections outside the ecosystem
- Notably, ecosystems' focus should be on building connections with top ecosystems

Size of bubble indicates ecosystem value

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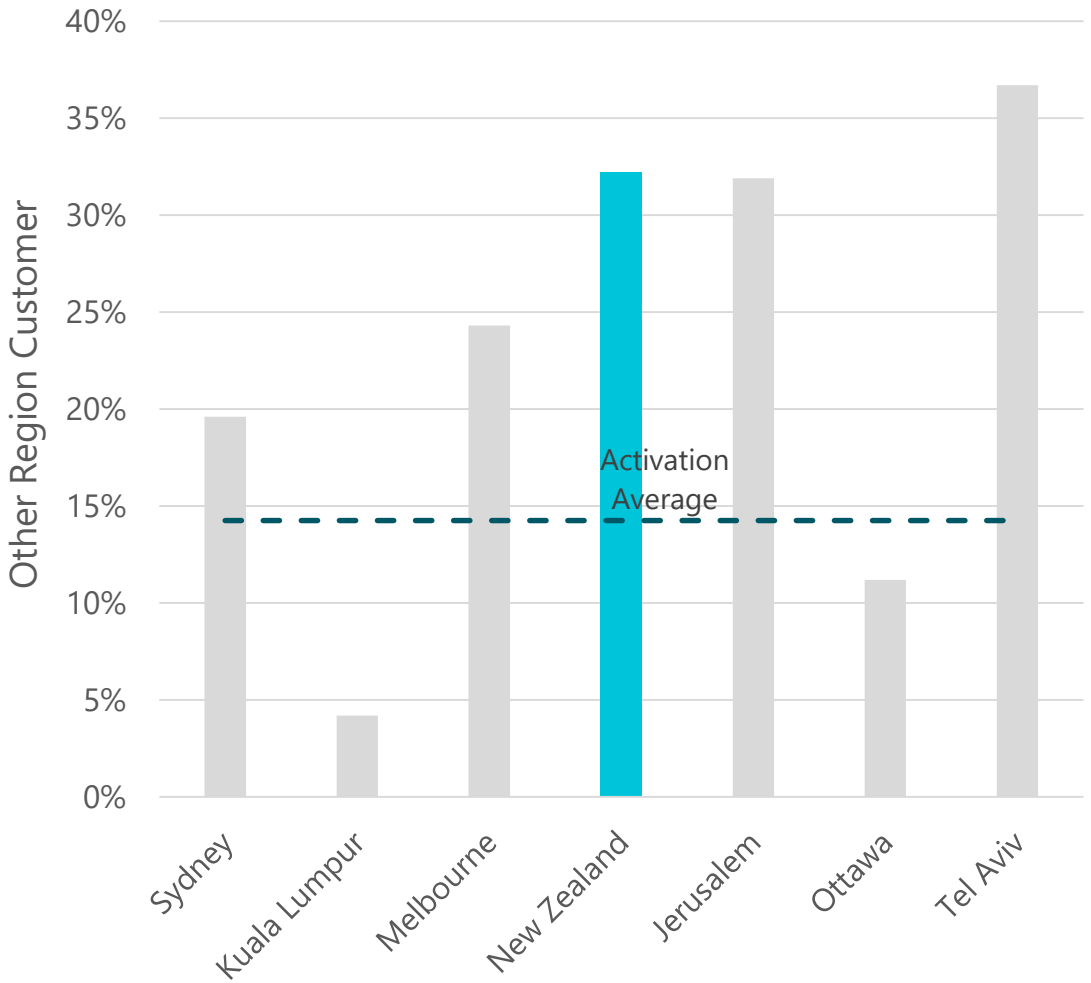
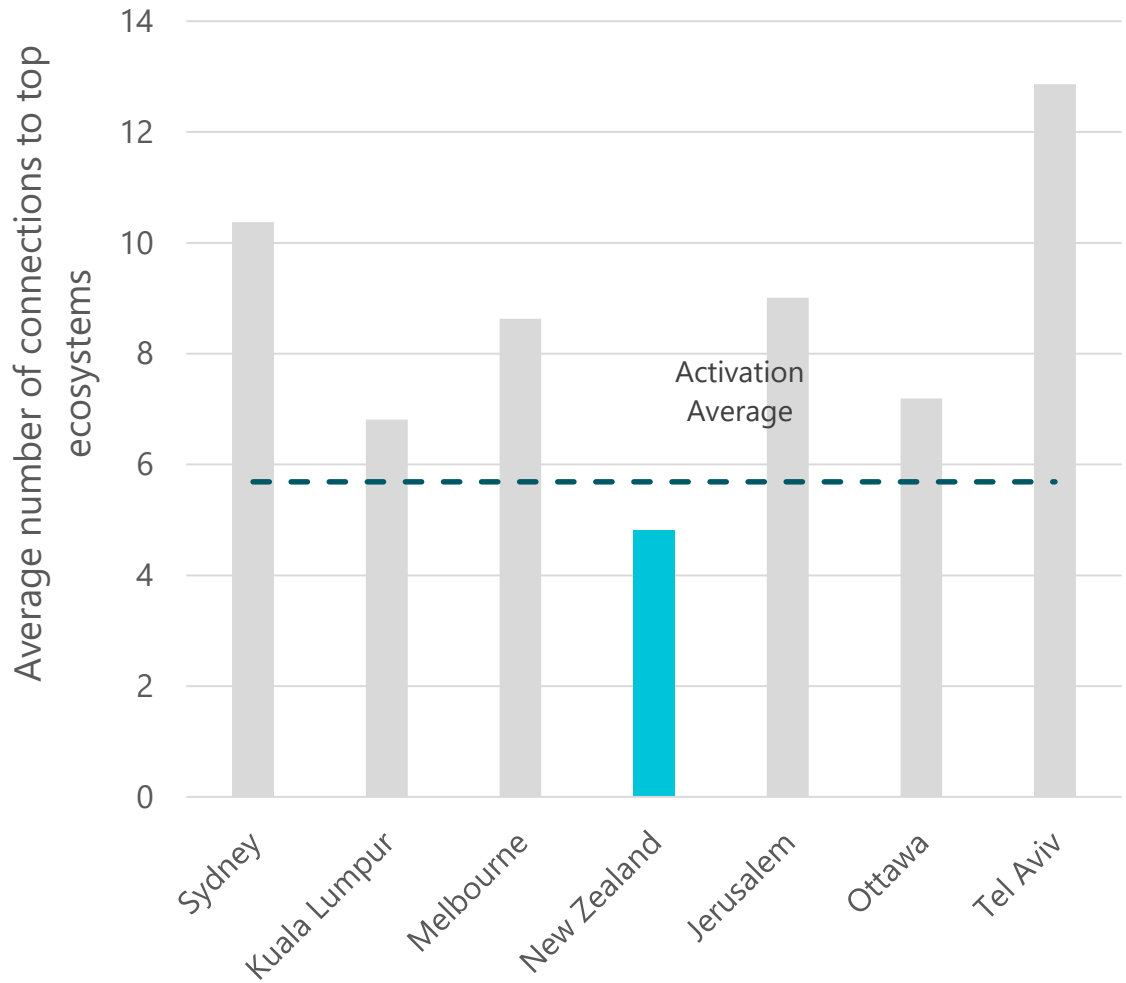
Although New Zealand has a high Global Market Reach, more Global Connections will help it expand even further beyond its borders

Global Market Reach



Global Connectedness



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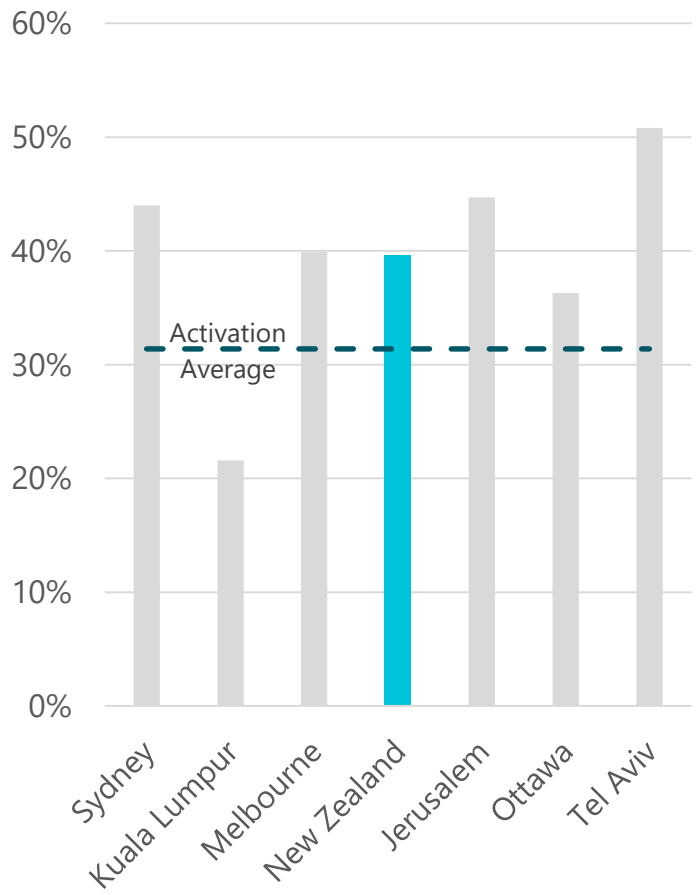
Global Market Reach also driven by founders with global ambition and strategy

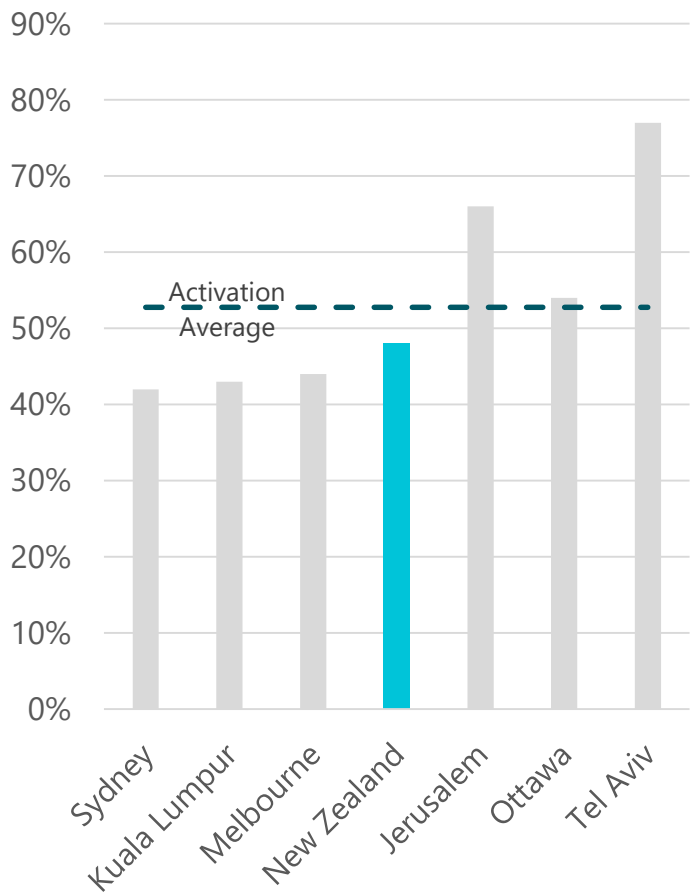
Global Ambition

Globally-Leading Product

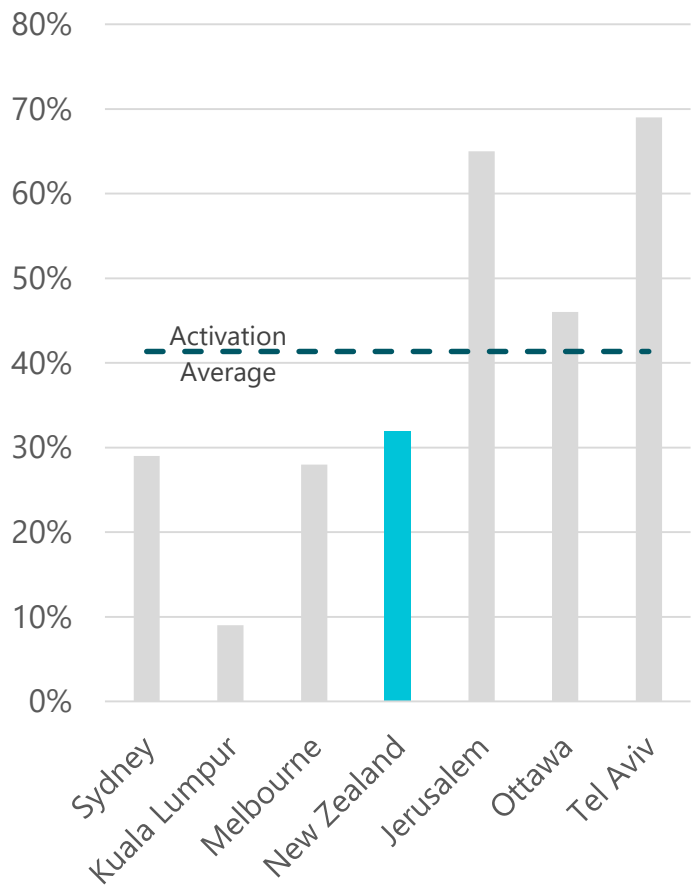


Strategy

Product Development with Focus on Global Customers



Targeting Global Market First



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Global Connectedness is driven by three main factors

1

Global Resource Attraction

- Large exit "Triggers"
- Relative Ecosystem attractiveness
- Immigration constraints

2

Global Networking

- Meeting founders locally
- Traveling to meet founders

3

Foreigners and Immigrants

- Immigration
- Foreign students that remain
- Immigration laws

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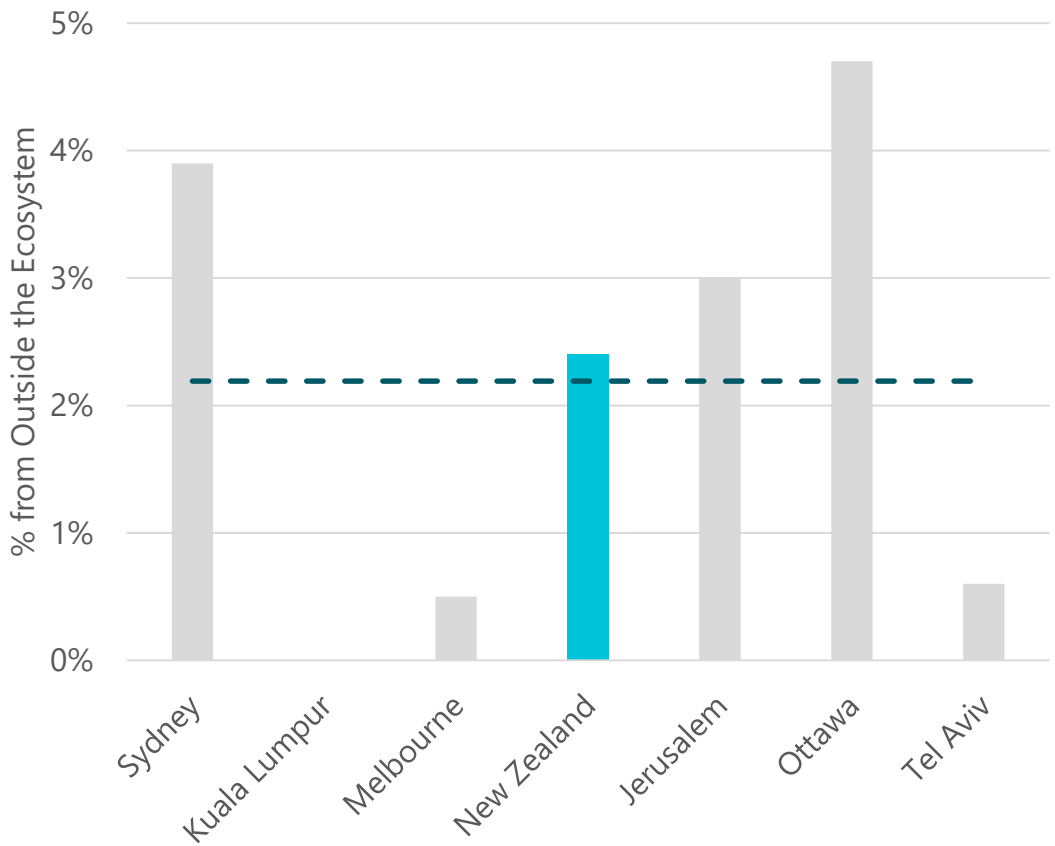
New Zealand's Global Resource Attraction is above the phase average

