



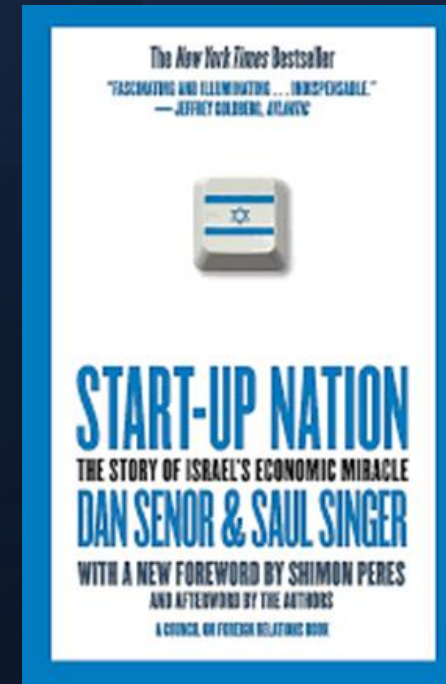
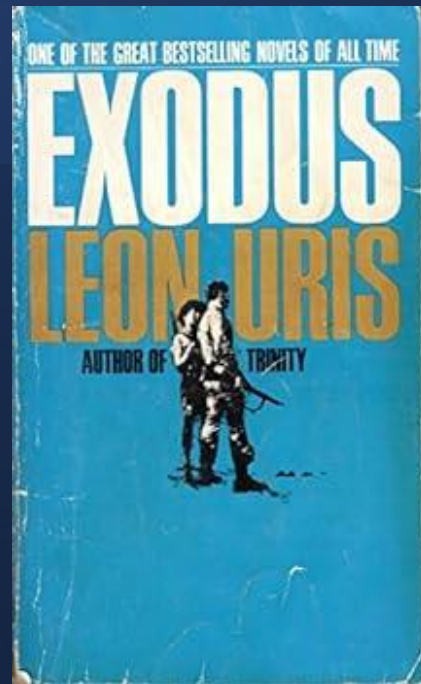
Making a Miracle: Fauda & Entrepreneurial Resilience

