Israel's Entrepreneurial Ecosystem

A Webinar Sponsored by
the ***Private Capital Research Institute*** and
the ***Private Capital Project at Harvard Business School***
(with support from the Division of Research at Harvard Business School)

Summary: Over the past decade, Israel developed one of the most thriving entrepreneurial ecosystems in the world. The economy attracted record levels of venture capital investments, as well as an increasing number of multinational R&D centers. The local tech industry became Israel's dominant growth engine, contributing to close to 20% of Israel's GDP, 50% of its exports, and 11% of all salaried employees. The entrepreneurial ecosystem also became more mature. While Israel once was "startups nation," entrepreneurial companies in recent years have attracted more late-stage capital and were more likely to exhibit substantial growth and remain independent. The industry also became more diversified, claiming a global leading role not only in cybersecurity (its early focus), but also in other sectors such as AI, fintech, digital health, agritech, and foodtech.

On June 15, 2023, a panel of practitioners met to discuss the unique characteristics of the Israeli ecosystem that led to its success over the past decade and the current challenges to the local ecosystem that have emerged from shifting global macroeconomic conditions and local political uncertainty. The panel participants included Eugene Kandel (Start-Up Nation Central), Rona Segev (TLV Partners), Adam Fisher (Bessemer Venture Partners), and David Berkowitz (KFO Partners). Shai Bernstein (Harvard Business School) was the moderator.

The success of Israel's entrepreneurial ecosystem may initially seem quite surprising, given its small size, geographical location, security situation, and political uncertainties. Yet, despite these challenges, the Israeli entrepreneurial ecosystem has evolved into one of the most vibrant and thriving tech scenes globally and has become a significant growth engine for the Israeli economy. Some of the most innovative technologies has come out of the Israeli ecosystem. Although funding levels were down in 2022, VC funding in Israel have been at an all-time high, with $8.8 billion and $6.9 billion raised in 2021 and 2022, respectively.[1] In 2022, Tel Aviv ranked third behind London and Paris (two much larger cities) for total VC investment raised in the Europe, the Middle East, and Africa region.[2] In addition, Tel Aviv is one of the fastest-growing mature ecosystems, with 3.5 times growth in overall activity in the five years from 2018 to 2022.[3]

---

[1] Israeli Tech Ecosystem 2022 Report, Start-Up Nation Finder, 2022, https://finder.startupnationcentral.org/snc-2022-report.
[2] "Tel Aviv – A Global Startup Trailblazer," dealroom.co, March 2023, https://dealroom.co/uploaded/2023/03/Tel-Aviv-Report-2023-.pdf?x37961.
[3] Ibid.

Overview of the Ecosystem

The Israeli entrepreneurial ecosystem encompasses over 7,000 tech companies at various stages of development, attracting investments from both Israeli and global venture capital funds. It comprises 220 VC funds, nine universities, 22 incubators, 16 tactical technology offices ("TTOs"), over 100 accelerators, and over 400 multinational R&D Centers.[4] In a tiny geographic area--a 100-mile radius around Tel Aviv--300 top-world tech companies are housed. When evaluated on a per capita or per GDP basis, Israel stands out as the world's most densely populated ecosystem.

Most of the Israeli entrepreneurial ecosystem's early success can be attributed to the country's development of its military and resource management capabilities, which were driven by the nation's existential threats. For example, the challenge of water scarcity coupled with a rapidly growing population compelled significant innovation and experimentation, resulting in the development of viable commercial solutions. Similarly, the country's experience with cyber-attacks spurred the evolution of defensive technological capabilities.

Today's Israel's entrepreneurial ecosystem is defined by three key features: its technology-driven basis, its reliance on start-ups, and its business-to-business focus. Because Israel is far from the end markets and end-use cases, technological capabilities tend to look for applications, unlike most other ecosystems where the subject matter expertise drives the need for technological solutions (e.g., London's ecosystem is driven by finance). Israeli entrepreneurs often enter markets with much less applicative domain expertise than American start-ups. This has the disadvantage of a steeper learning curve but the advantage of more meaningful innovation. Thus, seeing an Israeli fintech company enter the US or UK markets is so unique – the company has something special in its approach, either through technology or just thinking as an outsider. The only real local Israeli market need that drives innovation is cybersecurity. This structure has enabled the Israeli ecosystem to pivot quickly and succeed in many unlikely sectors like "Industry 4.0" (e.g., manufacturing technologies such as smart automation) and "Smart Mobility."

Until recently, the ecosystem was primarily start-up based, when companies were acquired at fairly early stages. But, there are increasingly more large companies that emerge in the Israeli ecosystem. Dozens of large tech companies across sectors help sustain and nurture the industry. Lastly, given Israel's location with a small local consumer market, the Israeli ecosystem is more B2B-focused, serving remote markets. Nonetheless, there have been several successful Israeli

[4] Source: *Israel's Entrepreneurial Ecosystem Webinar PowerPoint Presentation*, Webinar hosted by the Private Capital Research Institute and the Private Capital Project at the Harvard Business School, June 23, 2023, presented by Eugene Kandel, Start-up Nation Policy Institute.

companies in the business-to-consumer space, like Waze Wix, IronSource, MyHeritage, LightTricks, and Gett.

The Evolution of Israel's Entrepreneurial Ecosystem

Israel's first modern venture capital funds were established in 1993, partially due to the government's Yozma program. Initially, venture capital in Israel focused primarily on technology building (rather than business building) because the founders were predominantly engineers from military units. These founders developed new technologies to provide innovative solutions to limitations of existing products used in military operations and communication. They sold their companies to firms in other countries, mainly the U.S., often just for the intellectual property ("IP") without scaling the business through extensive operations. The Israeli engineers often had little entrepreneurial experience, and thus avoided the need to, for instance, build extensive sales teams. Outsourcing technological solutions from Israel was a mutually beneficial arrangement because developing similar products in the U.S. was considerably more costly for many firms.

