## The origins of high tech venture investing in America

By Tim Nicholas, Financial Market History-Reflections on the past for investors today, The CFA Institute Research Foundation, 2016.

## Introduction

VC investment increased to \$ 49.3 billion in the US in 2014, the third largest amount in history after 1999 and 2000. Silicon Valley accounted for 57% of the total investment. 90% of the investment was in high tech sectors. The US accounted for double the venture investment in Europe, China, India and Israel combined.

## **History**

From very early on in its history, the US has seen close ties between Finance and Innovation. VC style investments can be seen in the way the whaling industry was structured in the 18<sup>th</sup> century. The New England textiles industry took off because of a group of venture investors called Boston Associates. The rise of Cleveland owed a lot to investors like Andrew Mellon.

The turning point in the institutionalization of American venture capital came with the setting up of American Research and Development Corporation (ARD) in 1946. ARD's most famous investment was in Digital Equipment Corporation (DEC) in 1957.

ARD was set up at a good time. World War II was a catalyst for various technological advancements including radar detection and microelectronics. But capital was not easily available. ARD attempted to fill the gap.

ARD did not see itself as a substitute for bank finance. The way it was organized, raised funds and supported entrepreneurs was quite different from the way banks functioned.

ARD was organized as a closed end fund. ARD raised capital by selling a limited number of public shares. ARD raised funds from nonfamily sources including institutional investors. This made it different from other private equity firms like Rockefeller Brothers.

ARD maintained an eminent technical advisory board populated with MIT talent. ARD's Board of Directors had a blend of legal, financial and technological expertise.

ARD maintained high standards for filtering projects. It invested only in 4% of the project proposals it received.

In the 1950s, ARD had difficulty in attracting investors and deal flows slowed down. In fact, in 1954, ARD did not make an investment in a single new project.

ARD was revitalized by the investment it made in DEC in 1957. ARD offered DEC \$70,000 for a 78% equity stake with promise of additional loans. DEC's business plan was to develop circuit board models and later, fast, efficient computers. The business was risky. So, Kenneth Olsen and Harlan Anderson, the DEC founders readily accepted the proposal. By the time the value of the DEC stock was fully distributed to ARD's investors in 1971, it was worth \$ 355 million.

The DEC investment showed that a VC could build a portfolio of long tailed investments. A small number of successes could offset the losses and mediocre gains made on the remaining investments.

ARD was not only selective about the investments it made but also actively participated in the management of the investments.

VC investing in the US evolved to be complementary to the public markets. VC firms exit through IPOs. The timing of the exit matters. Inexperienced VCs take the firm public earlier and their IPOs tend to be under-priced.

VC funding can lead to bubbles and "hot" IPO markets. But it is during hot markets that more experimental and ultimately innovative projects receive funding.

ARD's organizational model did not turn out to be right. Limited partnerships, which had tax advantages were more suited to the creation of VCs.

Due to various cultural factors, the hub of VC finding in the US moved from the east coast to Silicon Valley. The valley prospered on the basis of a culture of open collaboration combined with competition that facilitated the development of high tech entrepreneurship. Many other countries have tried, but unsuccessfully, to replicate the US experience.