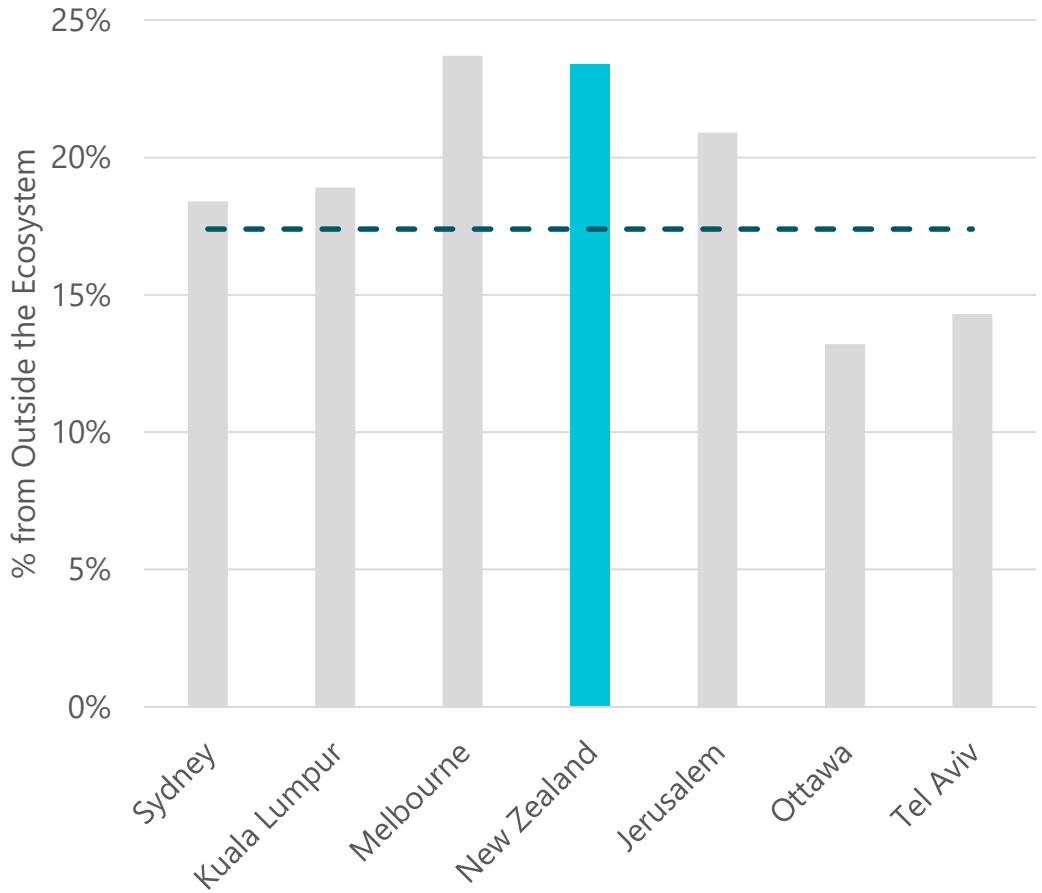
1

Global Resource Attraction

Global Startup Attraction



Global Entrepreneur Attraction



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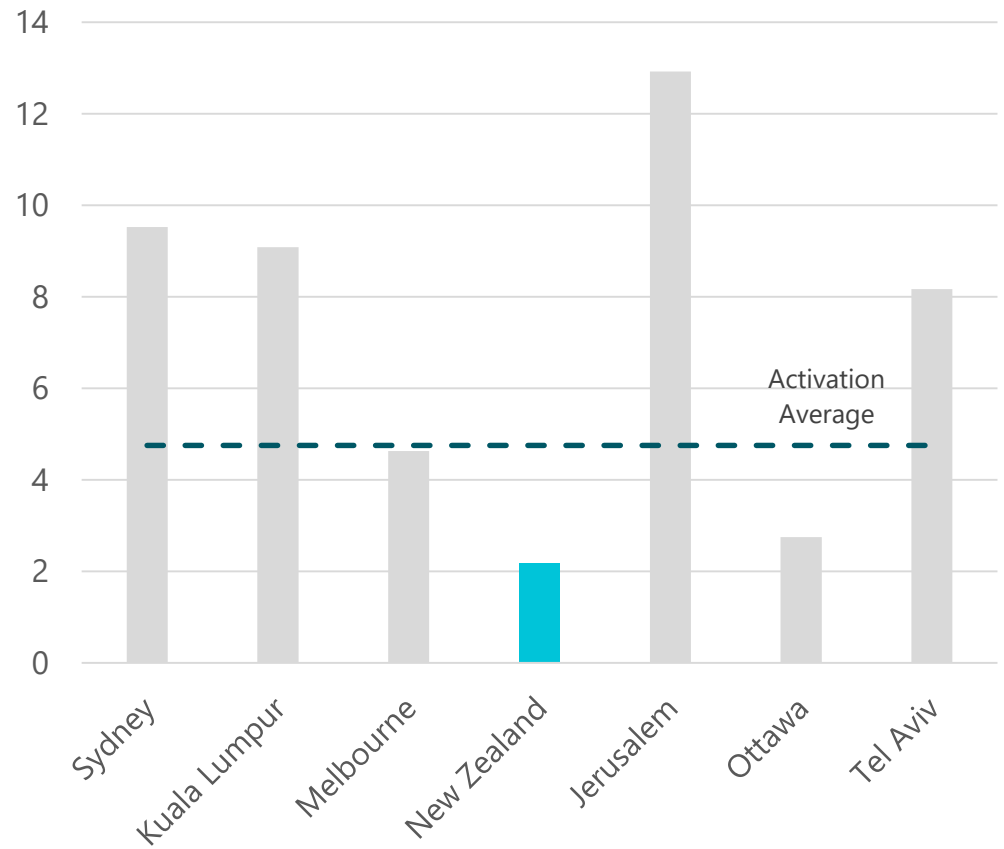
Local founders travel at a rate that is below average to meet founder in top ecosystems and meet few locally (normal for the phase)

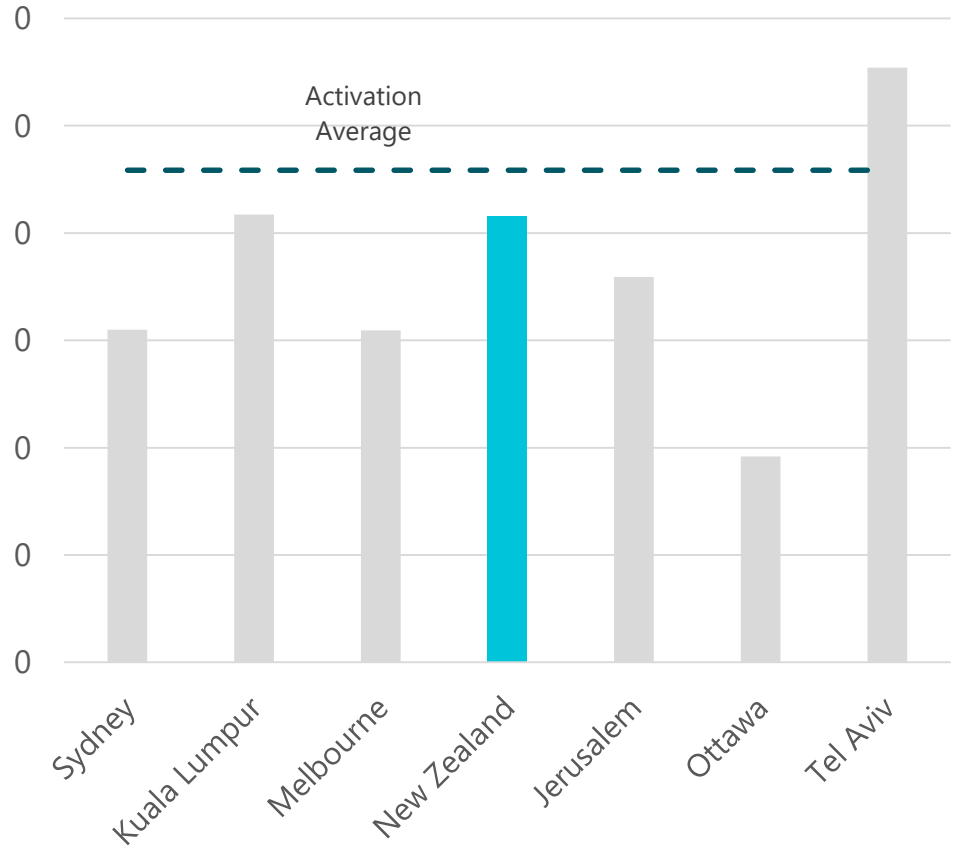
2

Global Networking

Local Meetings



International Travel



Local Meetings: Average number of startup leaders from top ecosystems that entrepreneurs from your ecosystem have met locally
International Travel: Percentage of startup leaders who have traveled 2 or more time to top ecosystems in the last 2 years.

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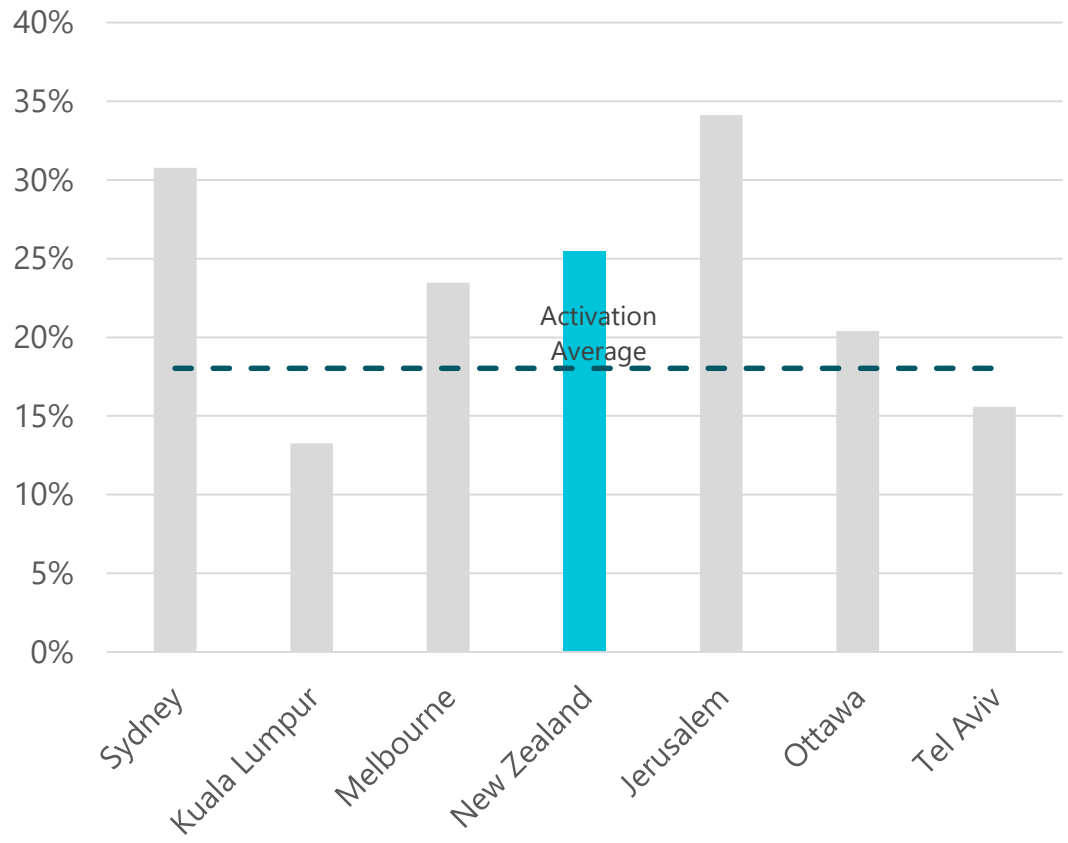
New Zealand does have high proportion of immigrant founders and engineers

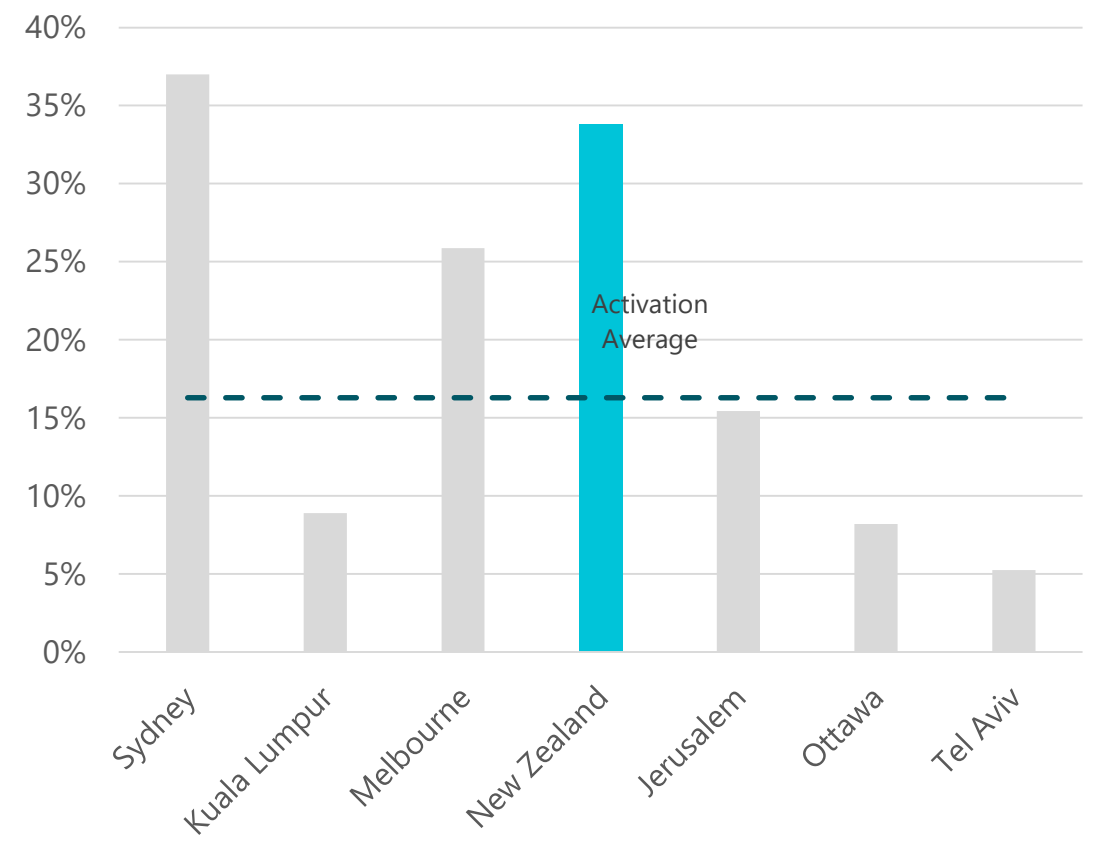
3

Immigrant founders and engineers bring many global connections with them to an ecosystem

Immigrant Founders



Foreign Engineers



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Conclusion: While New Zealand's startups have outpaced its peers in going global, there is further potential to increase Global Market Reach

Findings

- While ambitions to go-global run high, a low % of founders are motivated and have the right strategies to go global
  - This lowers the proportions of scaleups in the ecosystem
- Global Connectedness, a driver of Global Market Reach, is low for New Zealand
  - Founders must travel more and set up local meetings with founders from top ecosystems

Table of Contents

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How Connected Should Your Ecosystem Be—and How Connected Should You be to Your Ecosystem?

Startup founders accomplish more when they are more strongly connected to their ecosystem. But not all forms of networking are created equal.

Highly-connected founders enjoy a higher rate of success in their startups

Less connected startups have lower employment and slower employment growth

Less connected startups have lower revenues and slower revenue growth

Success Factor of Local Connectedness is comprised of following sub-factors:

Sense of Community

- How founders and investors help each other

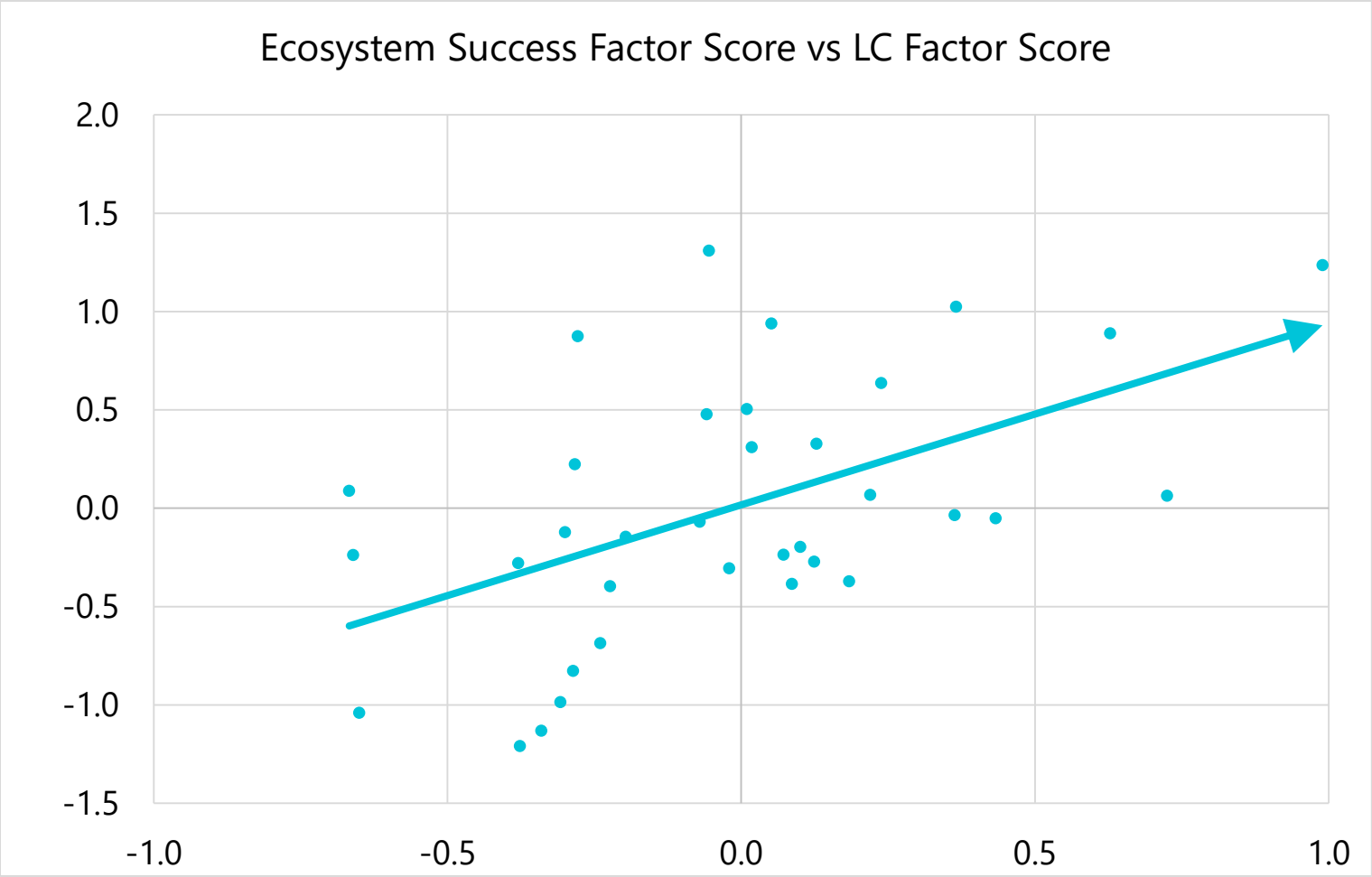
Local Relationships

- The number of quality relationships between founder and other founders, investors, and experts