Growth Capital Phase

As Israel's ecosystem matured, Israeli VC firms and entrepreneurs grew tired of their strategy of essentially being "outsourced IP development" for foreign firms. Israeli entrepreneurs transitioned into what is commonly known as the "business phase," giving rise to companies that focused on product development. During this phase, entrepreneurs increasingly understood that continued investment in the businesses, in addition to R&D, would lead to long-term success. While technology remained a crucial element, it was no longer the sole driver of economic growth. Entrepreneurs recognized the opportunity to bypass traditional distribution channels and directly reach markets with their products.

This is where growth capital played a significant role, which was previously nonexistent during the technology development phase. During the later 1990s, the Israeli ecosystem experienced a surge in companies going public on NASDAQ, making Israel the second-largest presence on the exchange after the United States. However, the Sarbanes-Oxley Act of 2002 led to a decline in initial public offerings in the U.S., prompting a shift back to selling to strategics. As growth capital became increasingly available, Israeli companies could prioritize growth over immediate profitability while avoiding the frequently treacherous status of being a young, unprofitable, but publicly traded firm. Currently, growth capital outweighs early-stage capital over five times.

Today, venture capital firms in Israel are much more diversified in their investments, expanding into every possible technology sector. The range of investment effectively mirrors that in the United States, except for consumer product companies.

Israel's Strengths

Reviewing the success of the Israeli market, several key factors stand out.

Immigrant Mentality: A significant dimension of Israel's success was its large immigrant population. Throughout its short history, Israel experienced massive immigration waves from Europe and Africa, and the immigrant culture is deeply rooted within its population. Such a culture brings a unique perspective to have a keen eye for identifying opportunities. Unfamiliarity with their new surroundings compels them to learn quickly and recognize overlooked aspects. In a business context, it has been well documented that immigrants have a risk-taking nature and are willing to try unconventional approaches to finding solutions.[5] These characteristics also apply to many Israeli companies in their approach to solving problems in foreign markets.

Small Market Size: Israel is small geographically, with no meaningful local markets to sell to. However, this seeming limitation paradoxically contributes to the strength of the Israeli entrepreneurial ecosystem. From day one, Israeli companies recognize the need to open research and development centers outside of Israel and serve different markets. In addition, they also need to expand globally at an early stage compared to startups in countries with well-developed local markets. However, one potential drawback is that the local market may remain underserved with relatively low technology adoption, making it sometimes challenging to understand consumers' needs, which is often critical to achieving product market fit.

Non-hierarchical Culture: The Israeli business culture is also non-hierarchical. Junior employees feel respected, and their opinions are heard. They do not have much compunction about recommending or correcting their seniors. Such culture facilitates feedback loops, critical thinking, that accelerates experimentation and innovation.

Challenges in the Outreach to Grow the Market

As noted above, the distant location of Israel from many markets and the lack of familiarity with specific problems and industries in remote locations could pose challenges when dealing with large foreign companies. It is often difficult to ascertain precise customer needs, leading to situations where startups address the wrong problems. The distance between the U.S. and Israel also led to cultural clashes. In early 2000s, for instance American VCs would frequently replace founder CEOs of Israeli startups with Americans, thinking that the move would solve problems. The strategy rarely worked.

---

[5] Sari Pekkala Kerr and William Kerr, "Immigrant Entrepreneurship in America: Evidence from the Survey of Business Owners 2007 & 2012," *Research Policy*, 49 (3), 2020.

Thus, to help with these challenges, over the past years, Israel sought to attract large companies that they thought could benefit from Israeli innovation. About 220 large companies were brought to Israel, many becoming clients, developers, or partners, and engaged in other collaborative relationships with Israeli startups. Also, Start-Up Nation Finder, a technology platform, was established to enable anyone to search for technologies in any space in Israel.

Expanding Foreign Markets Beyond the U.S.

Israel has a natural bias toward the U.S. market. While there was initial excitement and interest in expanding east towards the Chinese market, many Israeli entrepreneurs have concluded that China is primarily for Chinese entrepreneurs. The Chinese market, they feel, favors local vendors and holds a problematic view of Israeli capabilities. Moreover, tensions between the U.S. and China have restricted the exploration of dual-use technology in Eastern markets. Although Israel's role in Asia will undoubtedly grow, it will not likely find more opportunities there than in North America or even Western Europe.

Local Political Tensions

In the first quarter of 2023, the Israeli government proposed a series of reforms that aimed to tighten political control over judicial appointments and limit the Supreme Court's powers to overturn government decisions. This threat led to unprecedented demonstrations throughout Israel. While this has prompted a start-up and VC funding to move funds out of Israel (footnote), the panelists expected that the impact on the Israeli entrepreneurial ecosystem would be modest. They argued that the Israeli ecosystem is resilient, as entrepreneurs are used to dealing with unexpected conditions. Moreover, Israeli companies are rooted deeply in the US economy, which provides them flexibility when needed to overcome any challenges that emerge. In a sense, the Israeli ecosystem has always relied more on what is happening in the U.S. rather than Israel, which is therefore the important metric for their success.

Conclusion

The current global macroeconomic slowdown, with relatively high inflation and high-interest rates, is leading to a worldwide decline in venture capital activity. The panelists felt that Israel is unlikely to be worse off during this downturn than any other country. If anything, Israeli business culture and the tech sector's culture of quick adaptation and scrappiness contribute to its resilience. Israeli firms are likely to move faster to cut costs when necessary and to do more with less. These factors, as well as the inherent strength of Israeli innovation, provide reasons for optimism.