



## VC Policy in the time of COVID-19

A Webinar hosted by the Private Capital Project at the Harvard Business School and the Private Capital Research Institute

On July 15, 2020, a group of limited partners ("LPs"), academics, and general partners ("GPs") led by Josh Lerner (HBS and PCRI) met to discuss and share perspectives on the venture capital industry during the COVID-19 pandemic crisis and the effects of government policy efforts to assist the industry. The discussants were Jeff Bussgang (General Partner, Flybridge), Anne Glover (CEO and Co-Founder, Amadeus Capital Partners), Sabrina Howell (Assistant Professor of Finance, Stern School of Business, New York University), Eugenes Kandel (CEO, Start-Up Nation Central and Emil Spyer Professor of Economics, Hebrew University of Jerusalem), and Charles Lespérance (AVP Ecosystem Development, Business Development Bank of Canada). Below is a summary of the discussion.

The COVID-19 pandemic has made venture capital ("VC") investing quite challenging around the world. Unlike previous crises, the problems are not driven by lack of funding, as funds in most countries have plenty of uninvested capital raised prior to the crisis. Rather, a key challenge is "refinancing risk": the reluctance of venture capitalists to deploy funds, due to the possibility that their firms will languish after being unable to attract follow-on capital from other investors. While these concerns are already evident when funding early-stage companies, outside a few central hubs, the nature of the current crisis is making these concerns particularly acute. Travel restrictions are making it difficult to attract foreign investors, who are unable to do appropriate due diligence. Also, early-stage investing has become more difficult, because decisions to deploy capital are based on assessments after multiple in person meetings with entrepreneurs, reading body language and subtle cues, and building trust-based, personal relationships.

The consequences of the lack of human contact—and capital flows—have been substantial. Without a successful syndication with foreign co-investors, for instance, UK venture funds are unable to make investments of considerable size. Similarly, Israel, which has had tremendous success in VC over the past several decades, has also experienced a sharp decline in investments, since 85% of its VC funding typically comes from abroad. It might be thought that local investors could "pick up the slack", but in many nations, venture funds must grapple with an anti-home bias—local investors prefer to invest in foreign VCs. As a result, seed and early-stage has dropped to extremely low levels since the inception of the crisis. During this

time, it has been primarily only those companies that were already working with venture capitalists that have been able to receive funding. In the second quarter of 2020, the number of US early-stage deals was down 34% on a seasonally adjusted basis.<sup>1</sup>

VC funds appear to be able to stimulate innovation and economic growth better than large corporations, where basic research spending and research efficiency appear to be lagging.<sup>2</sup> Academic research finds that not only does VC activity fall precipitously during a crisis but innovation is also negatively impacted, as measured by patents.<sup>3</sup> Thus, a sharp decline in VC activities raises real concerns for many governments. But while policymakers in many nations agree that in these difficult times, a swift government response to help VC activity is needed, the approaches taken have varied:

- For instance, in the UK, where foreign co-investment dollars were cut off, the British government established the Future Fund to make easily accessible, sizeable convertible loans with standard terms to portfolio companies. The initial target amount of the Future Fund was \$250 million, but it has already delivered around \$320 million in funding.
- Similarly, in Canada, the government used a direct investment program where the government itself began writing checks in the form of convertible notes to companies, with a total targeted amount of \$300 million.
- In Israel, the government also stepped in quickly to intervene. Because most of the VC funding was going to larger transactions, the Israeli government established a direct loan program with a short approval process for small companies and also created incentives for institutional investors to make such investments alongside the government.

One persistent concern about these government intervention programs is that they could potentially create the danger of moral hazard and adverse selection. For example, both the US and Canada have found over the years that young firms can become dependent on government subsidies. That is to say, some awardees after receiving a grant may focus their efforts not on commercialization, but rather on winning a follow-on award. A study of the largest U.S. program, the Small Business Innovation Research (SBIR) initiative, suggests that most of the beneficial social outcomes were generated from the initial grants, but demonstrated little to no benefits from later phases.<sup>4</sup> (Despite this finding, about 80% of SBIR program funds goes to the larger second-phase grants.)