David B. Audretsch & Dafna Kariv

Israel

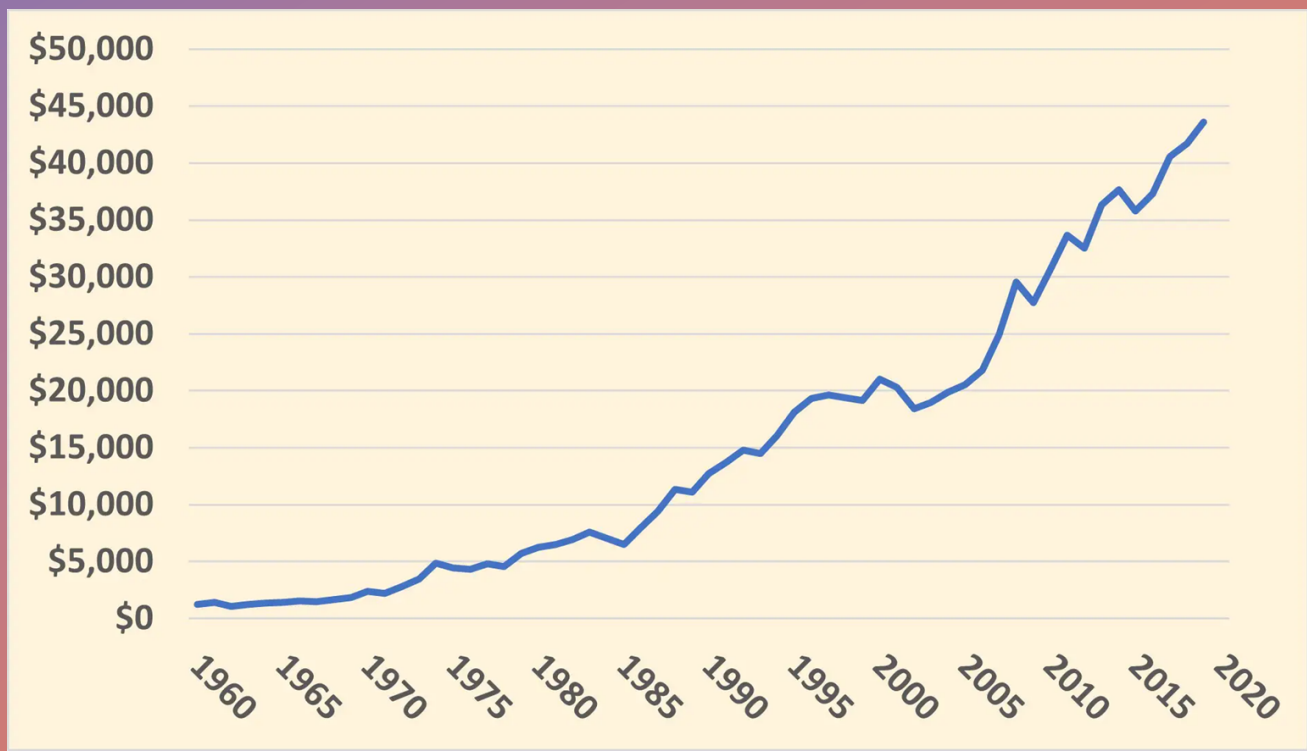


Making a Miracle





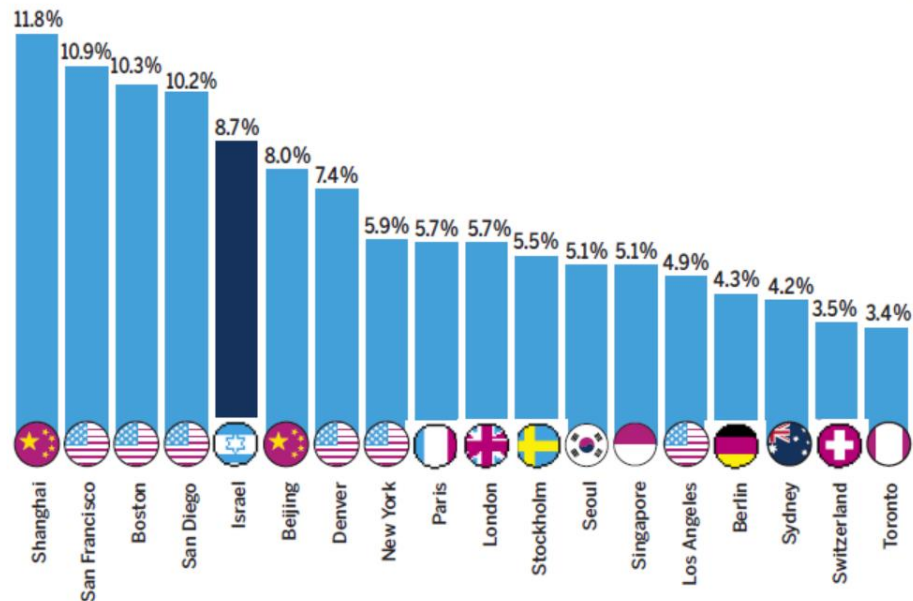
Economic Growth in Israel



Entrepreneurship in Israel

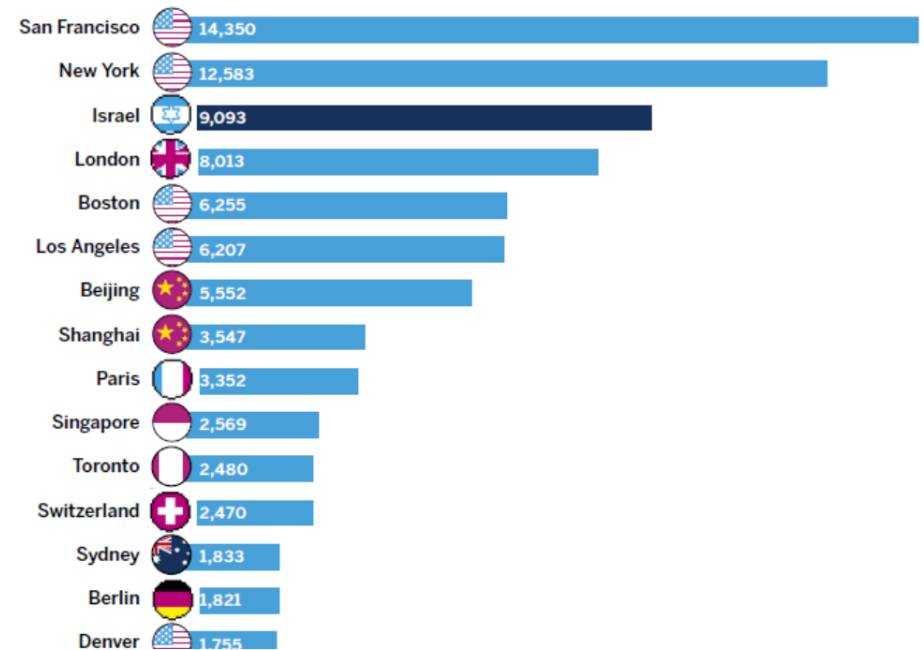
26 The Israeli Ecosystem Demonstrates Maturity in the Rate of Large Funding Rounds

Ratio of funding rounds of over 50 millions dollars in selected hubs (2022)