Collisions

- Participation of founders in community activities and events

Higher Local Connectedness is directly linked with the success of an ecosystem



53%

Correlation between Local Connectedness Factor Score and Ecosystem Success Factor Score

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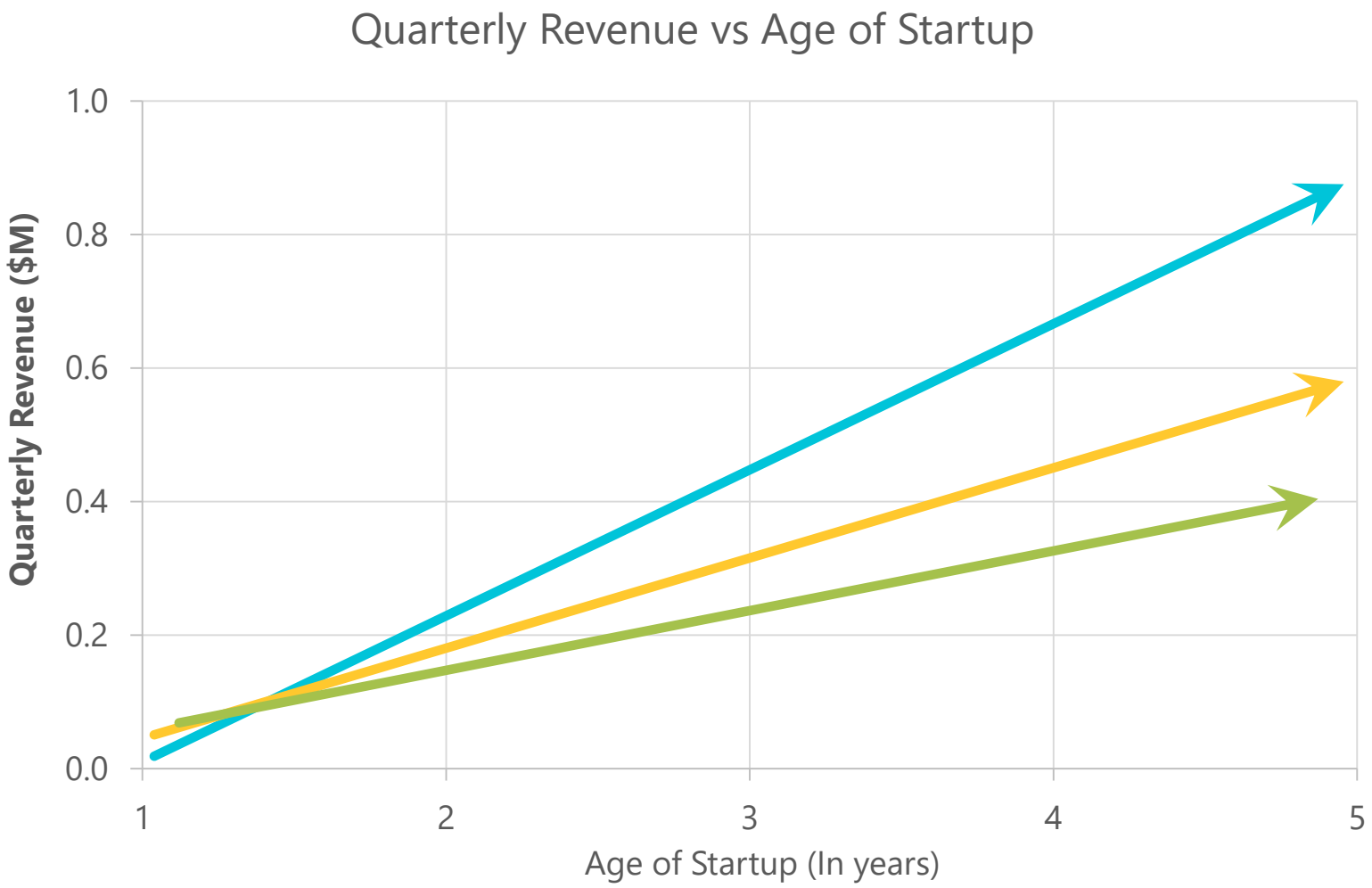
Startups with higher local connectedness grow faster and have potential for bigger exits



>2x revenue growth for startups with high Local Connectedness over those those with low Local Connectedness

High Local Connectedness

Medium Local Connectedness

Low Local Connectedness

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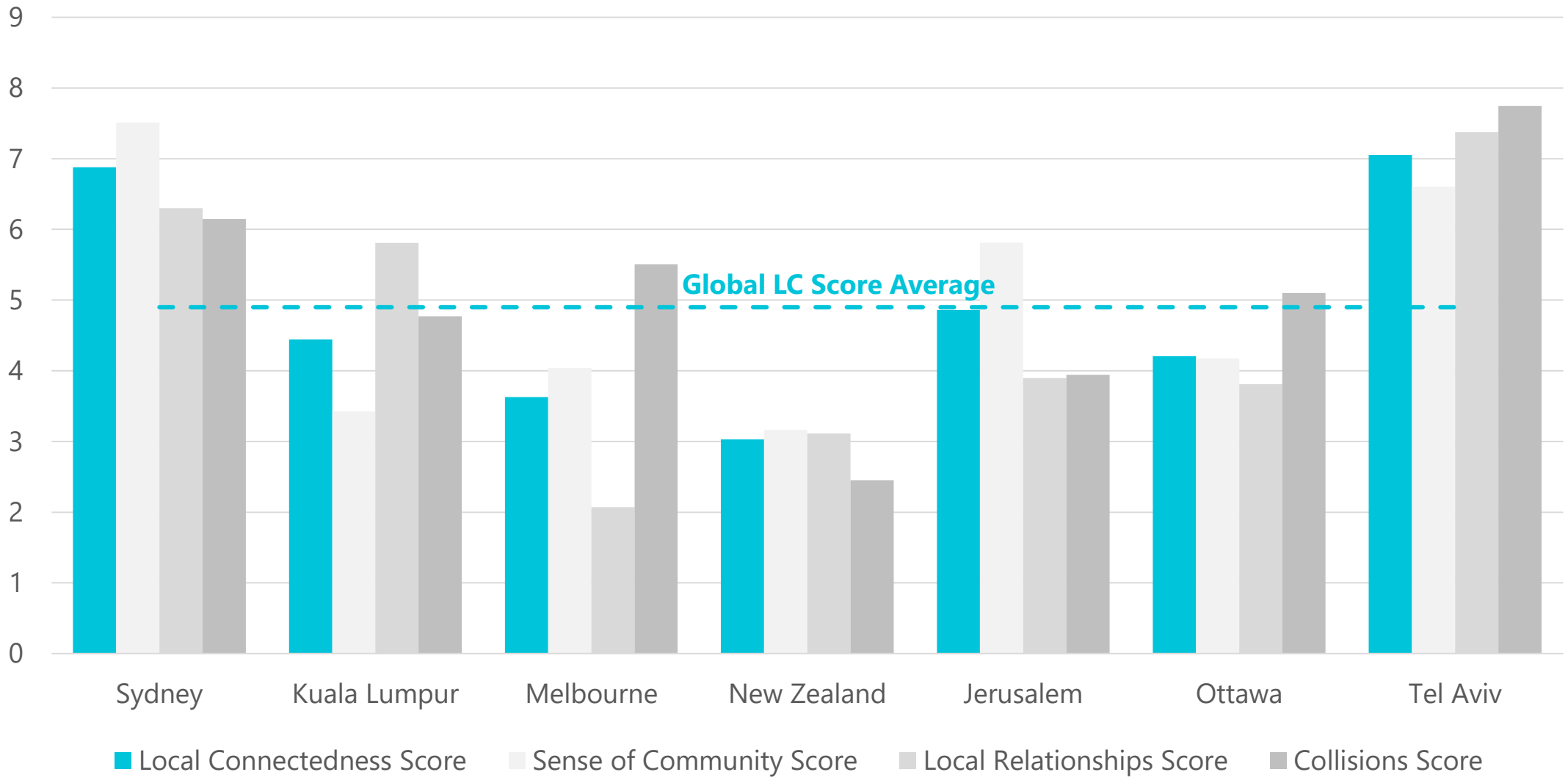
New Zealand lower than peers on Local Connectedness



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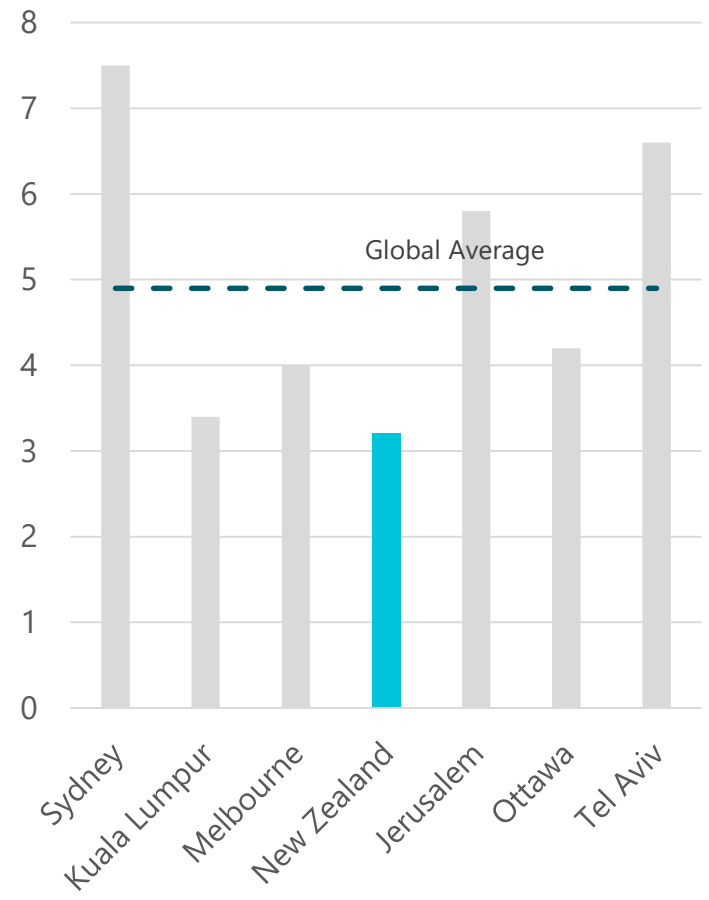
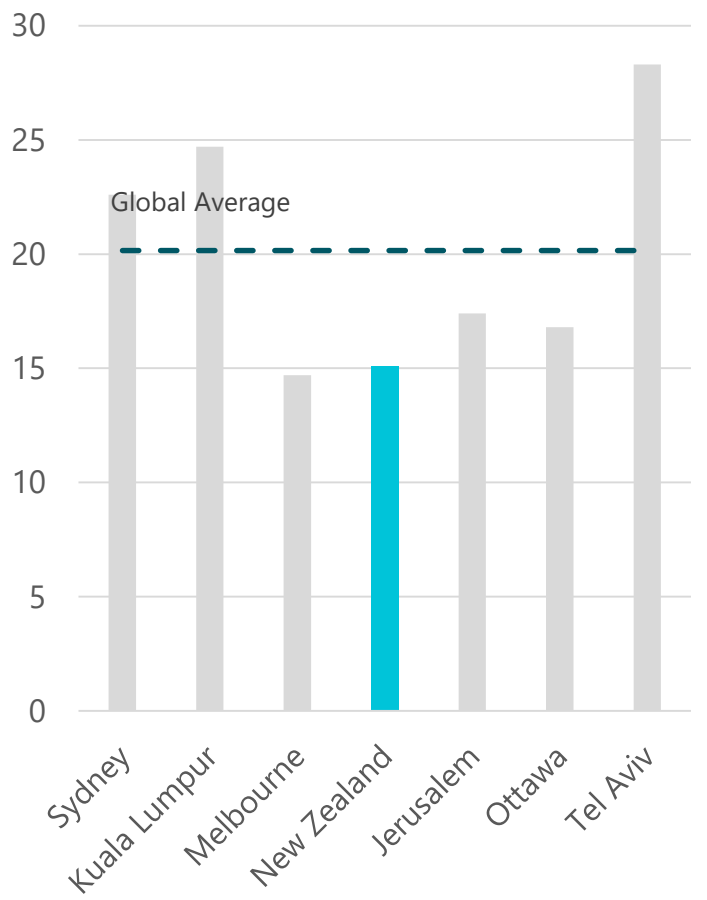
New Zealand scores lower than average on each sub-factor within Local Connectedness

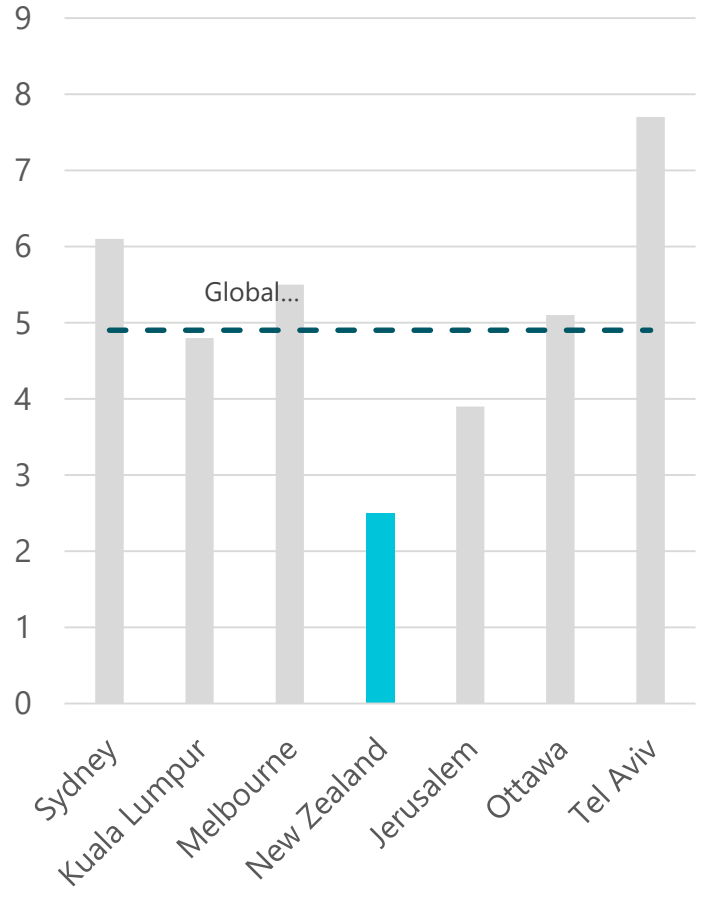
Sense of Community Index



of Relationship between Founders



Collision Index



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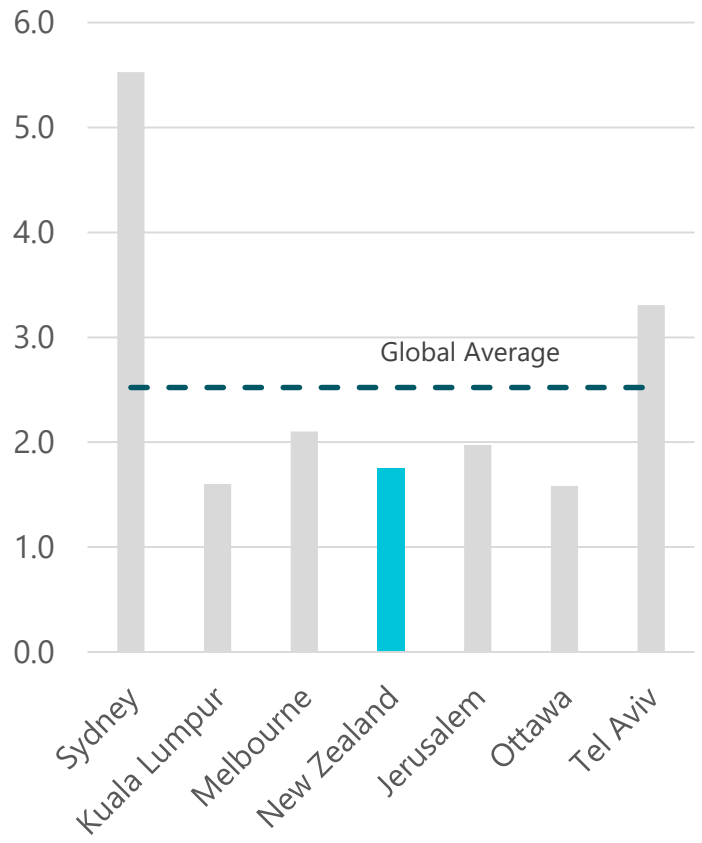
Within Sense of Community, founders in New Zealand receive relatively less help from other founders and investors