<sup>&</sup>lt;sup>1</sup> Howell, Sabrina T., Josh Lerner, Ramana Nanda, and Richard Townsend (2020), "Financial distancing: How venture capital follows the economy down and curtails innovation," <a href="https://ssrn.com/abstract=3594239">https://ssrn.com/abstract=3594239</a>.

<sup>&</sup>lt;sup>2</sup> See, for instance, Bernstein, Shai, Xavier Giroud, and Richard R. Townsend (2016), "The impact of venture capital monitoring," Journal of Finance, 71, 1591-1622, and Bloom, Nicholas, Charles Jones, John Van Reenen, and Michael Webb (2020), "Are ideas getting harder to find?" American Economic Review, forthcoming.

<sup>&</sup>lt;sup>3</sup> Howell, et al., op. cit.

<sup>&</sup>lt;sup>4</sup> Howell, Sabrina T. (2017), "Financing innovation: Evidence from R&D grants," *American Economic Review*, 107, 1136-64.

One subsidy program that was extremely successful in reducing moral hazard was the YOZMA program that originated in Israel in the early 1990s. The YOZMA used government funds to match contributions by investors and institutions. The government deliberately did not interfere in decision making to encourage top-tier investors from abroad to participate, and limited the return on its capital. While not all large US venture firms chose to participate, this program brought in enough talented foreign investors with the expertise to jumpstart innovation and R&D. Other nations have used alternative approaches to address these issues. In the UK's Future Fund, to help align incentives, the loans target only those companies that previously received VC funding. The Future Fund requires an investor to apply for a convertible loan on behalf of a company and invest alongside the government loan. In Canada, convertible loans written by the government try to match the terms of private GPs, which help align incentives and mitigate moral hazard and adverse selection. These problems are also reduced because of the possibility of follow-on financing from the Canadian government. However, the biggest mitigator is the fact that the Canadian Government is the largest LP in the market, typically taking on 10-12% of a fund, which is a strong incentive for GPs to behave.

During a crisis, a tradeoff exists between preserving existing firms and supporting the growth of new enterprises. Put another way, how much effort should be devoted to stabilizing existing companies and how much to "keep the next generation started"? Like many other countries, Canada's approach seeks to get money out quickly to stabilize existing companies in hard-hit sectors and to avoid widespread failures. While this strategy has an immediate payback, it may not be optimal in the long run. Some of these programs may not help entrepreneurs who are possibly providing the most innovation or social benefit. For instance, in the US, "blunt instruments" such as the Payroll Protection Plan ("PPP") loans may not have reached those firms that needed the capital the most. Instead, it may have been better to subsidize firms that had the potential to generate the most social benefit. But governments typically (and understandably) do not want to be in the business of picking winners and losers.

The discussion concluded by addressing what should be the goal of VC policy interventions. The panelists agreed on several principles:

- First, it is best to avoid outright grants and "free money" to make sure incentives are aligned. As part of the program design, the government should be clear on how its stakes (whether debt or equity) will be recovered.
- Additionally, whether or not there is a crisis, there should be a time limit on interventions to avoid companies becoming dependent on government handouts.
- Governments should also focus on areas that have difficulty receiving funding, but have high potential. For instance, in the US, the majority of VC investments are targeted in three locations, California, New York, and Massachusetts. Thus, the US government can use incentives to help get funding to investments in more geographically diverse areas.
- Whatever the initiatives to help VC-backed companies and firms, the government should spend more time on fundamentals such as STEM education and immigration to attract and retain talent. It may also make sense for governments to try to focus on supporting fundamental core research sectors, such as quantum computing and climate change. Such

areas have huge economic potential but are difficult for VC funds to start because of economies of scale. However, a concern is that government-funded research may not necessarily translate into applications and more patents<sup>5</sup>.

On a positive note, exceptionally innovative entrepreneurs often thrive in times of crisis. As a case in point, Israel is experiencing a growth of new COVID-19 related companies. A key question is when and how to support these new enterprises for the future.

<sup>&</sup>lt;sup>5</sup> Jaffe, Adam, Kayne Husbands Fealing, Julia I. Lane, John Marburger, and Stephane Shipp, "Analysis of Public Research, Industrial R&D, and Commercial Innovation: Measurement Issues Underlying the Science of Science Policy", *The Science of Science Policy: A Handbook*, Stanford University Press, 2011.