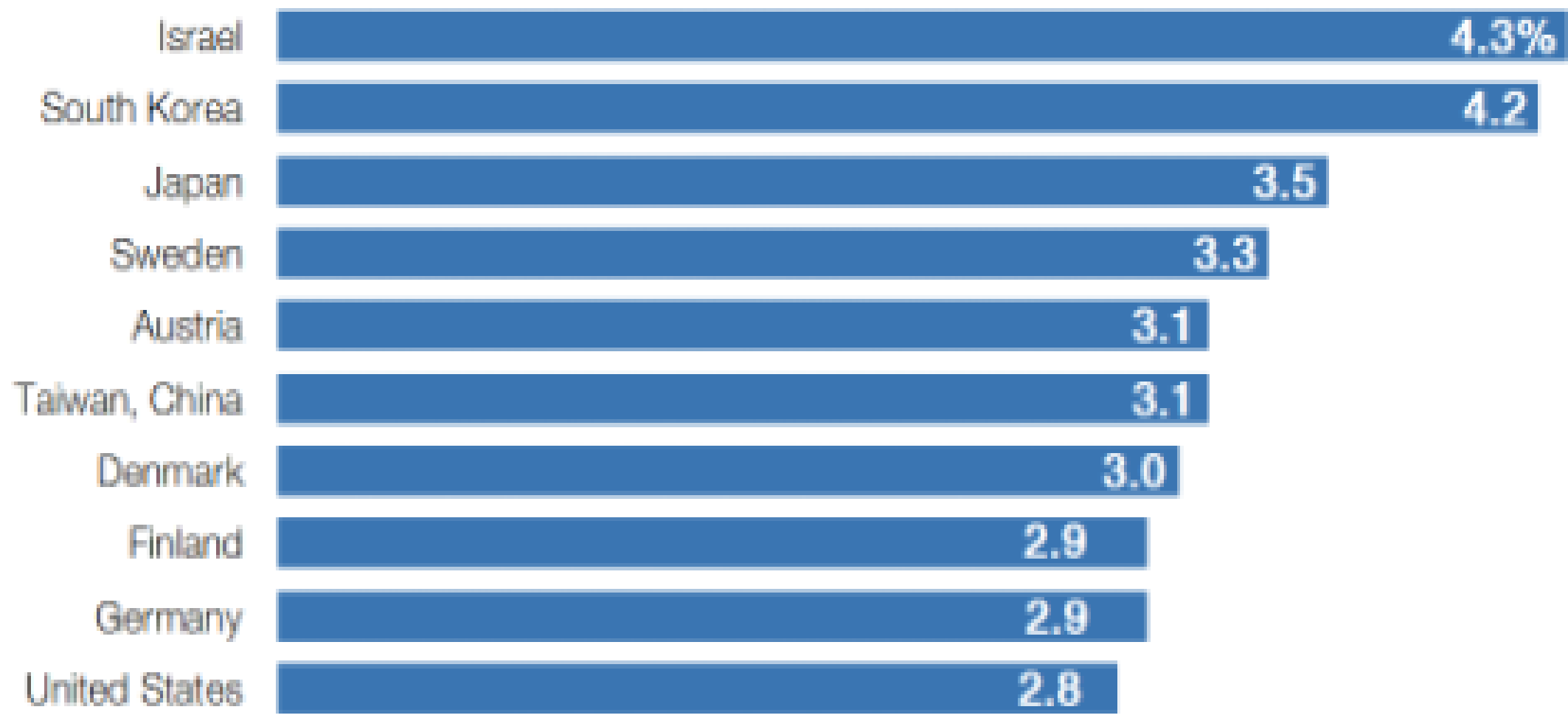
23 The Israeli Hub - Third in the World in No. of Active Startups