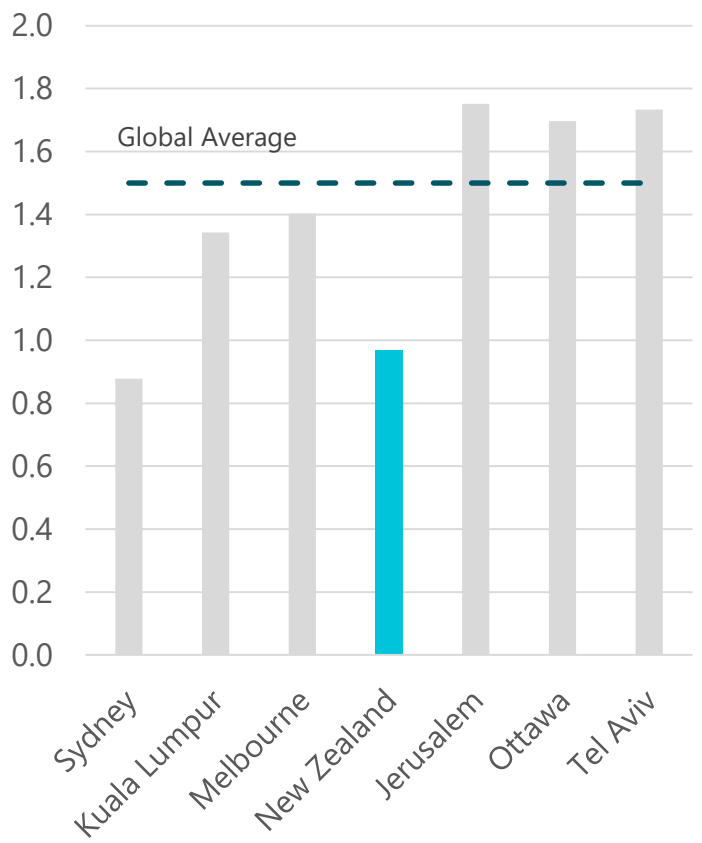
Sense of Community Score Breakdown

Founder-to-Founder Support

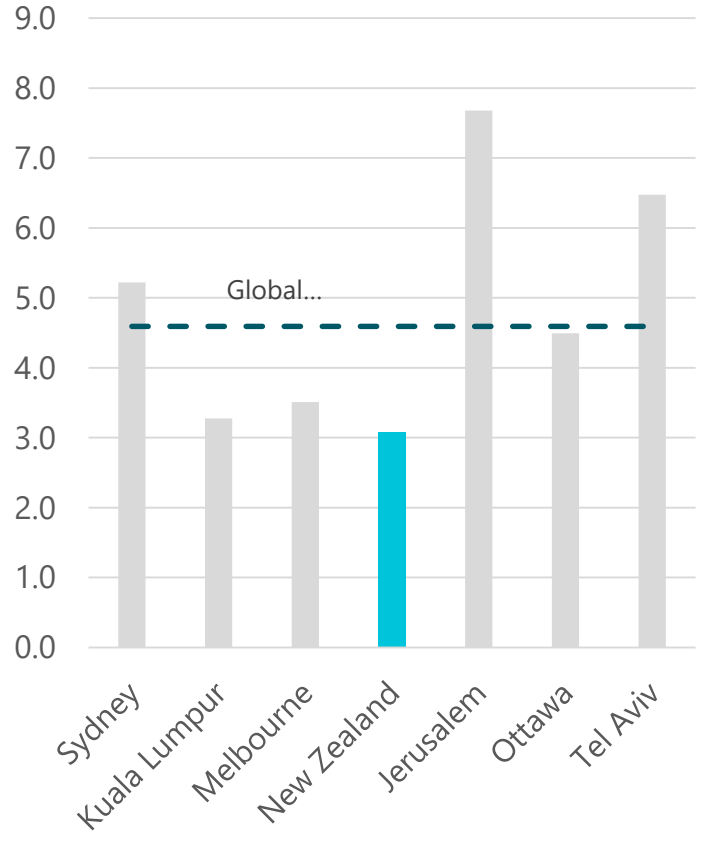
Helping Each Other



Intro to Customers & Investors



Investor Informally Helping Founders



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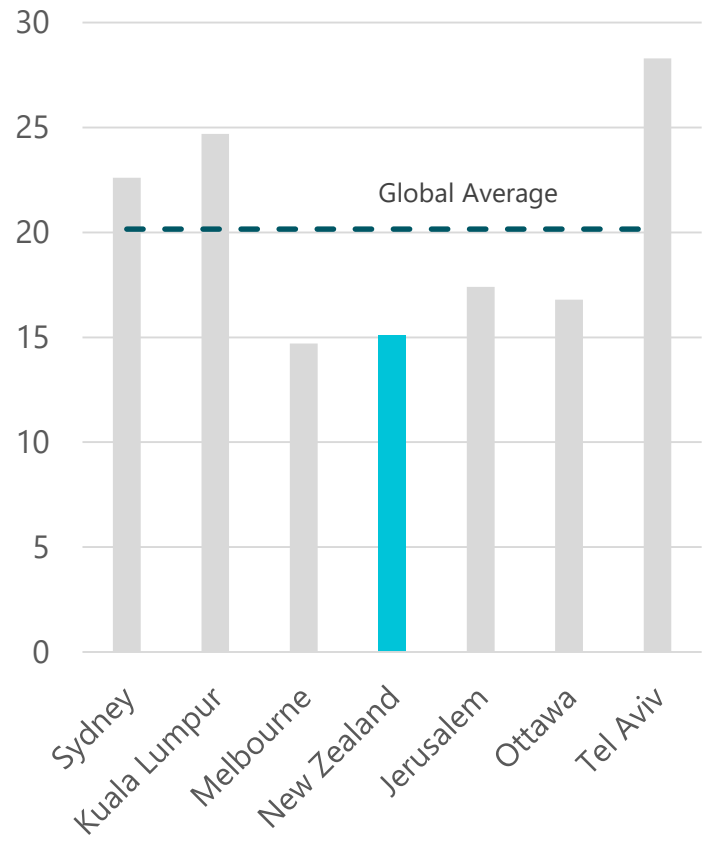
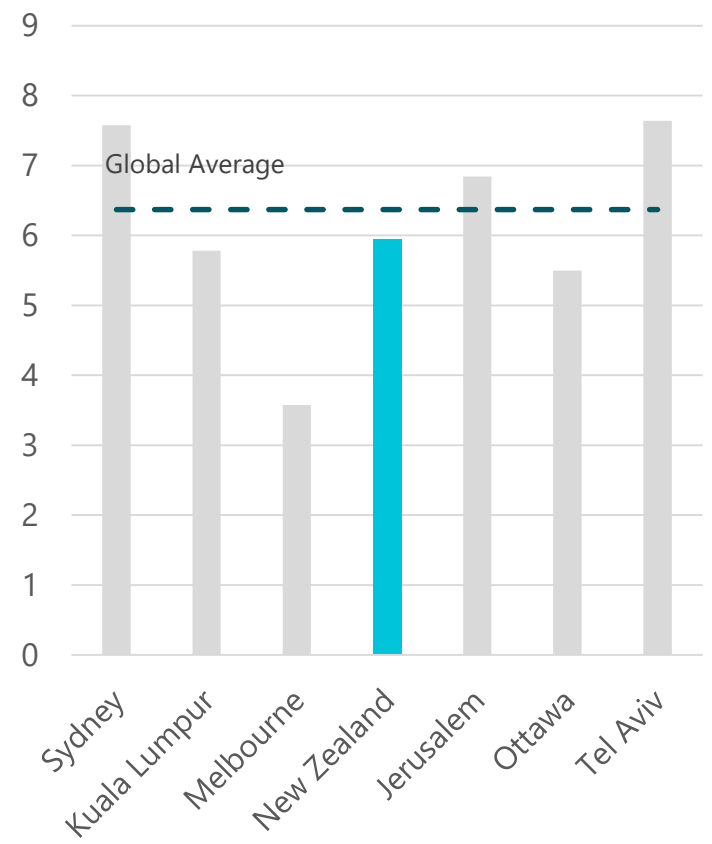
New Zealand trails global average in terms of founder relationships with other founders, investors and experts …

Founder Relationship Breakdown

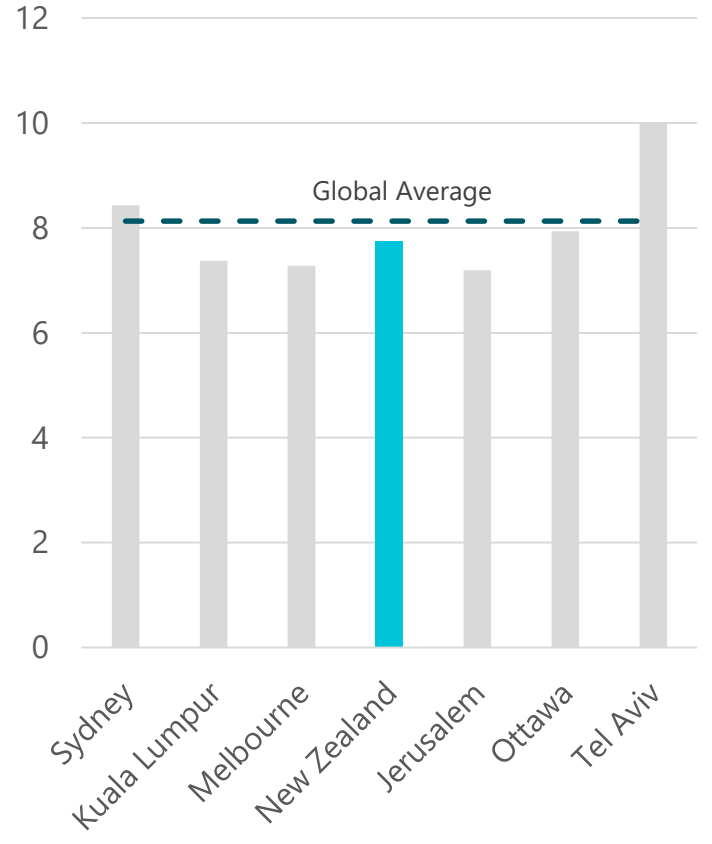
Founder Relationships



Investor Relationships



Expert Relationships



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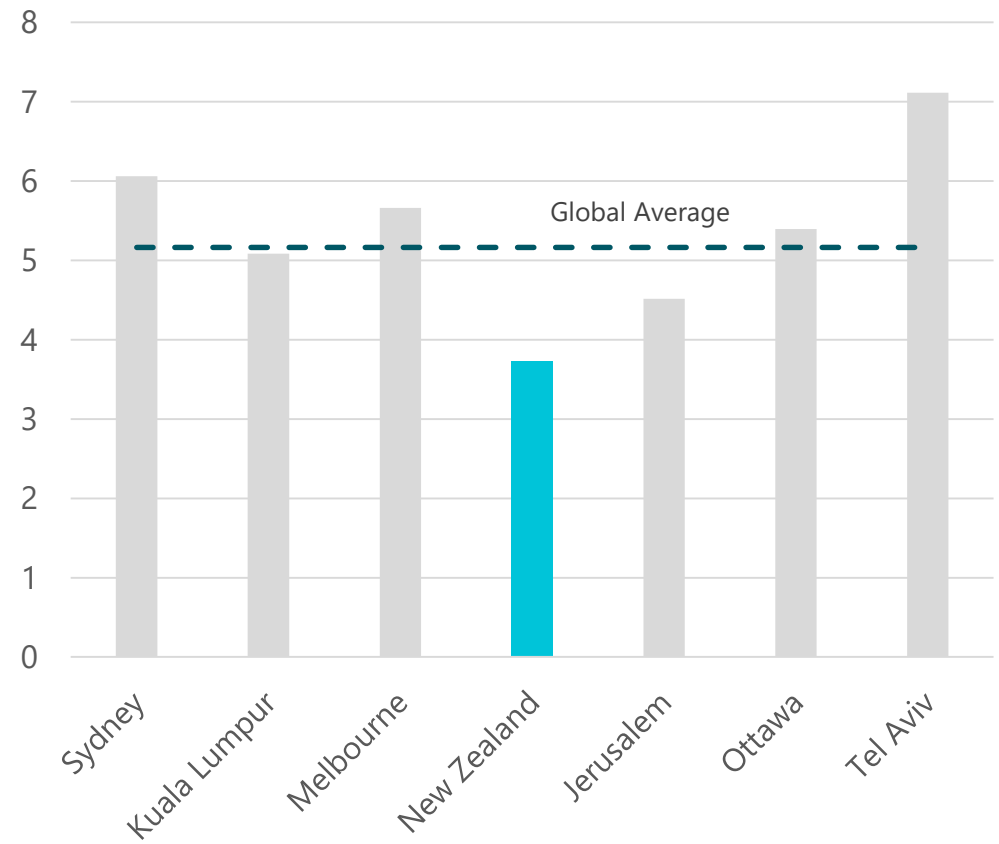
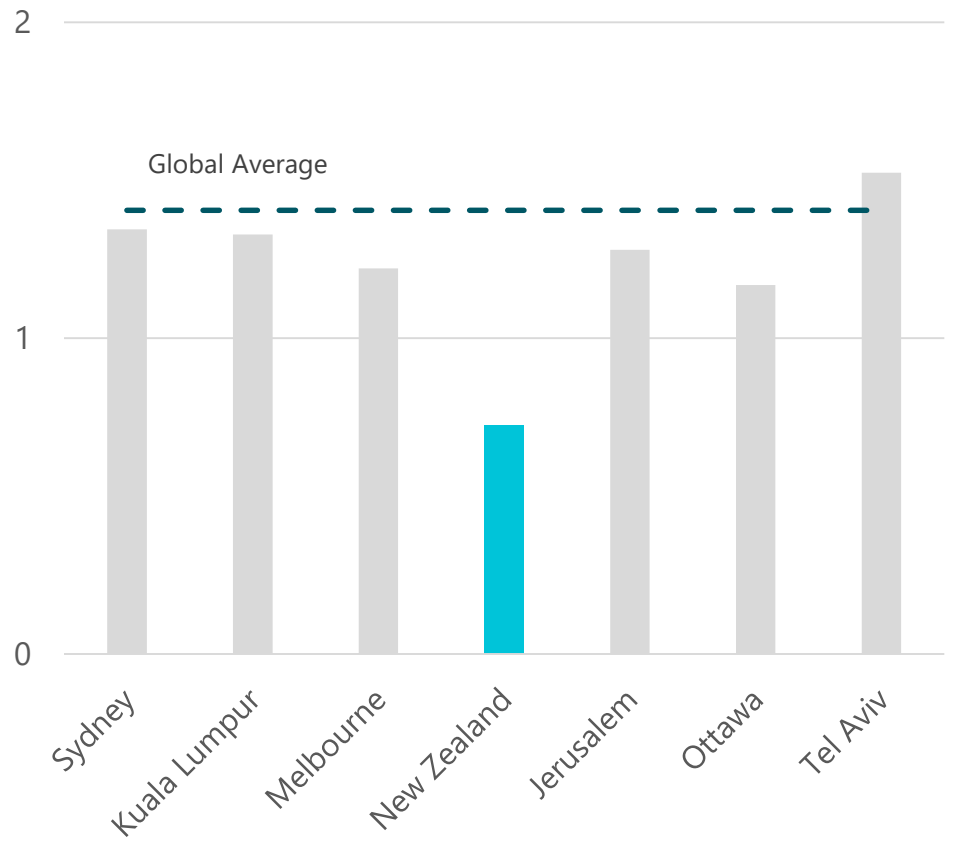
… and in terms of interaction with the local startup community and attending local startup events

