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FINANCING GROWTH THROUGH VENTURE CAPITAL IN ASIA AND THE PACIFIC

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Financing Growth through Venture Capital in Asia and the Pacific

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Abstract

In this study I provide an assessment of the factors that make Venture Capital (VC) a form of financial intermediation able to contribute to fostering innovation and economic growth, with particular reference to Asia and the Pacific. I review the economics of VC, focusing more on the aspects that are relevant for policy. I also review what conditions are conducive to innovation and growth, and examine recent evidence on public policy for venture capital. I conclude examining some descriptive evidence on the state of VC markets in the Asia and Pacific, comparing them to those of North America and Europe.

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I. Introduction

In this study I provide an assessment of the factors that make Venture Capital (VC) a form of financial intermediation able to contribute to fostering innovation and economic growth, with particular reference to Asia and the Pacific.

In Section II, I briefly review the literature on VC as a specialized financial intermediary. I will show the constraints under which VC firm operate; in particular, the need to satisfy the requirements set by institutional investors (Limited Partners, LPs), which are the ultimate source of funding for innovative companies. I also describe how VC investors operate, pointing to several distinctive traits that set them apart from other investors, like banks, corporations, the crowd, and wealthy individuals. Based on this knowledge about venture investors I consider evidence on their contribution to innovation and economic growth, both at industry and at firm level.

In Section III, I focus on which factors have been shown to favor and support the growth of an effective venture industry. Section IV I bring the analysis to policy level, and I examine evidence on how active policy can, or cannot, support an effective venture industry. Finally, Section V looks more specifically at issues and opportunities relevant for the Asia and Pacific regions.

II. How Does Venture Capital Contribute to Innovation and Economic Growth?

A. What is venture capital? A primer

Venture capital is a specialized form of financial intermediation that provides funding to innovative new ventures with high-growth prospects (Da Rin, Hellmann and Puri, 2013). Therefore, VC firms largely invest funds provided by other institutions or by wealthy individuals. Institutional investors (banks, insurance companies, sovereign wealth funds, family offices, etc.) invest in VC as part of their allocation to 'alternative assets.' This is very important, because intermediation creates constraints and incentives that are quite different from those that one would observe for investors that contribute their own money.

A major problem that intermediated venture finance needs to solve is a classic principal-agent problem, where an agent who acts on behalf of a principal can exploit his superior knowledge to take advantage of the principal (Sahlman (1990)). In the context of VC investing, institutional investors (the principals) contribute money to VC firms (the agents) which can behave opportunistically in many ways (see Phalippou (2009)). For example, they can invest in companies that are outside the intended strategy (say in data science instead of nanotechnology), or in companies whose prospects are not very good but that the VC wants to bolster to show good performance before raising funds from other investors.

As a solution, to these problems, at least partial, VC firms raise money through closed-end fund vehicles that typically last ten years. The finite duration of these vehicles forces VC firms to disclose the true value of their investments, which need to be realized by the fund's end date. At that point, institutional investors will be able to know the 'true' return to their investment, and can make an informed decision whether to participate in the VC's future funds or not.

This structure, based on sequential fund-raising through closed-end fund vehicles that allow revelation of information about true investment returns, is central to the VC industry. For anybody looking from the outside, like a policy-maker or an entrepreneur, it is important to be aware of it because of several implications.

First, institutional investors allocate money to VC firms on a comparative basis. Typically, an institutional investor will first decide an allocation of its portfolio to alternative assets, then to private equity, and within this to venture capital. Once the allocation to VC is decided, the investor will select in which VC firms to invest over several months. This puts much pressure on VC firms to deliver good returns on each of their funds, especially after the collapse of the dot.com bubble has made investors less keen to invest in this asset class.

Second, the ten year span of fund vehicles implies that VC firms have a well-defined time-frame for investment. The first few years are called the 'investment period,' when the VC firm attracts, selects, and contracts with portfolio companies. The later years are called the 'harvest period', when the VC prepare the company for sale, most often through IPO or acquisition. For entrepreneurs this has to important consequences: (i) they can access funding only when a fund vehicle has been recently raised, so some VC firms may not always be accessible, and (ii) they are under pressure to deliver growth within about 5 years from funding. Such pressure naturally translates to portfolio companies. This is what makes VC such a powerful form of financial intermediation, but also an extremely demoing one for companies: there is little mercy for non-performers.

Third, the closed-end nature of the fund vehicle bring additional implications for entrepreneurs. Companies which receive venture funding will need to be able to reach strong growth very soon, in order to become palatable to the market. Otherwise they risk being closed down, or sold at a low price when the time of wrapping up the fund vehicle comes. Also, companies in the portfolio of a VC are sometimes competing for scarce funding and scarce attention by the VC partners. This may lead to short-termism by of their funders, who may sacrifice long-term growth in order to deliver tangible short-term results.