No. of active technology companies that raised capital in prominent hubs



These OECD countries spend the most on R&D

Gross domestic spending percentage of GDP, 2015

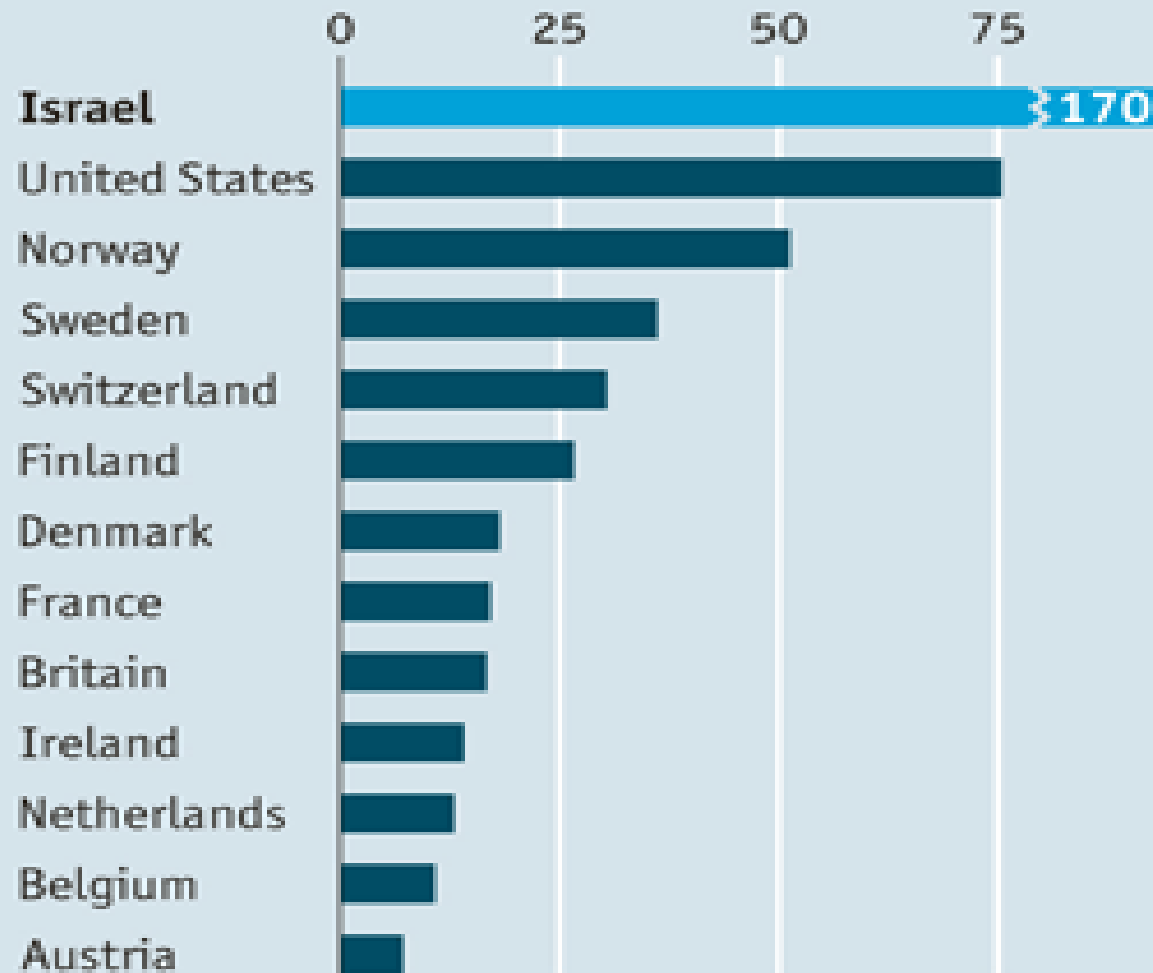


Source: OECD

Mediterranean magnet

1

Venture-capital investment per person
Selected countries, 2010, \$



Sources: National Venture Capital Association; European Private Equity and Venture Capital Association; Israel Venture Capital Research Center; UN

How to Create an Entrepreneurship Miracle?

- Kimjean, J & Davidsson, P., 2022, “External Enablers of Entrepreneurship: A Review Agenda for Accumulation of Strategically Actionable Knowledge,” *Entrepreneurship Theory and Practice*, 46(3), 643-687.
- **Macro Level – Stability**
Shane, Scot. 2011. The Great Recession’s Effect on Entrepreneurship.” Federal Reserve Bank of Cleveland, *Economic Commentary* 2011-04

Thorgren, S., & Williams, T. A. 2020. Staying alive during an unfolding crisis: How SMEs ward off impending disaster. *Journal of Business Venturing Insights*
- **Mezzo Level – Entrepreneurial Ecosystem**
Stam, E., & van de Ven, A. 2021. Entrepreneurial ecosystem elements. *Small Business Economics*, 56: 809–832
- **Micro Level -- Entrepreneurial Opportunity, Psychological Capital**
Lumpkin, G. T., & Dess, G. . 2001. Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16: 429–451.

Luthans, F., Youssef, C. M., & Avolio, B. J. 2015. *Psychological capital and beyond*. New York: Oxford University Press



Israeli Paradox

- **External Enablers of Entrepreneurship**

- Kimjean, J & Davidsson, P., 2022, “External Enablers of Entrepreneurship: A Review Agenda for Accumulation of Strategically Actionable Knowledge,” *Entrepreneurship Theory and Practice*, 46(3), 643-687.