Collisions Breakdown

Interactions with Local Startup Community



Attendance at Local Startup Events



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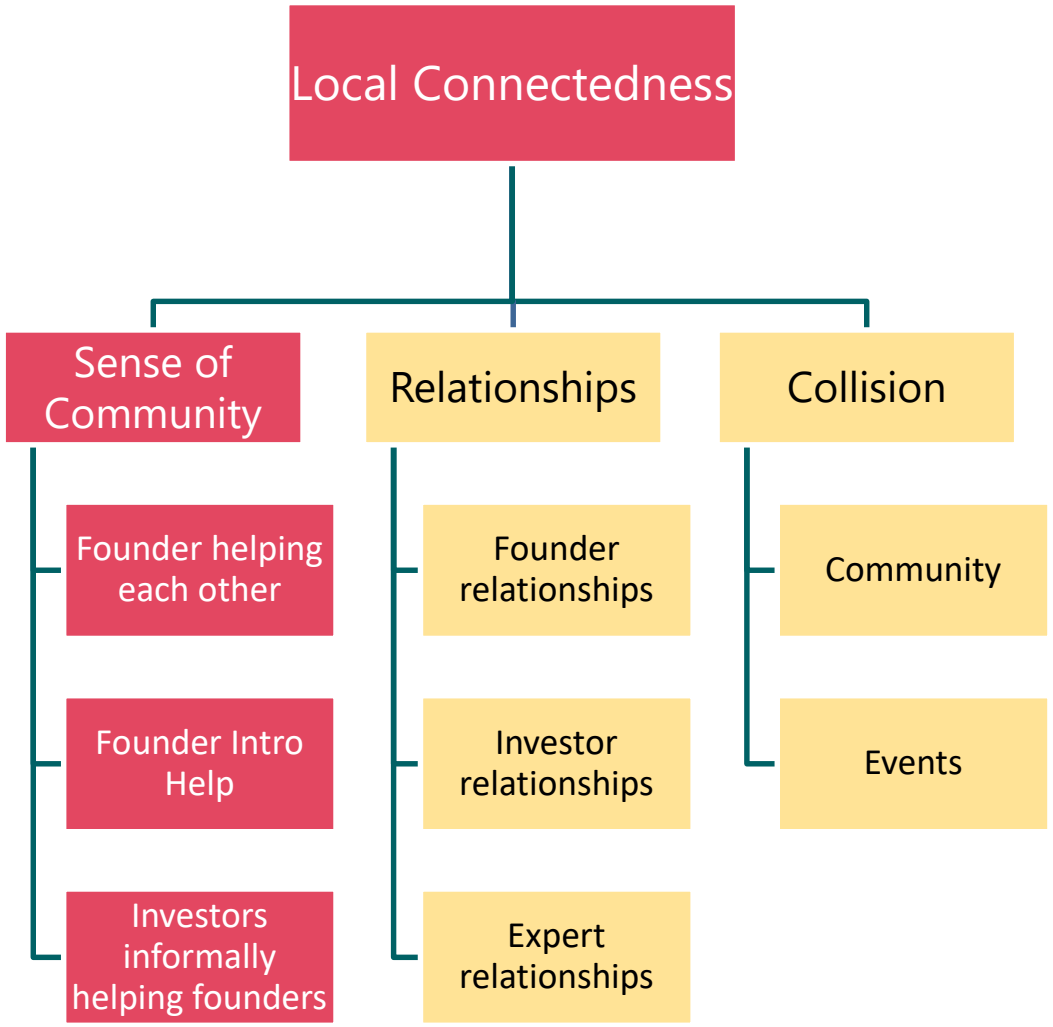
Conclusion: New Zealand low on Local Connectedness



Findings

- Low Relationships and Collisions present deep gaps but they get better with size
- Sense of Community is not related to size: shaping the community's culture early on is very important and will pay off for years to come

Table of Contents

- Introduction – Structure Leading to Execution
- Ecosystem Lifecycle Analysis
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- Appendix

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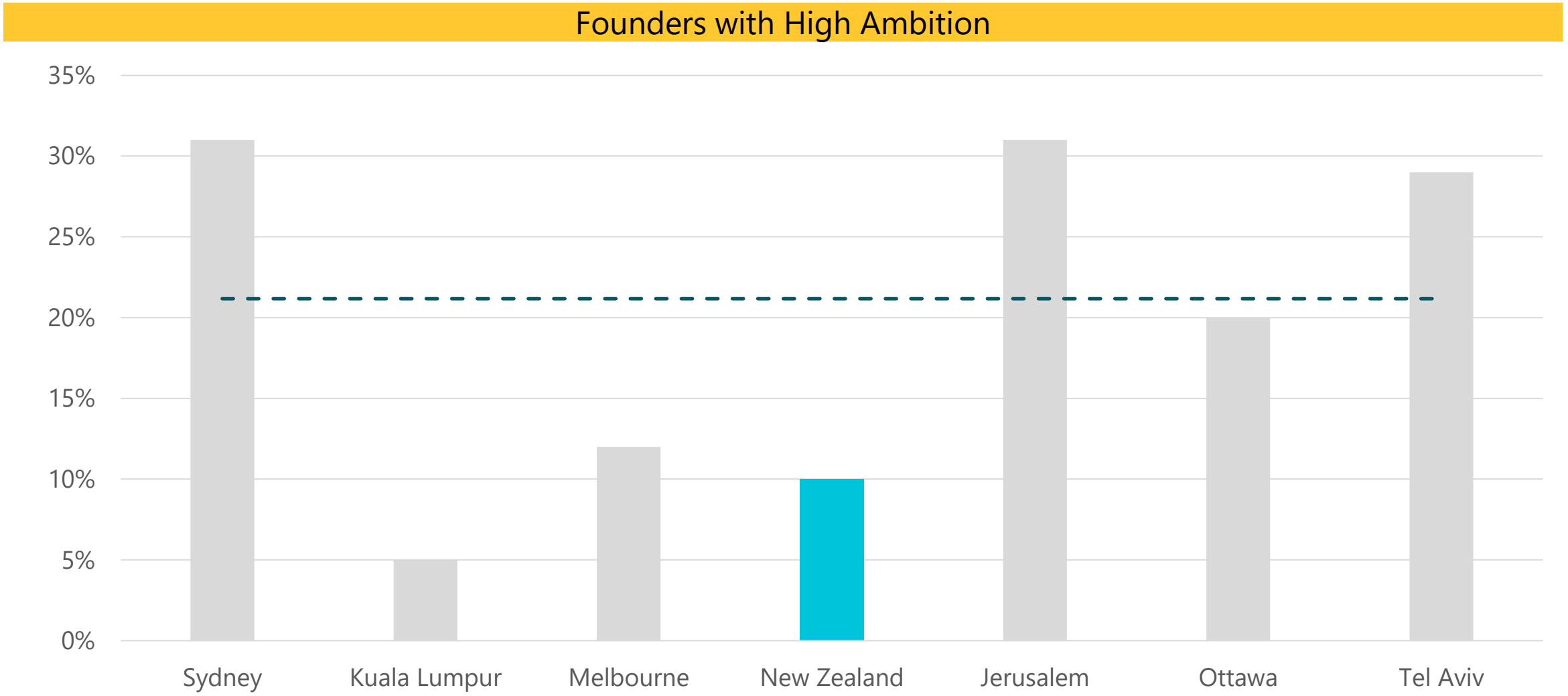
Founders from New Zealand lack ambition when compared to global peers



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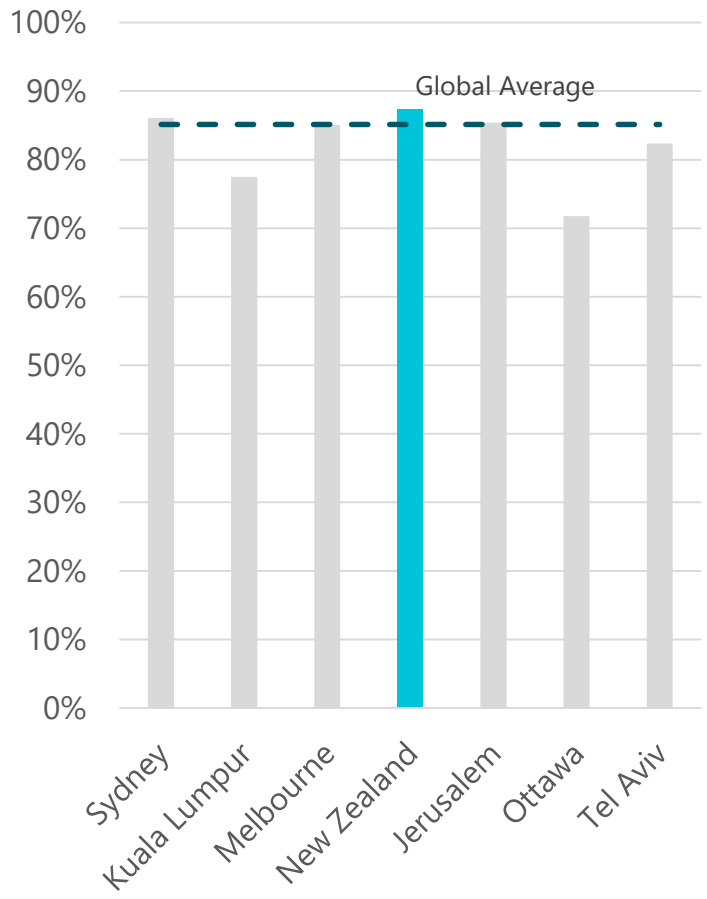
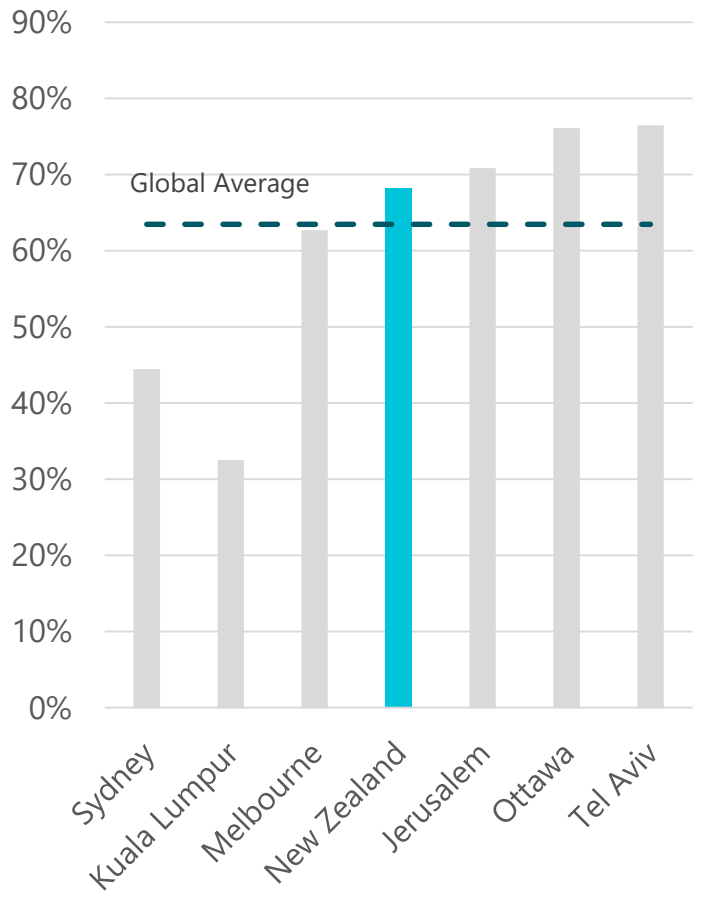
Gap in founder ambition reflected in the lack of founders targeting sizeable global markets

Founders with High Motivation

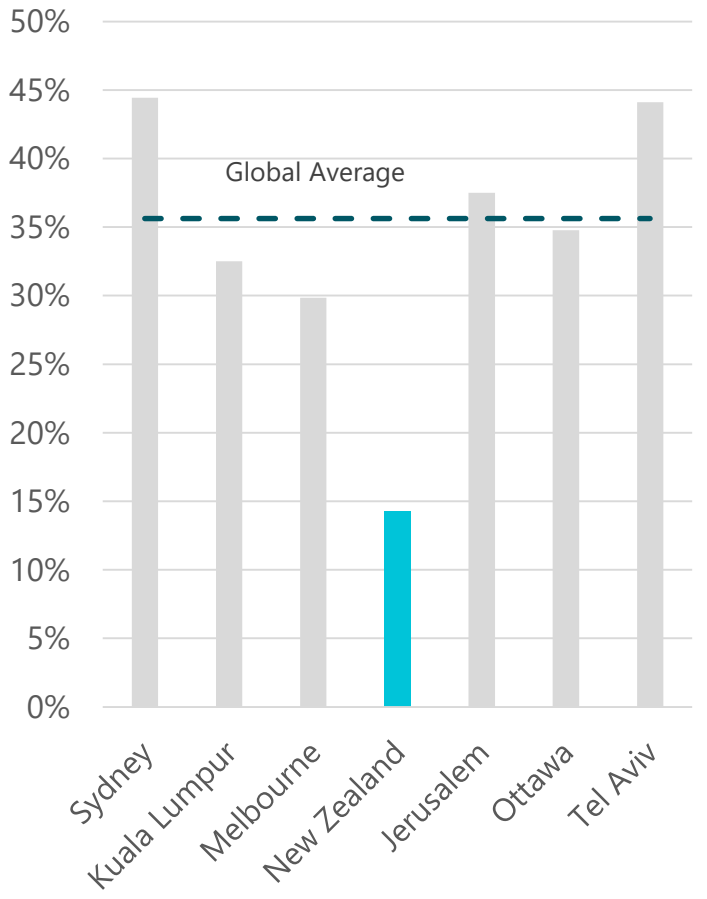
e.g. want to change the world



Founders claiming Global-Leading Product



$30B+ Total Addressable Market



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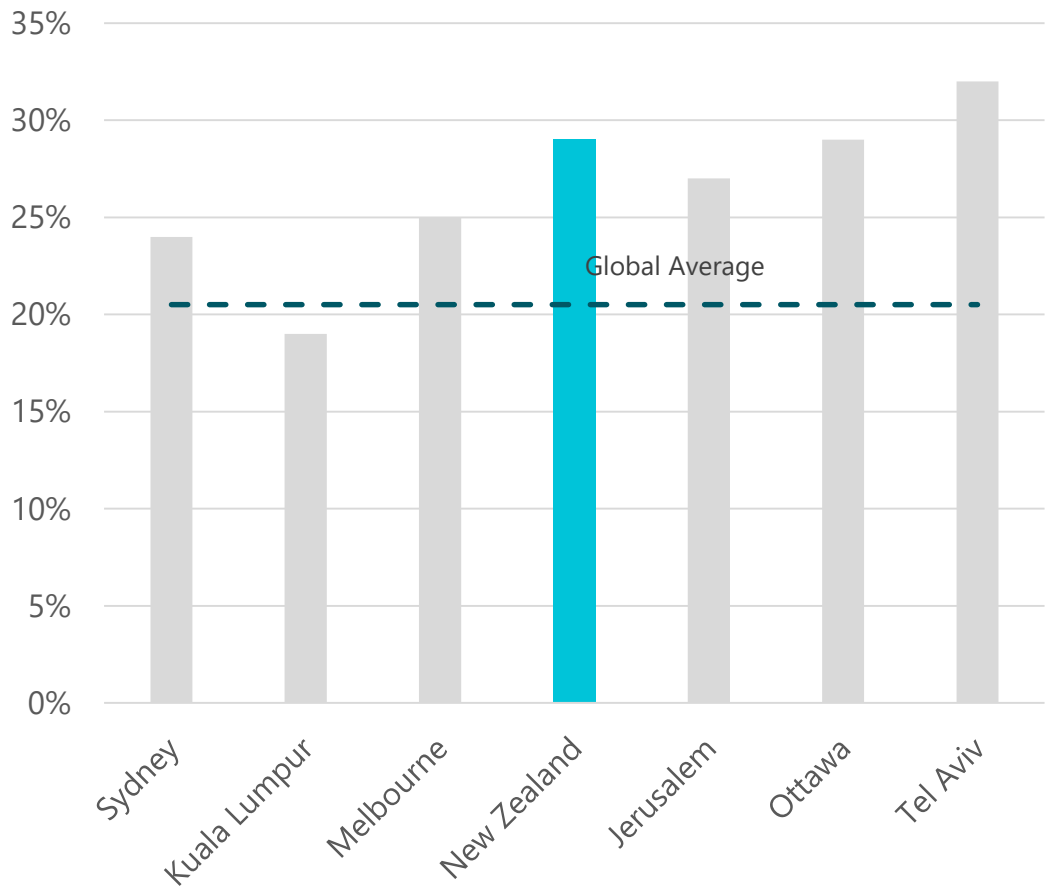
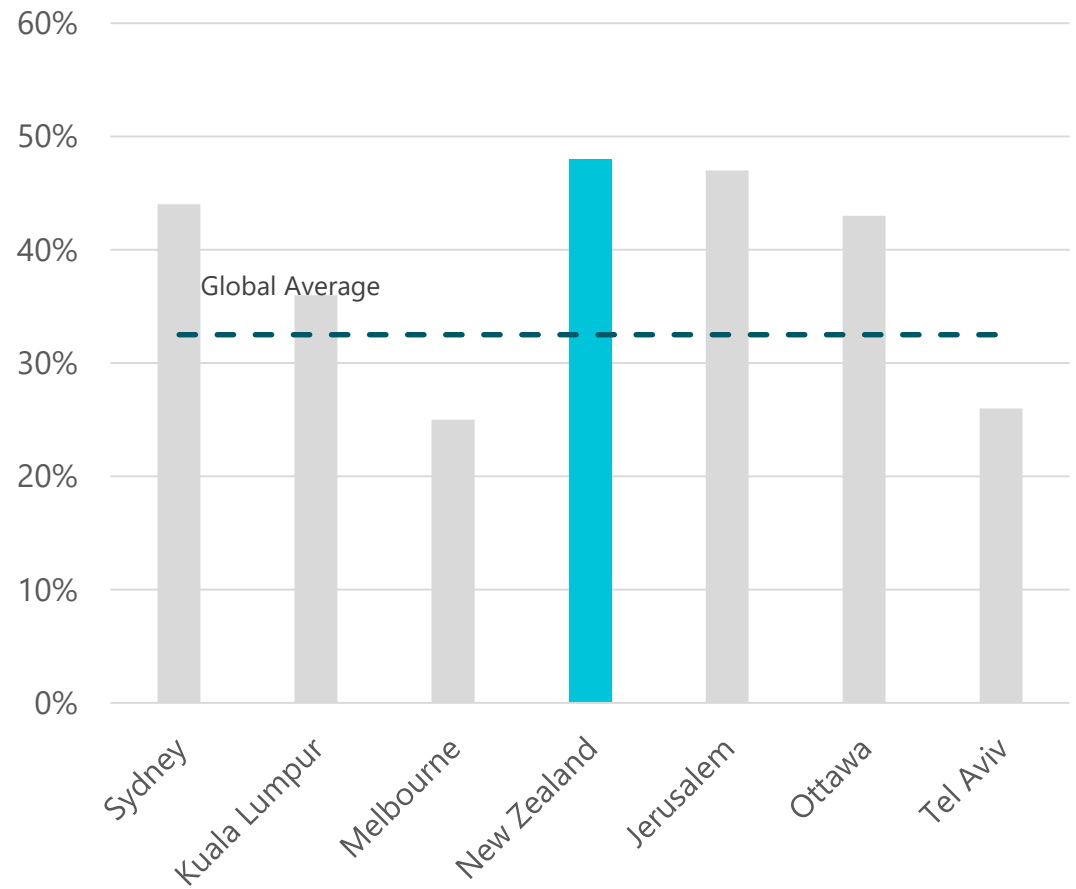
High share of New Zealand founders have Mindset correlated with success at both startup and scaleup stages

