Role of Venture Capital in Economic Growth of



United States

- Maria Ben

Venture capital is a form of financing used by startups and young companies at different stages of their growth. At early stages of development, raising debt capital is extremely difficult for young companies owing to the huge uncertainties involved. Young companies, especially those with business models that aren't fully proven, or firms that haven't reached their break even, find it extremely difficult to access funding. This is where VCs play a huge role by making risky investments in startups and young companies in return for equity ownership. The role that VCs play is not limited to capital contribution, they also provide mentorship, industry connect and an entire network of support systems which enables in large scale expansion of young business models. Not only is it beneficial to entrepreneurs, but it also has several other positive impacts. This article explores one such aspect of venture capital; how it is a fuel for innovation and economic growth in countries like the United States.

In 2018, out of the ten most valuable companies in the world, seven of them were startups that had humble beginnings and were funded by venture capital. These include – Apple, Amazon, Alphabet(Google), Microsoft, Facebook, Alibaba and Tencent. Interestingly, five out of these seven companies belong to the United States which is also home to Silicon Valley, the hub of entrepreneurship and venture capitalism¹.

According to a study conducted by Stanford University, public companies in the United States with venture capital backing, employ about four million people and account for one-fifth of the total market capitalization.(Stanford)

(World's most valuable companies in terms of market capitalisation in 2018)

Source: statistica.com

Ranking of the companies rank 1 to 100 $\qquad \qquad \updownarrow$	Market value in billion U.S. dollars
Apple	926.9
Amazon.com	777.8
Alphabet	766.4
Microsoft	750.6
Facebook	541.5
Alibaba	499.4

The study also mentions that in 2013, VC-backed U.S. public companies spent \$115 billion on research and development, while in 1979 it was just zero. The amount these companies invested on research and development makes up 44% of the total R&D spending of all listed companies in the United States².



This also indicates why VC backed companies are some of the most innovative companies in the world, as the funding from VCs allows them to invest heavily on R&D. Thus, they produce value not just for themselves, but its spillover positively impacts the rest of the world. Other studies like the one conducted by Dalberg Global Development Advisors in 2012 have proven that each dollar invested in venture capital can generate up to \$6.45 in economic activity through wages, payment to providers and taxes³.

The VC industry is a high risk game and VCs typically tend to lose money in 80% of the ventures they invest into. However, the remaining 20% of investments which they make, is expected to take-off well, and compensates for the huge losses they incur. Given the nature of risk, venture capitalists are constantly in hunt for companies that fall into the 20% category⁴. Thus, it leads to natural selection of certain industries which require low capital and have huge growth potential and maximum payoff-typically seen in industries such as technology(Apple, Alphabet, IBM), retail(Amazon, Costco) and biotechnology(Amgen, Genentech), etc⁵.

Since its formal inception, venture capital has close links to innovation. It was the desire to innovate that led to the creation of American Research Development Centre(ARDC), by Georges Doriot in 1946. Doriot, who is regarded as the Father of Venture Capitalism had aspired to create an investment fund to assist promising companies and help them in their future growth. This was unseen in America before 1946, where scientists and innovators usually approached wealthy families like Vanderbilts, Carnegie or Rockefellers to fund their projects.

ARDC gained huge momentum when its investment of \$70,000 in Digital Equipment Corporation(DEC) was valued at more than \$38 million during the launch of DEC's Initial Public Offering(IPO). Over the next few decades, with the evolving tech industry, a second generation of VCs came into

² "Inside the Secret World of Venture Capital." Stanford Graduate School of Business. Accessed April 19, 2019. https://www.gsb.stanford.edu/insights/inside-secret-world-venture-capital.

³ Funes,Rocio. "Exploring the Role of Venture Capital in Latin American Economic Development", Dalberg 2012

⁴ The 80/20 Rule In Venture « Top Tier Capital Partners Blog, http://blog.ttcp.com/8020-rule-venture/

⁵ 70 Years of VC Innovation." TechCrunch. November 09, 2017. Accessed April 19, 2019.

⁶ O'Sullivan, Sean, Cyril Ebersweiler, Benjamin Joffe, Sean O'Sullivan, Cyril Ebersweiler, and Benjamin Joffe.

[&]quot;70 Years of VC Innovation." TechCrunch. November 09, 2017. Accessed April 19, 2019.

being. The key figures on this list include Arthur Rock, Tom Perkins and Don Valentine.

Arthur Rock headed the firm Davis & Rock which existed from 1960-68. During this period it invested in 15 companies, including Anadex Instruments, Inc., General Capacitor,

Astrodata, Teledyne, Benrus Watch Co. The turning point for the firm was its investment of \$257,000 in a company called Scientific Data Systems (SDS), founded by a mathematician called Max Palevsky. The investment peaked to \$60 million and the company's revenue grew exponentially from \$1 million to \$100 million in the next few years ⁷! In the years after that Rock also funded two phenomenal companies of the Silicon Valley- Intel and Apple, which went on to be multibaggers and to this day have an extremely strong market presence. Tom Perkins, the founder of Kleiner Perkins, another VC fund, established in 1972 has invested into a commendable portfolio of companies over the years ⁸. They have backed close to 850 ventures including America Online,

Amazon.com, Compaq, Electronic Arts, JD.com, Square, Genentech, Google, Netscape, Sun Microsystems, Nest, Synack, Snap, AppDynamics, and Twitter.