- **Macro Level Stability & Continuity Conducive to Entrepreneurship**

- **Crisis & Disruption Suppress Entrepreneurship**

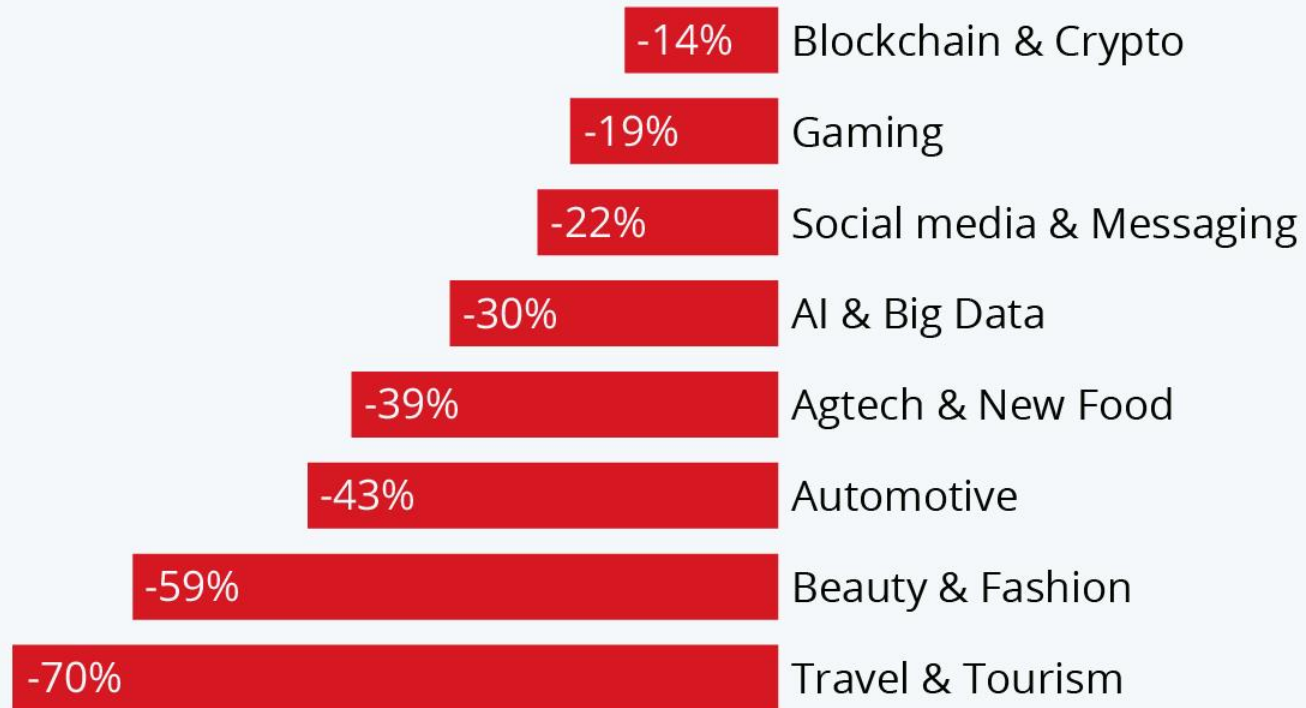
- Shane, Scott. 2011. The Great Recession’s Effect on Entrepreneurship.” Federal Reserve Bank of Cleveland, Economic Commentary 2011-04

- Thorgren, S., & Williams, T. A. 2020. Staying alive during an unfolding crisis: How SMEs ward off impending disaster. *Journal of Business Venturing Insights*, 14.

- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C. A. M., Prochotta, A., Steinbrink, K. M., & Berger, E. S. 2020. Startups in times of crisis—A rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights*, 13: e00169.