Founders with Entrepreneur Mindset



Founders with Business Builder Mindset



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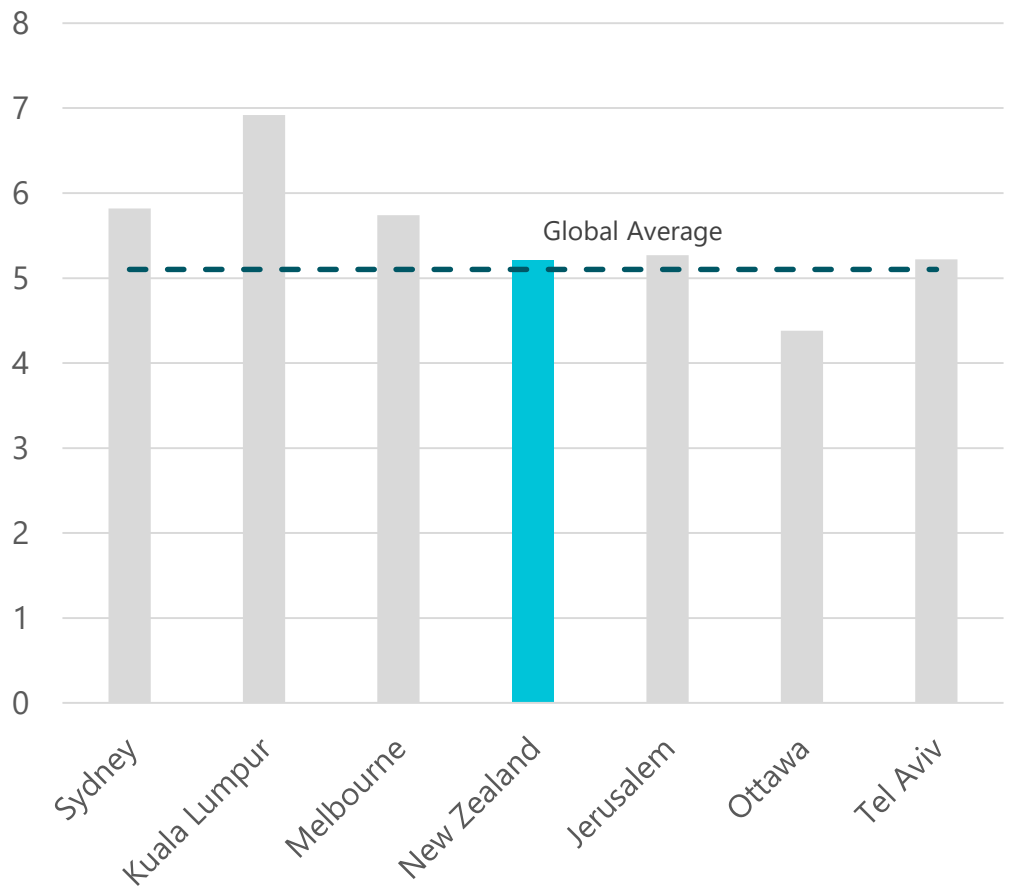
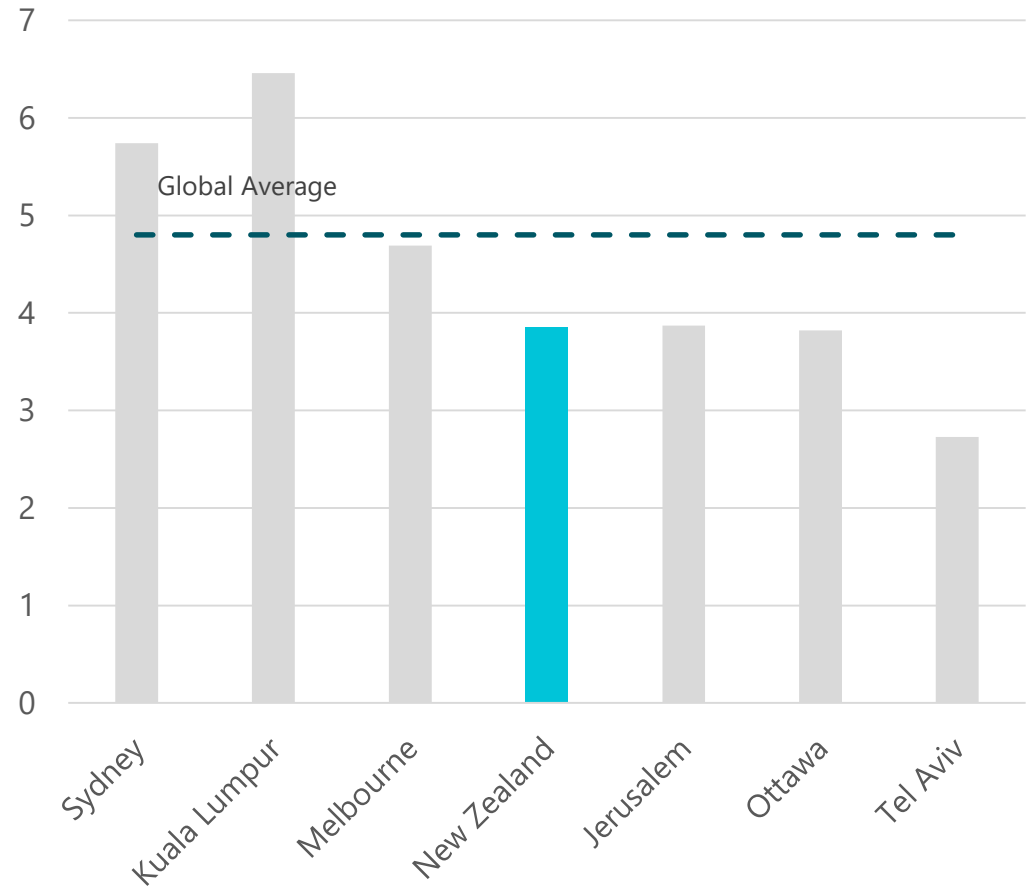
While founders in the ecosystem possess the right knowledge to build startups, there is a gap in terms of practical know-how

Theoretical Know-How Index



Practical Know-How Index



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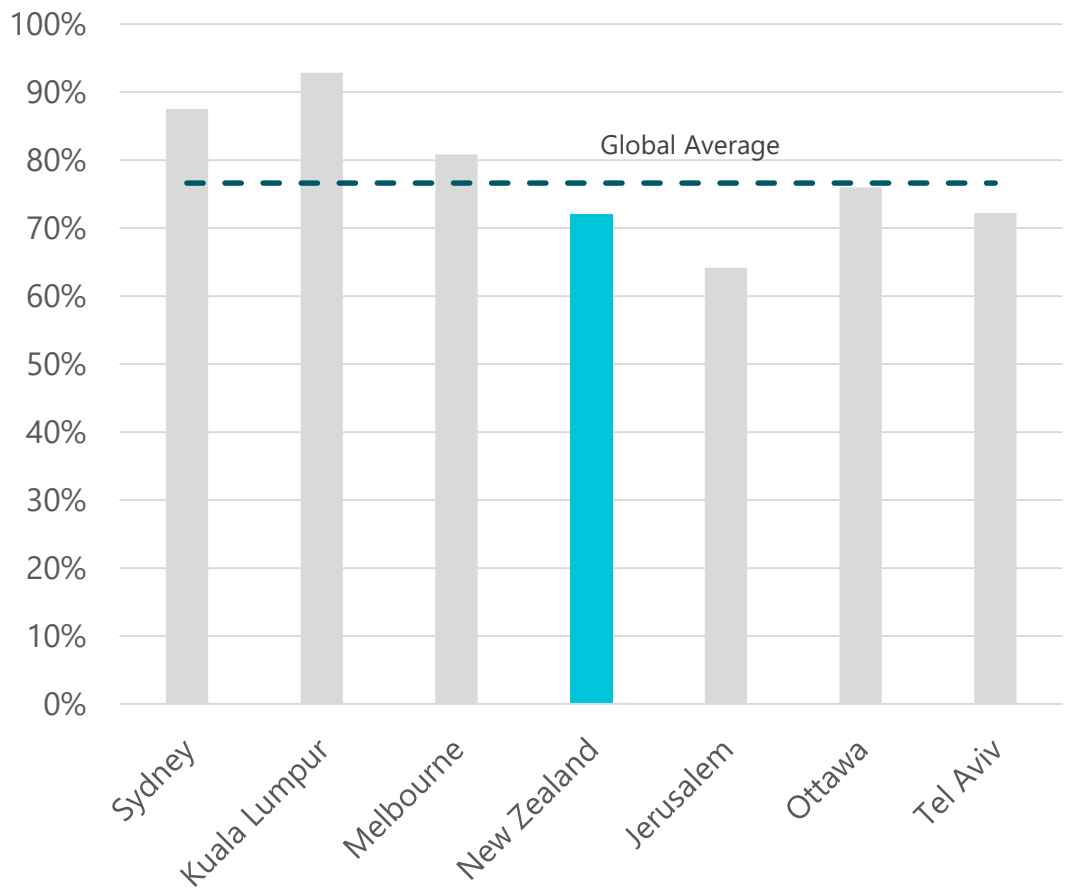
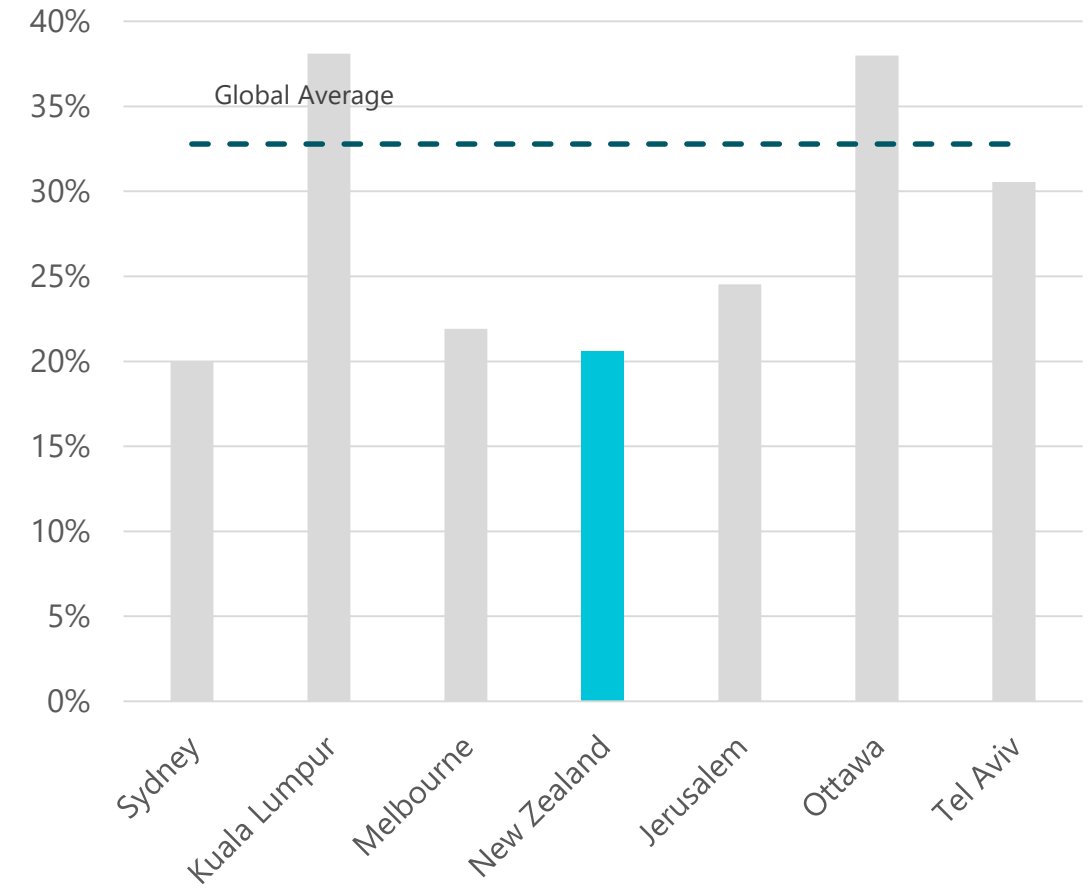
Founders from New Zealand also have below-average financial support from third-party sources

Founders with Personal Financial Support



Founders with Third-Party Financial Support



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Founder Factors Conclusion

- Ambition:
  - New Zealand founders want to change the world …
  - But low proportion of founders targeting sizeable market globally
- Founder Mindset:
  - New Zealand has a high proportion of founders with startup and scaleup success mindsets
- Know-How:
  - Founders from New Zealand are slightly behind their global peers in terms of implementation of startup methodologies like lean startup and customer development
- Financial Support:
  - Low proportion of founders from New Zealand receive financial support from third-party sources

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Table of Contents

- Introduction – Structure Leading to Execution
- Ecosystem Lifecycle Analysis
- Exits and Triggers
- Global Connectedness and Market Reach
- Local Connectedness
- Founder Mindset & DNA
- Funding
- Sub-Sector Potential
- Actionable Insights
- Appendix

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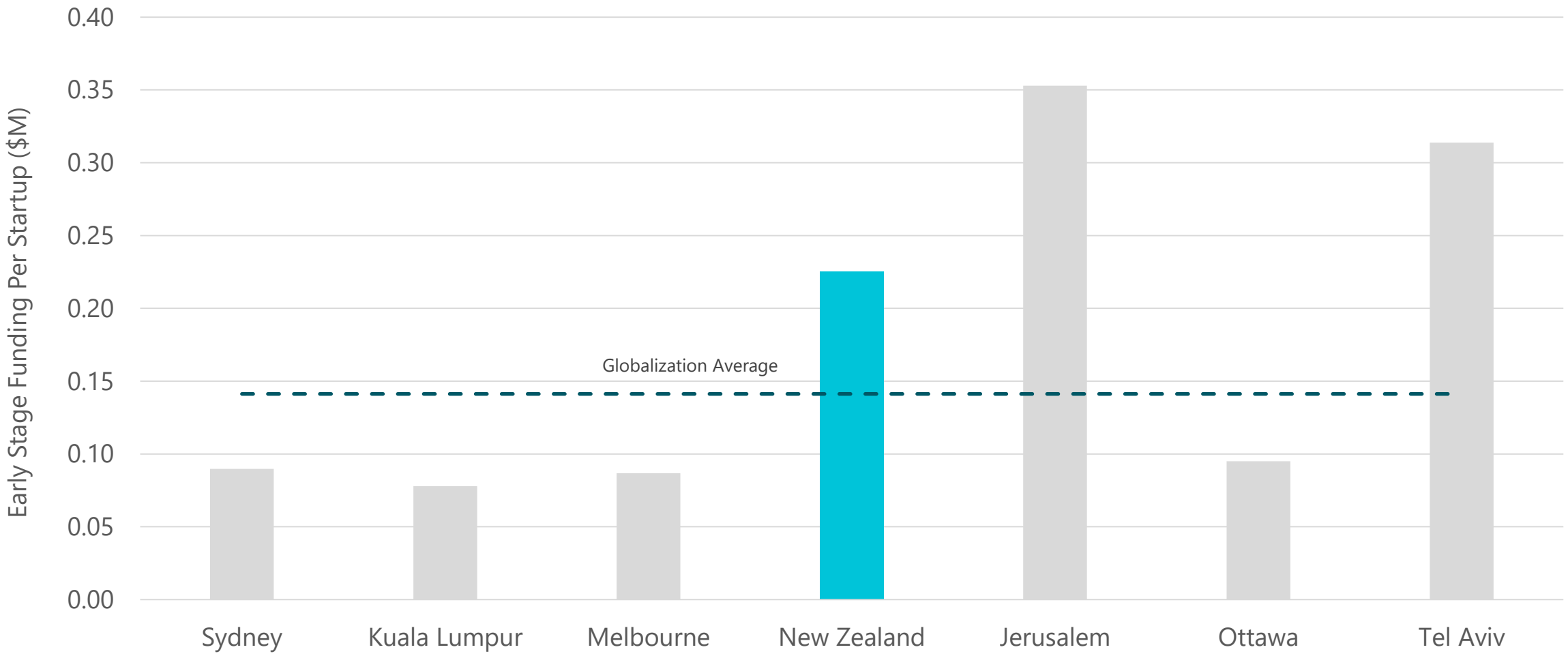
High availability of early-stage capital for New Zealand startups