VC is therefore a powerful source of entrepreneurial finance. In particular, the specialized nature of intermediation that VC provides allows institutional investors to open their investment strategies to the very risky investments into entrepreneurial companies. In other words, VC allows mobilizing savings for funding innovative ventures. It is therefore an extremely valuable component of financial markets. As we will see in section III.D, VC is also quite distinct from other non-intermediated sources of entrepreneurial finance, and therefore enriches the set of possible funding sources for innovative entrepreneurs.

At the same time, VC is also limited to funding a specific type of firms, those which can mature quickly and grow substantially within a very few years. This is a very important characteristics, which is often not appreciated enough by policy-makers: VC funding is only for very few companies, those which can grow very fast and attain a considerably large value within a few years. VC is therefore is not a universally usable tool for fostering innovation, and such limitation should be clearly understood and respected by policy-makers.

B. Captive venture capital firms

While VC firms are mostly financial intermediaries, there are also some investors that are owned by an organization, and are therefore called 'captives.' Parent organization are most often industrial companies (like Siemens Venture Capital) or financial firms (like Citigroup), but also government agencies (like FinPiemonte, the financial investor of the Piedmont region in Italy). We can include also public development agencies among captive investors, since they are also financed by a captive owner that shields them from market pressure. To contrast them from captives, it is common to identify the VC firms that act as intermediaries as 'independent' VCs.

The defining trait of captive venture investors is that they do not have a purely financial objective. While independent VCs need to generate large enough returns to be able to raising new funds from the market, captive VCs are funded by their parent organization. Their parents also give them investment mandates, which are often a mixture of financial and strategic goals (Hellmann (2002), Masulis and Nahata (2009)). For corporate VCs (or CVCs), a key priority is to gain access to new technology developed by nimble and innovative ventures (Da Gbadji, Gailly. and Schwienbacher (2015), Dushintsky and Lenox (2005)). Investment can also be used to gain toe-holds that allow getting acquainted with a new company and decide its future acquisition (Benson and Ziedonis (2010)), or to attract talented individuals (De Bettignies and Chemla (2008)). Indeed, CVCs often invest in younger and less mature—and therefore riskier—companies than VCs (Maula and Murray (2001), Chemmanur, Loutskina, and Tian (2014)). For entrepreneurs these patterns mean that a corporate investor can be a very attractive investor when the new venture is complementary to it, for example because it develops products that create demand for the established incumbent. An example could be software firms that develop application for an operating system. Such companies can find in CVCs initially a financier, and later on an acquirer.

Financial firms often own growth-equity investors, which constitute a second important type of captive investors. The evidence shows that bank-owned investors tend to invest in companies that are less risky than the typical start-up (Mayer, Schoors, and Yafeh (2005)), and that will later become clients of the investor's parent organization (Hellmann, Lindsey, and Puri (2008)).

The third important category of captive investors has a public nature, and comprises a variety of agencies and financial companies that are used to foster technology and employment at regional or national level (see Duruflé (2010) for an overview). These investors are quite heterogeneous and they tend to invest in early stage companies or companies that have difficulty finding financial support in the market (see an assessment of the Australian experience in Cowling, Murray, and Liu (2010)). An interesting fact is that companies that receive public VC funds alongside with private VC funding tend to raise more money, produce more patents, and have more successful outcomes than companies that raise only public or only private funding (Brander, Du, and Hellmann (2010)). This suggests that public and private funding are complements and that entrepreneurs whose business idea allows them to raise both types of funding can obtain more financial resources and more support from the very professional independent VCs.

To conclude this section, it is important to notice that in venture markets which are less developed, like Asia and Europe, compared to the US, independent VCs are (relatively) fewer and less important as source of funding for new ventures, especially those at an early stage of development.

C. How do venture capital firms operate?

1. Organization

In this sub-section, I am going to describe in some detail how VC firms operate, in order to better understand their contribution to innovation and growth. First, I look at independent VC firms. These are typically small partnership of less than a dozen individuals (Hsu and Kenney (2005)). VC partners are most often former entrepreneurs or industry executives with several years of experience in running and creating companies (Ewens and Rhodes-Kropf (2015)). Several studies document the important role of human capital for venture investing (Dimov and Shepherd (2005), Zarutskie (2010)). The business experience of VC partners has been shown to lead to more support for portfolio companies and to better exit outcomes (Bottazzi, Da Rin, and Hellmann (2008)).

Captive VC exhibit more variety of organizational forms, but these are rarely partnerships. Corporate VCs are often structured as divisions or subsidiaries, and similarly bank-owned VCs. Public development agencies can take many different structures, often determined by national legal requirements. While independent VC firms need to build and maintain a reputation to be able to repeatedly return to the market to raise funding, captive VCs are not subject to such discipline. In a way this makes them more resilient and nimble, since their very existence and operations depend on the decision of their parent organization, As long as the parents has funds to commit to new investments and is satisfied with the performance of its venture arm, investments will continue. However, for the same reason, captive VC firms may also be quickly folded up if they no longer correspond to the goals of their parent's management. Or they can be left with fewer resources, making it difficult to support, financially and managerially, their portfolio companies. This is clearly poses a threat to entrepreneurs, especially when their venture requires reliable support over long periods of time.

Another important difference between independent and captive VCs concerns the way