How Covid-19 Has Impacted The Global Startup Scene

Change in revenue of selected startup sectors since the start of the pandemic*

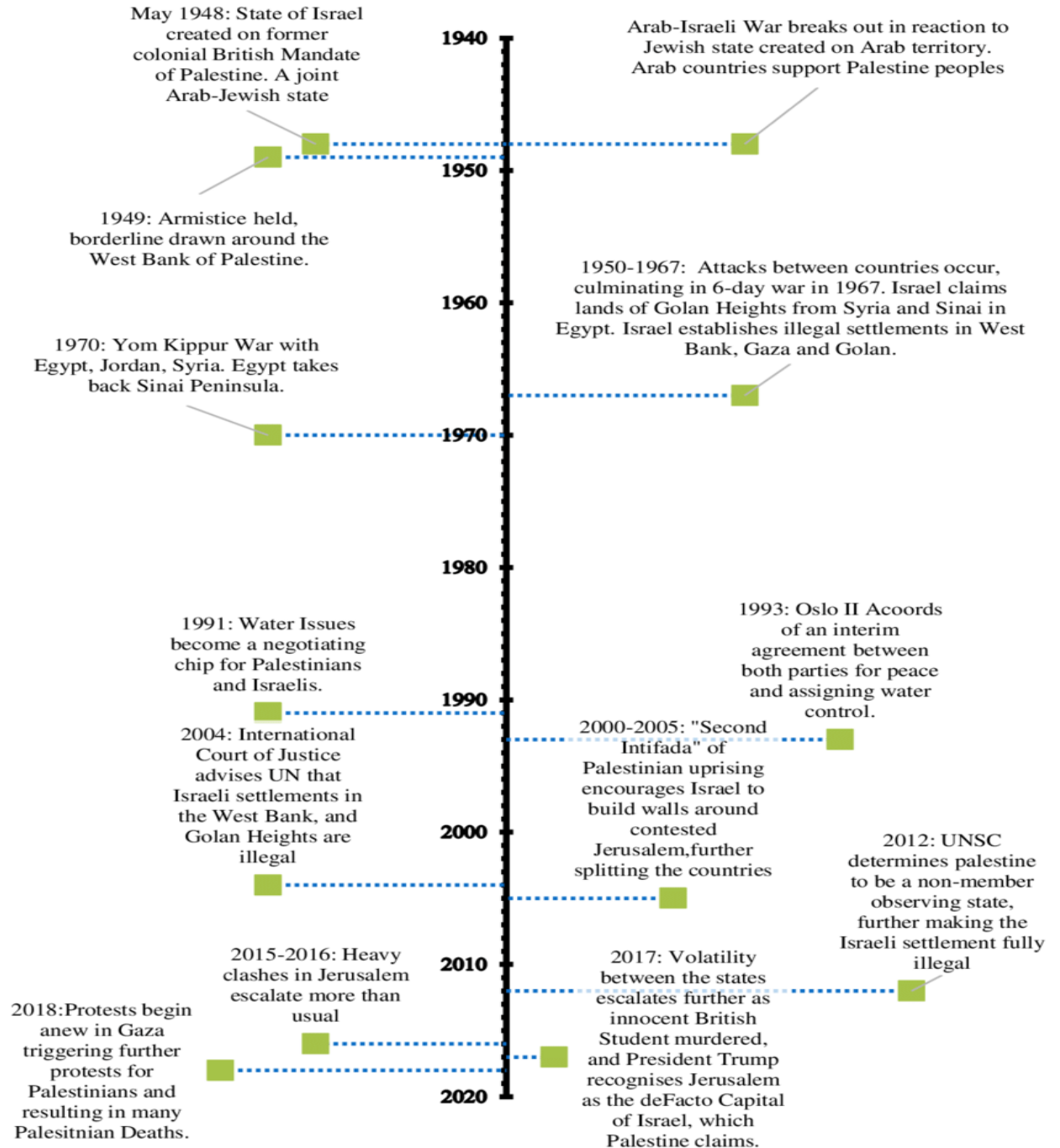


* Worldwide (between December 2019 and June 2020).

Source: Startup Genome



The Israeli Paradox



What's the Secret?

- Macro Context of Crisis & Disruption Deters Entrepreneurship
- Israeli Macro Context of Permanent Crisis -- *Faada*
- How Do They Do It?
- Lessons for Entrepreneurs, Entrepreneurial Ecosystems & Policy Elsewhere?

Theory of Community Support Based Resilience

- “No Man is an Island”
--John Donne
- Support from Community Bestows Resilience
 - Lin N, Simeone RS, Ensel WM, Kuo W. Social support, stressful life events, and illness: A model and an empirical test,” *Journal of Health & Social Behavior*, 1979 (20), 108–19
 - Resick PA ,*Stress and Trauma*. New York, NY: Psychology Press, 2001.

Methodology,
Data &
Measurement

Research Design I –
Interviews: Natural
Language Processing (NLP)

Research Design II –
Questionnaire

Natural
Language
Processing
(NLP)

31 Founder Interviews

Step 1 – Word Cloud

Step 2 – Sentiment Analysis

Step 3 – Topic Modeling

Results from Natural Language Processing (NLP)

Permanent Multiple Crises were frequently described using terms associated with work

Sentiments attached to crises were considerably less negative and more positive or at least neutral

Topics associated with crises included statements associated with opportunities, resources, pivots and resilience.