Don Valentine, the founder of Sequoia Capital is also one of the most prestigious VCs in the world. Apple, Google, Oracle, PayPal, Stripe, YouTube, Instagram, Yahoo! and WhatsApp are only some of the brand names on Sequoia's portfolio. The combined market capitalisation of these companies exceeds \$1.4 trillion, which is equivalent to 22 percent of Nasdaq⁹.

The thriving entrepreneurial communities of Silicon valley owe a lot to the mature and evolved venture capital industry that has been established there. The widespread presence of such strong institutional structures which provides easy access to capital is something that is lacking in several economies and is being worked upon. Israel, which ranks second in entrepreneurship below the United States, and is labelled as the start-up nation also has a widespread network of established VC firms. Apart from that even countries like Hong Kong and Singapore, two thriving economies of the world, have a well established venture capital industry.

As Jack Wilson framed it,

"The best venture capitalists are far more than checkbook investors, and the best entrepreneurs have too strong a vision of their enterprise to brook interference in its planning and operations. Success in venture capital comes most often from a creative partnership in which the

⁷ "Inside Sequoia Capital: Silicon Valley's Innovation Factory". *Forbes*. Retrieved 19 April 2019.

⁸ 70 Years of VC Innovation." TechCrunch. November 09, 2017. Accessed April 19, 2019.

⁹ "Unicorn Outcomes: Sequoia Capital Sees The Most \$1B+ Exits And Tends To Get In Early". *CB Insights Research*. 19 April 2017. Retrieved 18 April 2019.

investor's lengthy and often painful experience in the company's formation process is combined with the entrepreneur's management skills and detailed knowledge of a market or technology.¹⁰,"



An example to highlight how VC firms back companies outside providing capital can be seen from the case of ServiceNow (SNow). SNow was founded in 2003 by Fred Luddy as a cloud computing firm. After the company grew big, Fred, who was the CEO wanted to quit his managerial role and focus more on the products and platform. Being a passionate programmer he found himself ineffective as a CEO. That's when Sequoia, an investor in the company stepped in to help him hire a compatible CEO from the large pre- existing networks it had on offer 11.

A lot of innovative enterprises such as Microsoft, Apple, Google, Facebook, Alibaba, Baidu, Tencent, and the likes have risen sharply in succession, and have profoundly changed the prospect of the world economy just because of the support of the venture capital. Even the success of silicon valley is attributed to the willingness of individuals and institutions who dared to take financial risks and provided capital to fund ventures that they had faith in Among many other reasons why Indian origin entrepreneurs like Vinod Khosla, founder of Sun Microsystems was able to establish himself as an entrepreneur in United States and not in India is the ease of access to capital. Infact according studies even Europe hasn't been able to compete with the United States in creating innovation because of the lack of capital. Even while countries like Germany believe that they have superior talent than the United States, studies have proven that lack of capital has hindered the growth process.

Venture capital investment has been almost single handedly responsible for delivering huge productivity gains to the U.S. economy by way of financing new information, communication technologies, and innovations. Venture capital is even described as the DNA upon which the successful American capitalistic economy is based ¹³. According to a study by Stanford University, 38% of the working population of America is hired by VC backed firms. The huge employment opportunities that VC investments created can definitely not be neglected as it is a key to economic growth.

¹⁰ "The Little Book of Venture Capital Investing: Louis C ..." Accessed April 18, 2019. https://www.bookdepository.com/Little-Book-Venture-Capital-Investing-Louis-C-Gerken/9781118551981.

¹¹ "Sequoia - ServiceNow." Sequoia Capital. Accessed April 19, 2019. https://www.sequoiacap.com/companies/servicenow/

¹² "The Little Book of Venture Capital Investing: Louis C ..." Accessed April 18, 2019. https://www.bookdepository.com/Little-Book-Venture-Capital-Investing-Louis-C-Gerken/9781118551981. ¹³ "The Little Book of Venture Capital Investing: Louis C ..." Accessed April 18, 2019. https://www.bookdepository.com/Little-Book-Venture-Capital-Investing-Louis-C-Gerken/9781118551981

As proposed by the economist Paul Romer, growth in an economy in the long run is determined by technological change that arises from intentional investment decisions by profit maximising agents¹⁴. Thus, the economic growth of the United States, which has been powered by the best of technology and most innovative firms owes a lot to the venture capital industry and its appetite for risk and reward.

Pie chart 1 shows the investments made in 2014 alone. Chart 2 shows the investments made from 2006-13. The charts reveal how the investments in the US are substantially higher than any other country.

Top countries for total venture capital invested

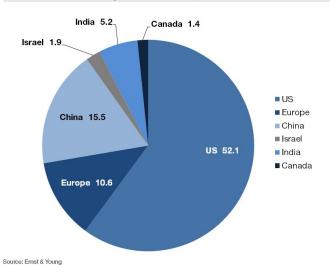
Share of total venture capital invested 2014, \$ billions

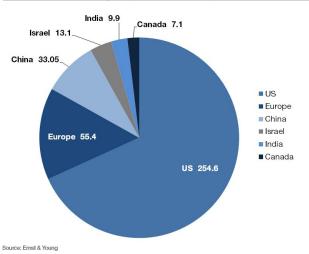


Top countries for total venture capital invested

Share of total venture capital invested 2006-2013, \$ billions







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