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New Zealand's funding landscape can be broken down in four ways

	Seed	Series A
Smaller Amounts?	Median Amount	Median Amount
Fewer Rounds?	% Seed-Funded Startups	Survival Rate

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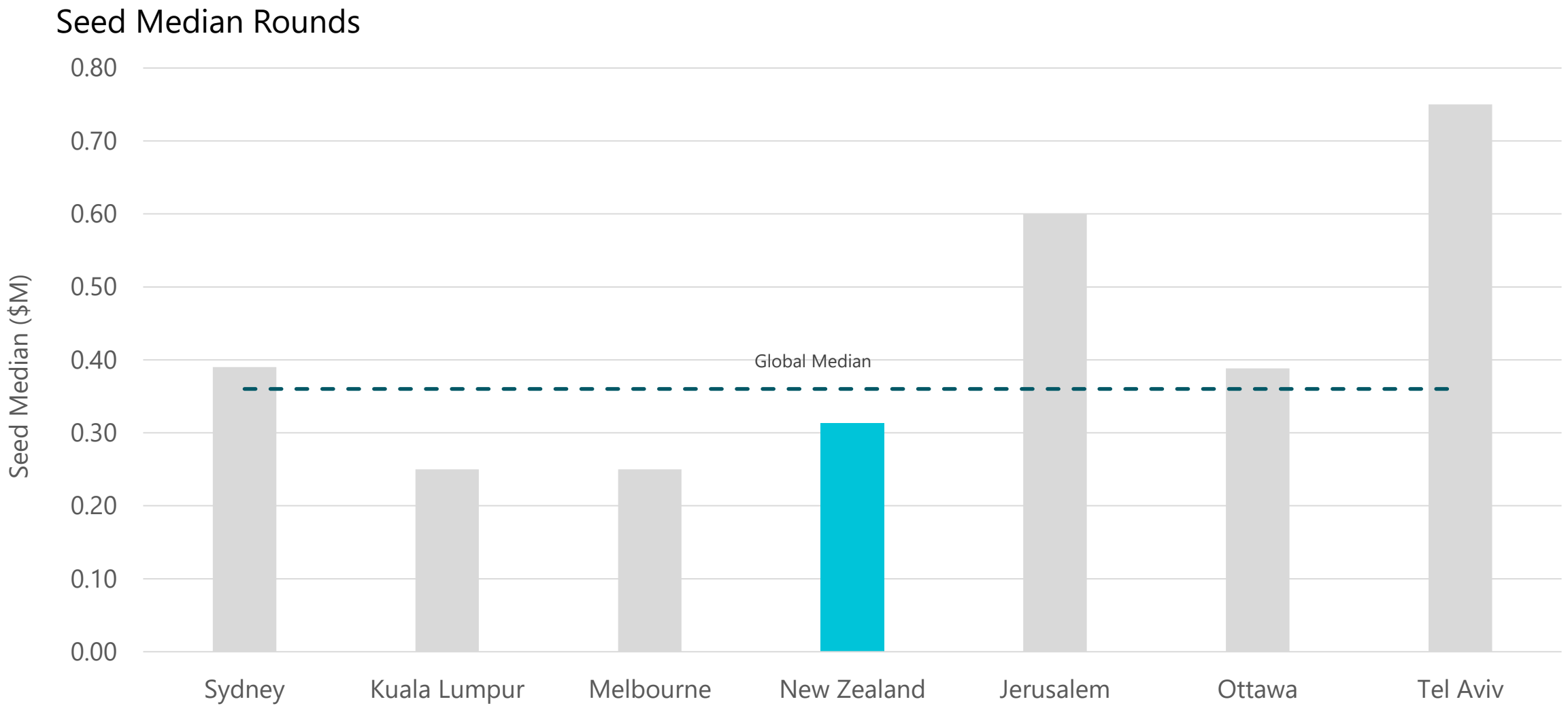
New Zealand shows a slight gap in the median seed round size when compared to the global median



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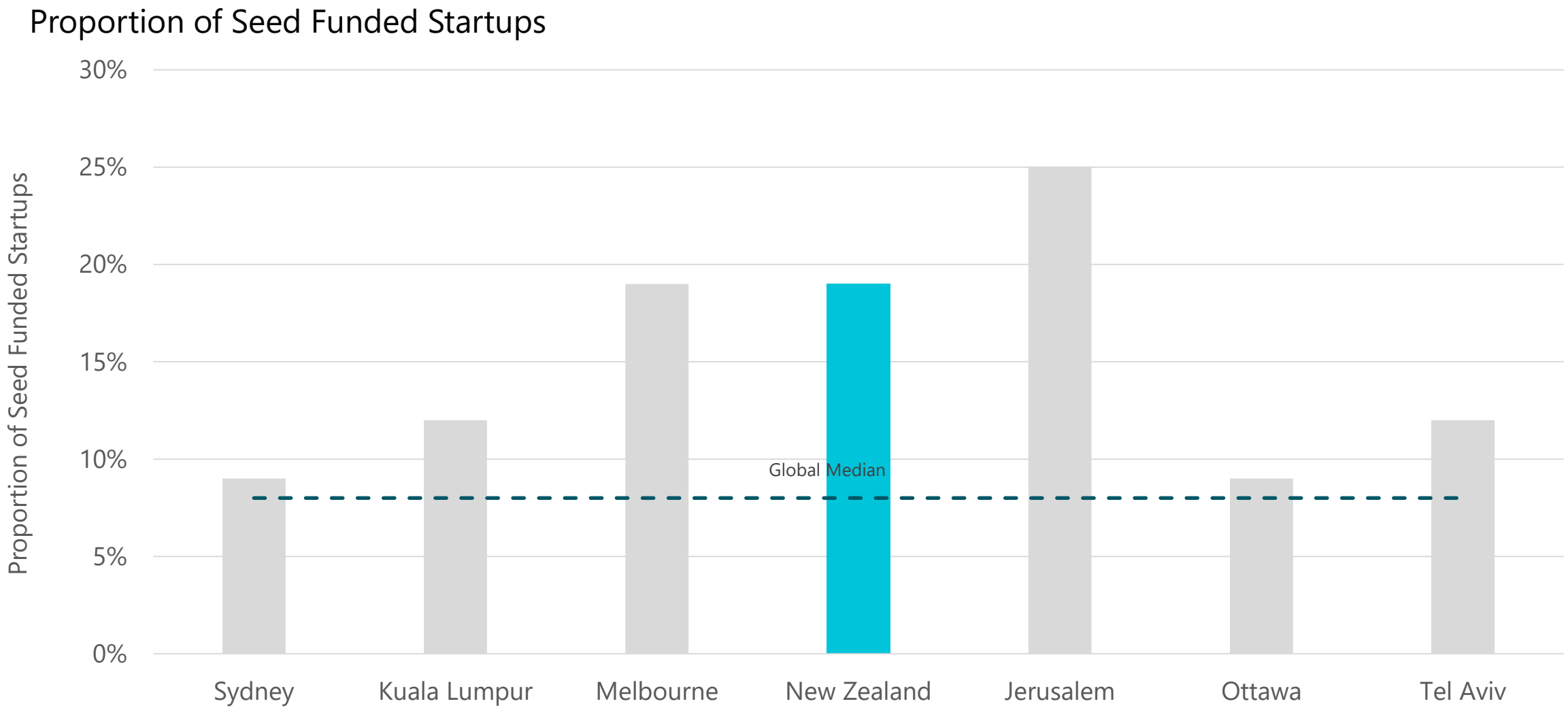
New Zealand has a high proportion of seed funded startups



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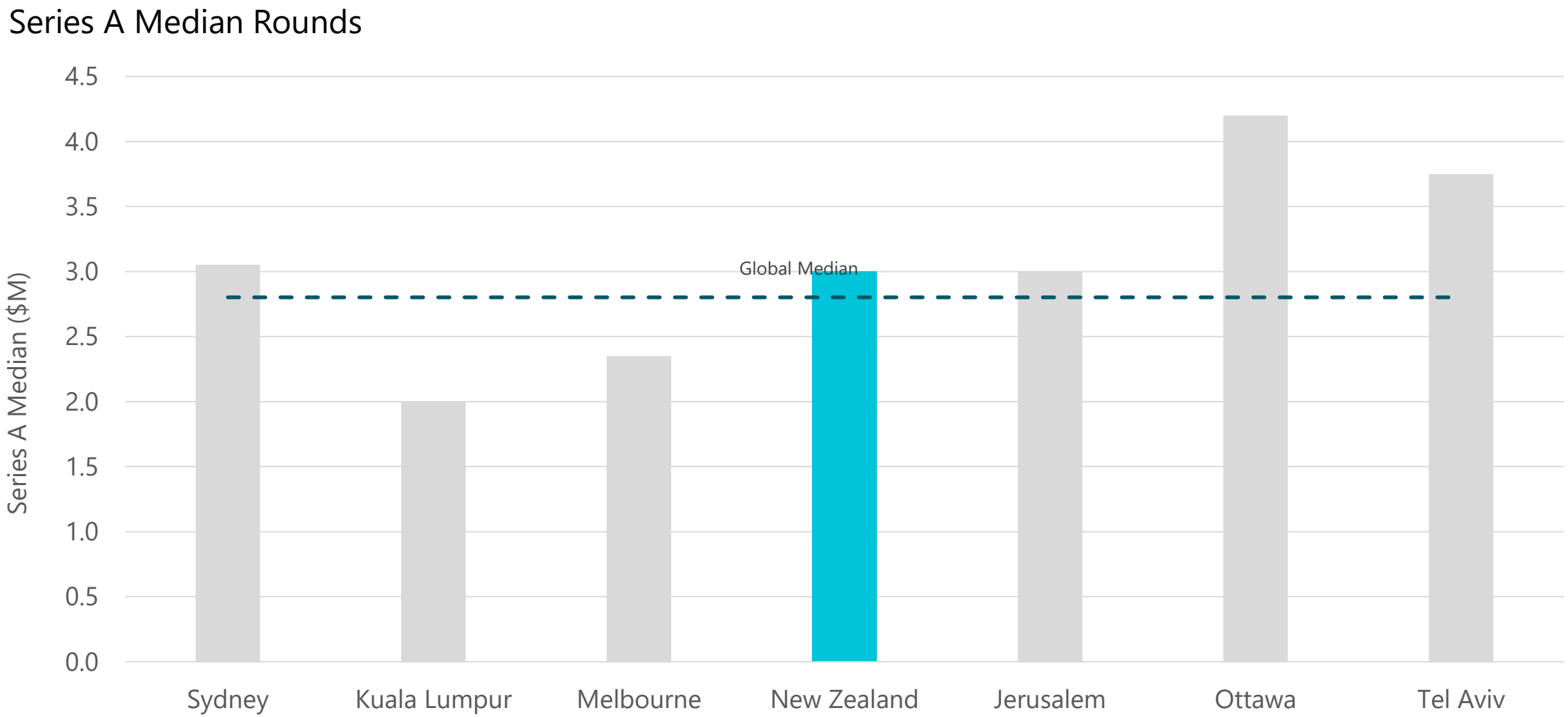
The median size for Series A rounds in New Zealand is close to the global median



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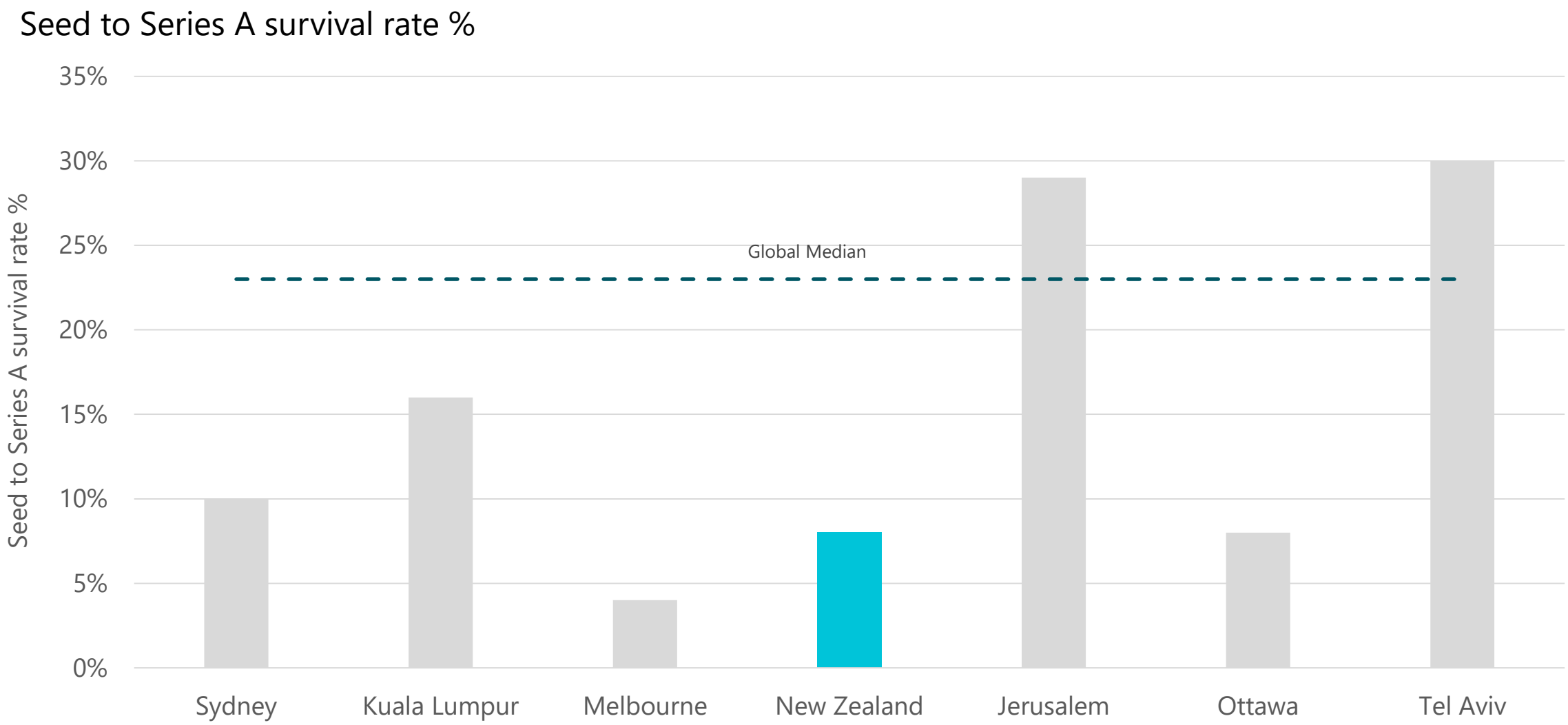
However, our data indicates that survival rate of startups from Seed to Series A is low



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Conclusion: New Zealand has a strong funding landscape, and has enormous potential to grow by plugging in some gaps

Breaking down the early-stage funding gap

- Seed
  - The median seed round amount is slightly lower than the global median
  - The ecosystem has a high percentage of startups that obtain seed rounds from private investors
- Series A
  - The Series A median amount is above average
  - However, the survival rate is low, suggesting a lack of institutional investors (either number or fund size)

	Seed	**Series A**
Smaller Amounts?	Median Amount	Median Amount
Fewer Rounds?	% Seed-Funded Startups	Survival Rate

Focus Area

Table of Contents

- Introduction – Structure Leading to Execution
- Ecosystem Lifecycle Analysis
- Exits and Triggers
- Global Connectedness and Market Reach
- Local Connectedness
- Founder Mindset & DNA
- Funding
- Sub-Sector Potential
- Actionable Insights
- Appendix

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Sub-Sector Strategy Development: Allocate more resources to Startup Sub-Sectors most related to your local strengths

- Step 1: Assess Emerging Startup Sub-Sectors (clusters)
- Step 2: Benchmark Traditional Sector Strengths *related* to Sub-Sectors
- Step 3: Identify how Existing Strengths can help Startups in each Sub-Sector
- Step 4: Overlay Potential of Identified Startup Sub-Sectors
- Step 5: Select 1 to 3 Startup Sub-Sectors to Prioritize and Take Action

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Underlying assets like large companies, universities, and patents within an ecosystem can be leveraged to bolster startup sub-sector growth

Benefits of having a strong resource base within an ecosystem

Talent

Good universities and a strong legacy industry base help attract right talent base required for new startup sub-sectors

Sectoral Know-How

Ecosystems with strong legacy industry-concentrations and patent registrations have relevant technologies and experts as well as existing policy frameworks to fuel sub-sector growth

Network Strength

Existing business networks of suppliers, customers, and others within an ecosystem act as catalysts for successive sub-sectors

Key Data for Assessment

- Startup Sub-Sectors
  - Funding
    - 5-year count of Early-Stage Funding rounds across sub-sectors
  - Performance
    - Startup Output
      - Number of Startups across sub-sectors
    - Exits[1]
      - 5-year count of Exits larger than $50m across sub-sectors