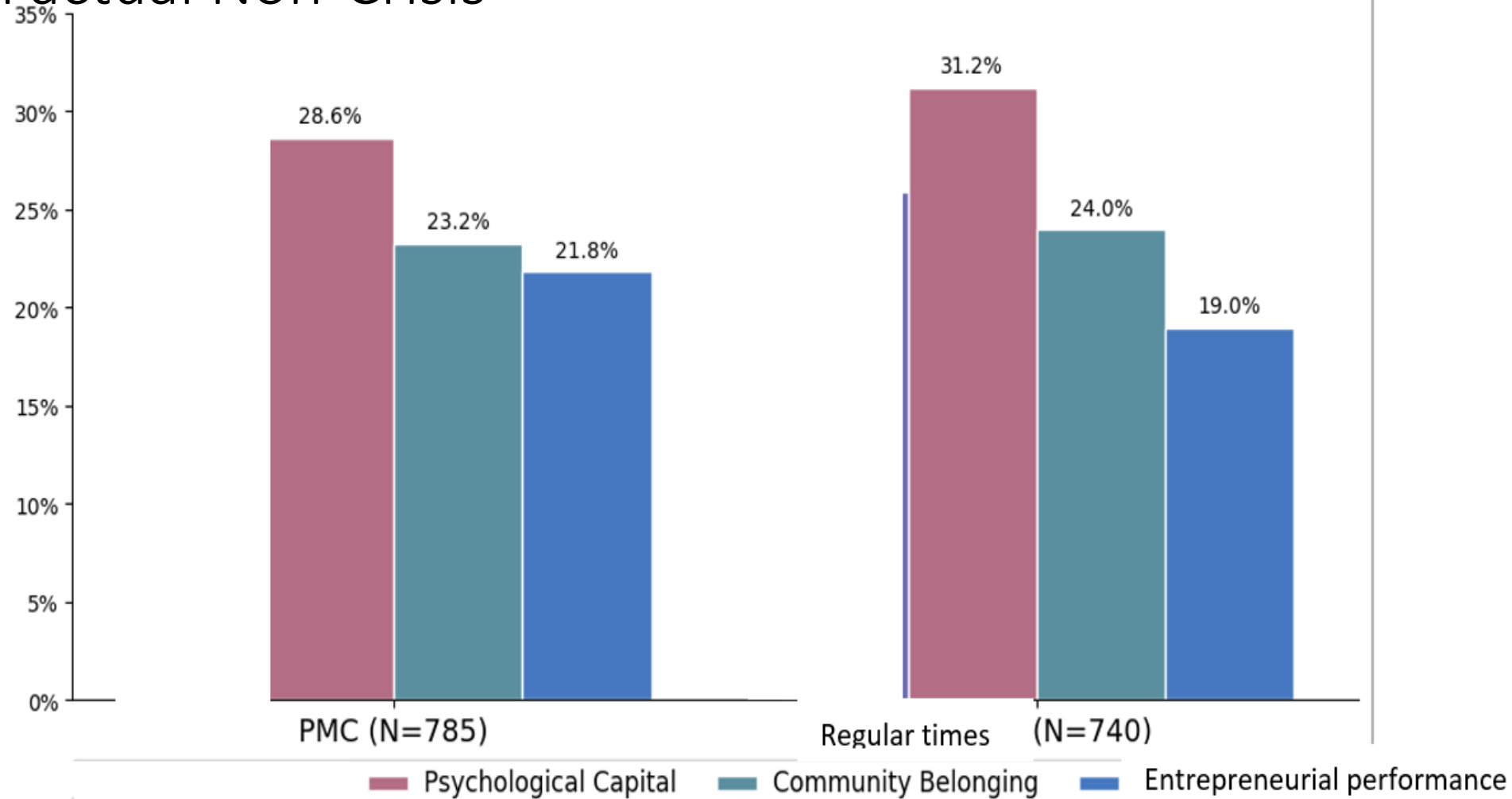
Sentences by sentiments

Entrepreneurial performance	Confidence Score	Sentiment
I have addressed all crises encountered very professionally, and in any experience of crisis, the startups I was running, became much more successful	98.0%	Positive
For example, we made a plan in place to respond to unexpected challenges and to be able to adapt and pivot as needed in order to navigate through the crisis, but the plan was not employed eventually, and we worked on another plan	97.6%	Positive
Maybe this is the main factor in managing crises	96.3%	Negative
The crisis was so sudden and unexpected, that we were managed by the crisis, but our hope that things will get better enabled us to 'go back to business'	94.9%	Negative
So when the pandemic hit, I knew that I had to take a proactive approach	93.9%	Positive
We did not manage the crisis, the crisis managed us	93.8%	Positive

PsyCap	Confidence Score	Sentiment
My story is a testament to the power of resilience	98.7%	Positive
These experiences have taught me to be resilient, patient, and persistent, and I am excited to continue on my journey as an entrepreneur	98.7%	Positive
This is optimism in the face of adversity	97.9%	Positive
But more importantly, it reinforced our belief in ourselves and our vision, and reminded us that we were in this for the right reasons	93.3%	Positive
I am untrustful about our reputation at the moment	93.1%	Negative
It was a difficult journey, but it taught me an important lesson about the power of resilience and optimism in the face of adversity	92.8%	Positive

Sense of belonging to community	Confidence Score	Sentiment
investors from our ecosystem	95.4%	Positive
income communities	94.9%	Positive
my family also supported me financially	94.3%	Positive
I attend conferences, join communities, and seek out mentors who can offer guidance and support	93.7%	Positive
I had a vision to empower small businesses and help them thrive in their communities	93.7%	Positive
two famous collaborators from the ecosystem contributed generously	93.1%	Positive
We have come together to share resources and ideas, and offer each other encouragement and support	93.1%	Positive
It may not be where I want it to be yet, but I have a great team and a supportive ecosystem that keeps me going	92.5%	Positive
I also focused on staying healthy and taking care of myself and my family	92.4%	Positive
Another positive experience was the support I received from other women in the tech industry	92.4%	Positive

Community Support, Psychological Capital & Entrepreneurial Performance for Permanent Crisis & (Synthetic) Counter-Factual Non-Crisis



Research Design II – Questionnaire

Start-up Nation Policy Institute (SNPI)

4,000 Founders

N = 489

Entrepreneurial performance -- assessed through the founder responses (ranging from 1 to -5) on their actual implementation of measures representing entrepreneurial performance, based on the model employed by Lumpkin and Dess (2001), which includes innovativeness, proactivity, risk-taking and aggressiveness (Covin and Slevin,1989).

Independent Variables

Sense of Belonging -- Zimet, Dahlem, Zimet, and Parley (1988) scale of perceived social support, which measures the level of the feeling belonging and of being embraced by others, thus relevant to this research (e.g., Nielsen, 2020).

Entrepreneurial Ecosystem This was based on Stam and van de Ven (2021) model, due to their focus on both opportunity exploitation and high technology (Audretsch et al., 2022) and has been recently used in other studies (Prokop & Thompson, 2022)

Independent Variables

Opportunity exploitation -- Measure the positive and negative sides of opportunity exploitation, through capabilities and attitudes. Cronbach's alpha was .76, indicating an acceptable level of reliability.

Psychological capital Developed on the basis of previously established scales measuring hope, optimism, resilience and self-efficacy (Luthans, Youssef, & Avolio, 2007). It included 12 items (PCQ-12) and has been shown to exhibit reliability and construct validity in several previous studies (Luthans et al., 2007), including in entrepreneurship research (Baluku et al., 2016; Kariv, Cisneros, Guiliani, & Chouchane, 2023a). The responses were computed to form an overall score of the PsyCap construct, with a Cronbach's alpha of .87, indicating a reliable measure.

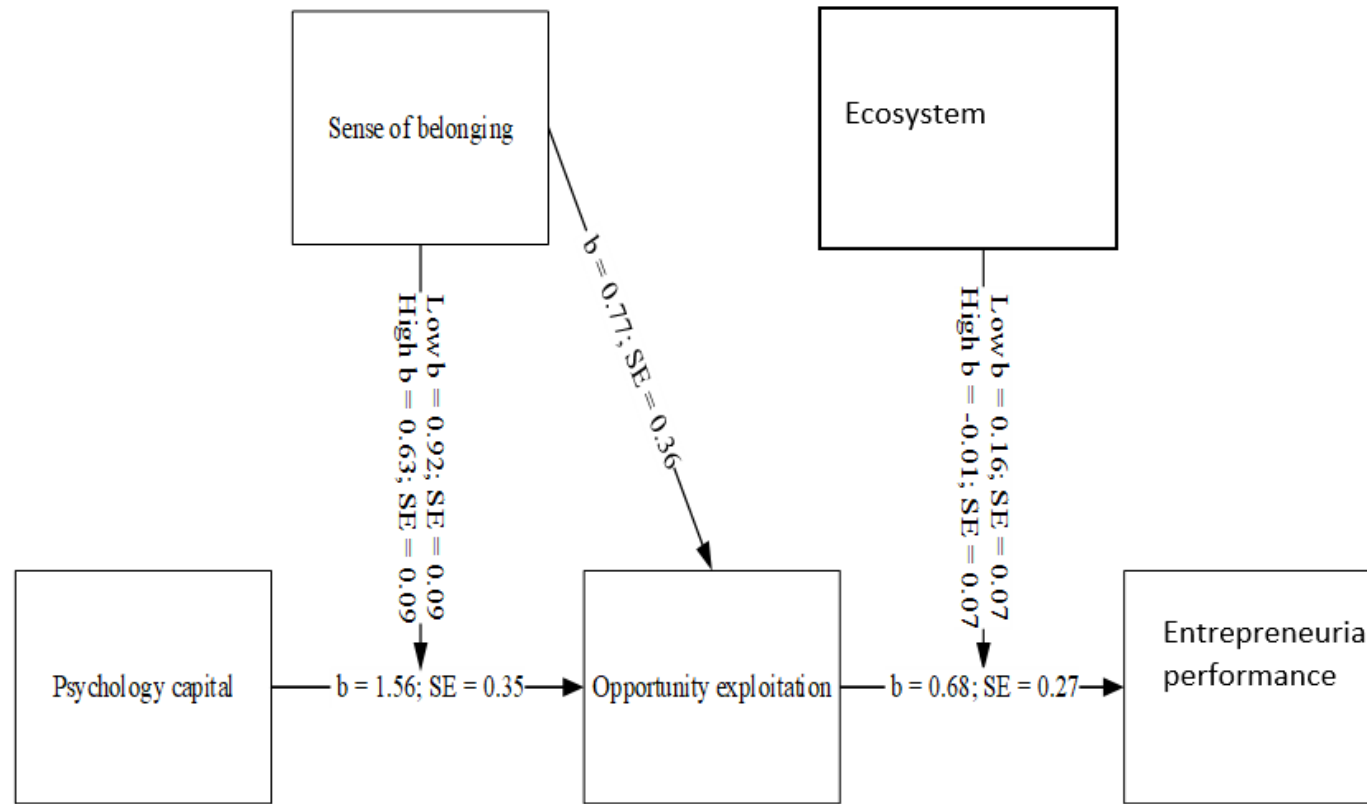


Figure 4. Direct, indirect and moderated relationships between the independent variables on entrepreneurial performance

Conclusions

Israeli difference – The People

We are all Israelis
(Crisis & Disruption Have Replaced Stability as The New Normal)

Lessons for Every Region & Country to Create its Own Miracle

“It will never rain roses: when we want to have more roses we must plant more trees”
-- George Elliot