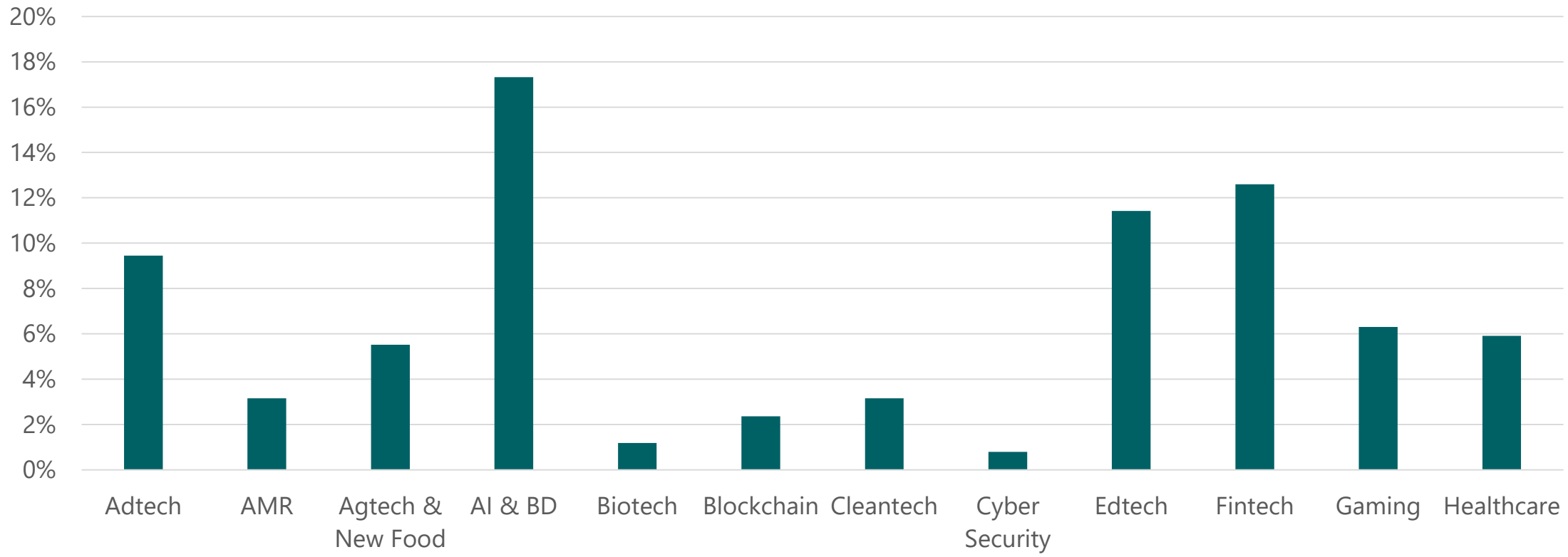
- Local Strengths
  - Legacy Industry
    - Market capitalization of Forbes 2000 companies (HQ) within the legacy industries of sub-sectors
  - Knowledge Creation
    - Patent production related to sub-sector
  - University & Talent
    - Quality of universities that feed the talent demand of sub-sectors

1. Not included in every analysis due to limited sizable exits in some ecosystems

Step 1
Startup Sub-Sectors: Funding

AI and BD have emerged as the leader in terms of volume of early-stage funding

Share of Early-Stage Funding in New Zealand (#, 2012-2017)



AMR: Advanced Manufacturing & Robotics | AI & BD: Artificial Intelligence & Big Data

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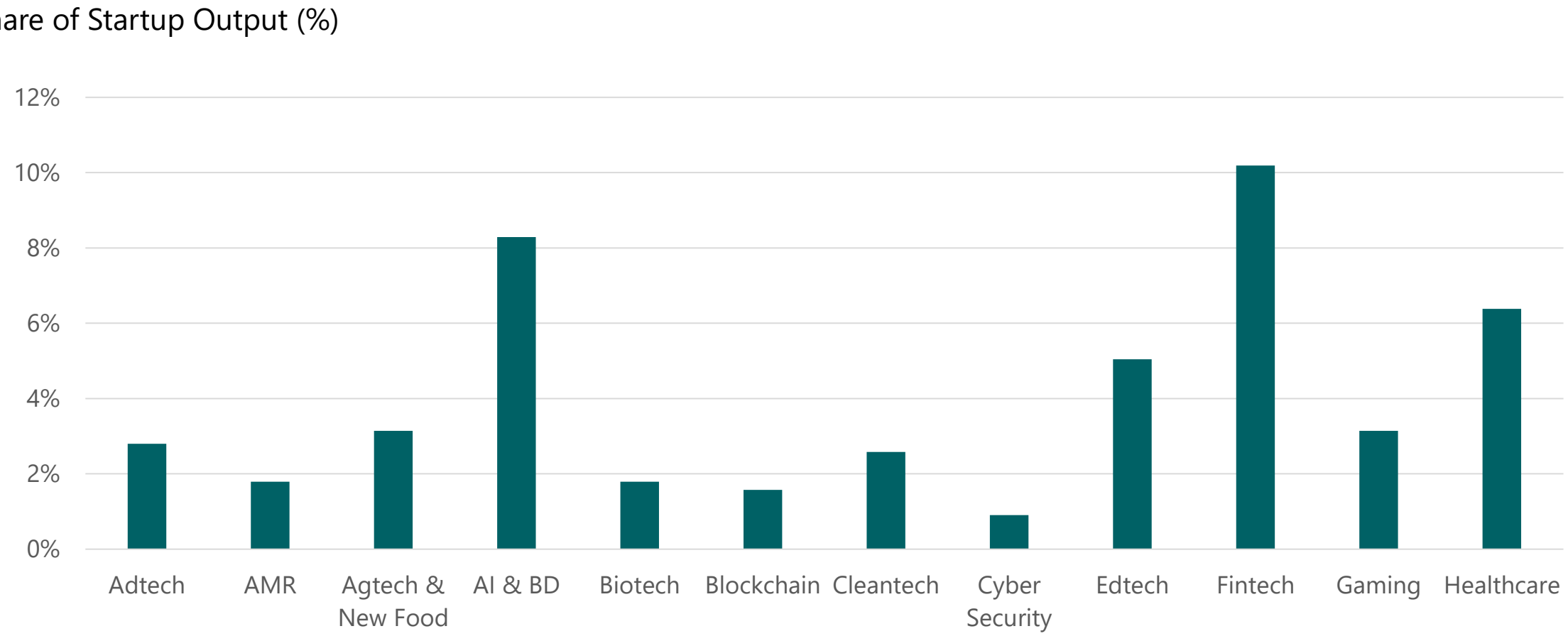
Step 1
Startup Sub-Sectors: Performance

Fintech has largest share of Startup Output in New Zealand, just ahead of AI & BD



*AMR: Advanced Manufacturing & Robotics

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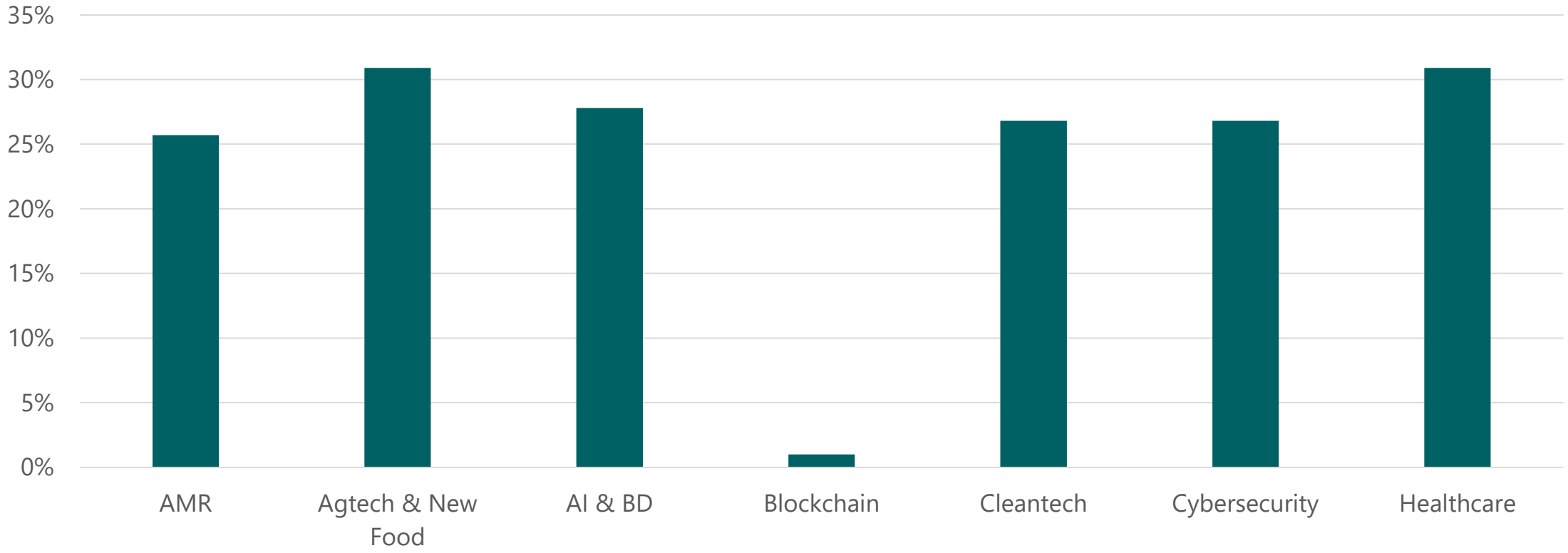
Step 2
Local Strengths: Knowledge Creation

Patent production and R&D in New Zealand is limited when looked at on a global landscape

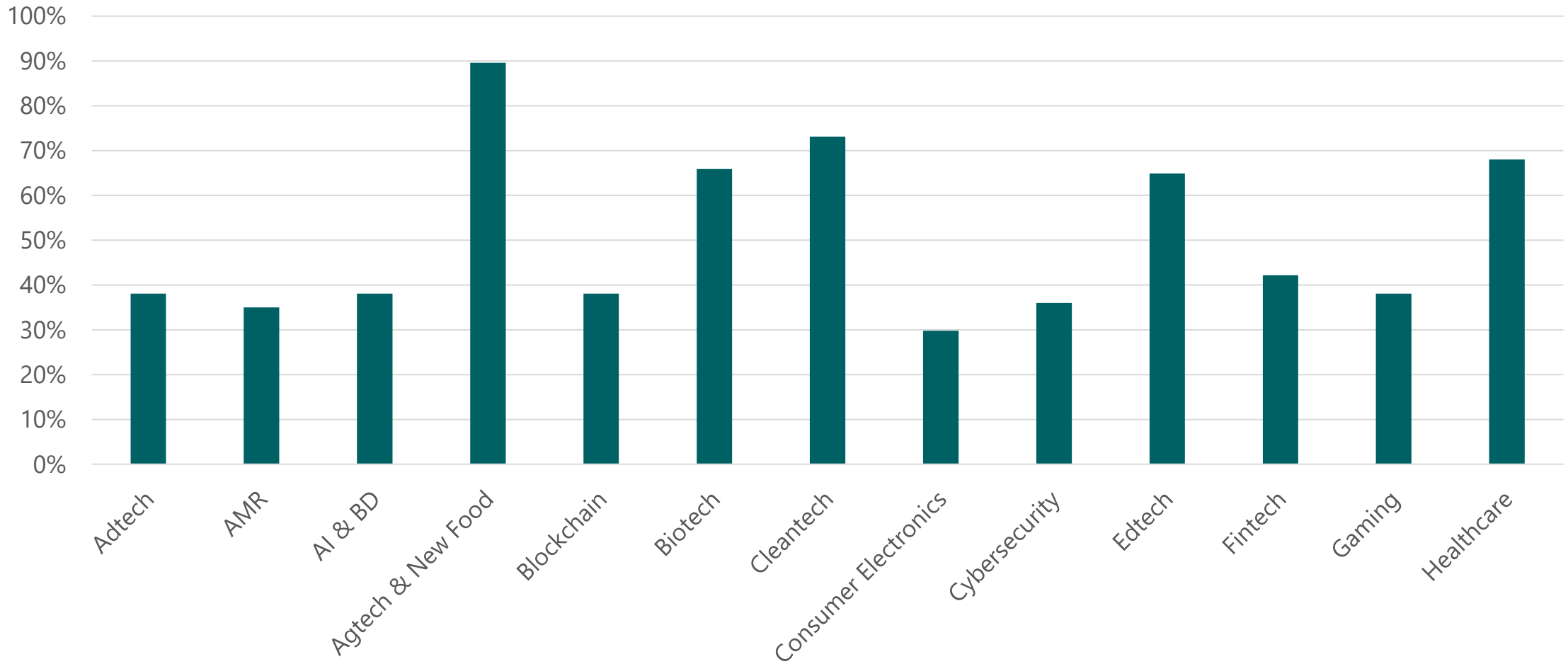
Percentile of patent production across relevant startup sub-sectors (2015-17)



Step 2
Local Strengths: University & Talent

Universities in New Zealand groom high-quality talent that can be leveraged across sub-sectors

Percentile scoring of talent needed across startup sub-sectors based on university rankings



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Step 3

Using our framework, we have identified the top three sub-sectors in New Zealand from a global perspective

Chosen Sub-Sectors

Healthcare

Agtech and New Food

Govtech[1]

Top 3 Identified Sub-Sectors

Agtech and New Food

Edtech

Biotech

1. Data for Govtech is not available

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Step 3

A breakdown of the top 3 sub-sectors in the ecosystem explains how they are leading

Global ranks across metrics

	AgTech & New Food	Edtech	Biotech	Healthcare
Global Rank (#)	**7**	**30**	**39**	**47**
Early-Stage Funding	6	14	41-50	41-50
Startup Output	3	18	21-30	31-40
Sizable Exits	-	-	-	31-40
Legacy Assets	-	-	N/A	-
University Talent	10	31-40	31-40	31-40
Patent Creation	Less than 50	N/A	N/A	Less than 50

Step 3
Global Sub-Sector Attractiveness: How do these sub-sectors perform

	AgTech & New Food	Edtech	Biotech	Healthcare
Global Rank (#)	**7**	**30**	**39**	**47**
Sub-Sector Lifecycle	Growth	Mature	Mature	Mature
Size (Share of Global Startups)	0.6%	2.8%	1.8%	6.8%
Potential (Early Stage Deals 5-Year Growth)	171.4%	7.9%	57.2%	56.2%
Startup Growth (Startup Formations Growth)	14.3%	7.4%	-5.7%	-0.3%
Exit Growth (Exits 5-Year Growth, Count)	114.3%	168.5%	75.0%	119.4%

Next Steps

- Step 1: Assess Emerging Startup Sub-Sectors (clusters)
- Step 2: Benchmark Traditional Sector Strengths related to Sub-Sectors
- Step 3: Identify how Existing Strengths can help Startups in each Sub-Sector
- Step 4: Overlay Potential of Identified Startup Sub-Sectors
  - Further SG's analysis of Existing Strengths
  - Identify opportunities to leverage existing strengths into sub-sectors
- Step 5: Select 1 to 3 Startup Sub-Sectors to Prioritize and Take Action
  - Build local consensus around prioritized Startup Sub-Sectors
  - Develop programs and policies to accelerate them

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Table of Contents

- Introduction - Startup Genome Ecosystem Science
- Ecosystem Lifecycle Analysis
- Exits and Triggers
- Global Connectedness and Market Reach
- Local Connectedness
- Founder Mindset & DNA
- Funding
- Sub-Sector Potential
- Actionable Insights
- Appendix

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Conclusions

- Strengths
  - New Zealand has much higher Global Market Reach compared to its peers
  - Ecosystem has done well at building a diverse startup community
- Priority Issues
  1. Grow Connected Community

  2. Continue to Increase Access to Funding
     - Maintain wide funnel: need higher survival rate from Seed to Series A

  3. Create Microcosms of Success and $100M Exits

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#1: Invest in Growing a Connected Community

- Objective: grow the number of startups by 3x in 3 years

- Develop and fund organizations and events that foster the creation of startups
  - Startup creation events, hackathons, pitch competition
  - Fund more organizations to provide the support that many need to finally make the jump
  - Make special, continuous efforts to increase the inclusiveness of such organizations and events

- Invest rapidly in developing a strong sense of community
  - Identify and support a leader who becomes the voice of the community and actively shapes its culture
  - Give the mandate and physical space to an organization to bring people together regularly and develop and uphold the culture
  - Develop informal mentorship programs

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#2: Continue to Increase Access to Funding

- Objective: grow Funding access as the community triples in size
- As community grows, funding it will inevitably become an issue
- Series A: prepare programs to foster the development of a local VC community
  - Keep funnel wide, increase survival rate

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#3: Create Microcosms of Success and $100M Exits

- Maintain focus on Agtech—increase number of startups, funding

- Create corporate innovation and mentorship programs that concentrate more resources around the highest potential startups in strategic sub-sectors (gaming, FinTech, and Agtech)
  - E.g. The Bridge: large corporate problems that are worth solving: Coca-Cola, Mercedes, Porsche
  - Tech City UK mentorship programs for startups and scaleups

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Next Steps

- Consensus about priority challenges among your community
  - Joint presentation by Member & Startup Genome to organizations leaders and successful entrepreneurs, ecosystem builders
  - Elevate priorities, challenges, actions
- Develop Plan with deliverable dates from consensus about problem, programs, funding and execution
- Assessment and Monitoring
  - Highly active efforts in New Zealand
  - Monitoring to determine effectiveness, course corrections

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END