

INSIDE VENTURE CAPITAL

Past, Present, and Future

Robert C. Perez

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Preface

“America is the land of opportunity—not guarantees. In years gone by entrepreneurs have been willing to risk their time and capital to make America grow and these opportunities have provided fortunes for those willing to risk their time and money in pursuit of these worthwhile goals.”¹

As this radio commercial tirelessly reminds us, the United States appears to be entering a developmental stage approaching the magnitude of—or possibly even exceeding that—of the first Industrial Revolution. This upheaval is centered on the computer sciences, which offer a way of reducing the costs of goods produced that dwarfs the benefits derived from the first applications of mass production in the Industrial Revolution of 1850 to 1925.

The microchip is the “workhorse of this revolution, just as the steam engine, electric power, and the gasoline motor powered the first revolution. The potential applications of the chip pervades all economic activity. Computer-controlled robots are being adopted to control assembly lines, thereby freeing human beings from much debilitating work and transferring their energy to more uplifting and creative tasks in the business world. Computer systems have revolutionized the office by eliminating the need for mind-boggling files, and the personal computer now serves executives as a communication system, strategic planning mechanism, and managerial tool. Computer-controlled survey devices are even finding new sources of energy deep under the earth’s surface.

All told, economists predict that the microchip will result in a revitalization of almost every phase of our rapidly expanding economy, and enable the United States to reassert itself in the highly competitive world economy now dominated by the Japanese and the Germans. This upheaval will require financing, involving vast sums of capital. Some estimates put the cost of new energy systems alone at \$1.5 trillion over the balance of the twentieth

century, with a like amount needed to adapt the microchip to automate our industrial plants.²

The service field constitutes the cutting edge of the new industrial revolution and surpasses manufacturing as the principal economic activity in the private sector. This continues the trend that extends back over several decades: the change of the United States from a goods-producing economy to a provider of intangible services.³ Computer technology is the major force behind the growing service sector of our economy. The microchip has become the ubiquitous “worker” of our business world. And well it should—it works 24 hours a day, seven days a week, never takes vacations, and hardly ever loses time because of illness!

This contemporary revolution will witness the launching of many new companies and industries “wet nursed” by venture capitalists dedicated to the success of these emerging new industries. In the investment banking field, venture capital investments have historically been the beginning point for developing long-term investment banking relationships. With the burst of activity in “start-ups” investment bankers have shifted their emphasis more and more to focus on venture capital financing.

Historically most of the venture capital business has been developed by small specialty investment banking houses, but it is expected that this will spread to the larger firms and be augmented by commercial banking houses, especially if the future amalgamation of banking and investment banking is approved by the Congress. Commercial banks, through their own efforts, have emerged as major financiers of venture capital deals, employing the small business investment company format as its primary vehicle. The small “start-up” company needs the skillful hands of the creative banker to nurture it through the start-up and early growth phase of its corporate life.

This book will emphasize the creation of new industries with the aid of venture capitalists. Ferdinand Eberstadt, my mentor for many years and head of the investment banking firm bearing his name, used to compare the financier to a tailor who takes a button and makes a suit. In other words, investment banker-venture capitalists are the epitome of creativity—the contribution that they make to the economy and society is their ability to conceive and develop innovative financing to help along fledgling businesses.

In the spring of 1985, the author conducted a series of seminars on the subject of venture capital at Iona College Hagan School of Business in New Rochelle, New York. These seminars included a number of outside experts on venture capital who participated as invited guests in the seminars including Gerald Goodwin, President of Goodwin Alexander Inc., a New York venture capital firm; H. Donald Wilson, Partner in Wilson & McLane, Inc.; and George Middlemas, Vice President and Senior Investment Manager of Citicorp Venture Capital, Ltd. The seminars plus the author's experience and research in the field provide the backbone for this book. Thus this book reflects the contributions of many individuals and institutions involved in the field of venture capital investments.

The author owes a debt of love and gratitude to his wife, Mary Jean, who typed and retyped the manuscript on an IBM PC computer word processor and acted as the author's executive editor, correcting the inevitable grammatical lapses and inconsistencies that occur in any work of this length. The errors that remain and the opinions expressed remain the responsibility of the author.

NOTES

1. From a radio commercial of First Jersey Securities, Inc., Fall 1985.
2. Peter J. Schuyten, "American Industry Faces Huge Capital Investment to Increase Efficiency," *New York Times*, January 11, 1981, pp. 31 and 45.
3. Nicholas D. Kristof, "Nation's Two-Tier Economy: Production is Slow While Services Gain," *New York Times*, May 21, 1985, p. D 1.

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1 Introduction and Overview

America has always been the land of opportunity for anyone with a good idea and lots of energy to bring that idea to reality. Henry Ford working in his shop perfected his lifelong ambition to build an automobile that every American could afford. Americans believe that our society can and does nurture dreams into success stories.

Alexis de Tocqueville described the earlier industrial revolution of the nineteenth century as a world of smoke, ceaseless din and social disruption but, “from this foul drain pure gold flows forth.” That wealth built vast family fortunes—such as those of the Carnegies, Harrimans, and Rockefellers—and many lesser fortunes as well.¹

Now, a century later, another revolution is transforming the economy and society. It is based on the tiny microchip that represents the computer’s brain and the software or the programmed instructions that tells the computer what to do. Workers benefit by laboring in quiet, pollution-free environments, and the fortunes accruing to the entrepreneurs and venture capitalists from this industrial revolution promise to exceed those of 100 years ago by a wide margin.

In recent years, the rapid pace of technological change in computers and communications has given birth to a new and different age of entrepreneurship in manufacturing and in the services. For example, the creation of the microprocessor by the Intel Corporation enabled Apple and other companies to develop the home computer, which, in turn, opened new markets for

software companies such as Lotus Development and Microsoft. All told, a \$100 billion a year market developed out of the waves generated by the development of the personal computer by Apple Computer and others.²

"There is more entrepreneurship today and it is somewhat different than before," said Alfred E. Chandler, the Isidor Straus Professor of Business History at the Harvard Business School. "Society is quicker, more mobile, bigger and more urban. This growth, combined with new technologies, has given the entrepreneur opportunities that simply weren't there prior to World War II."³

Technological change may be the driving force in the rise of the new entrepreneur, but other forces are at work too. The decline of America's basic industries has caused aggressive "Young Turks" to look for careers in new growth areas. The cut in capital gains tax rates in 1978 triggered an unprecedented rise in venture capital dedicated to new businesses—a pool that now totals over \$16 billion.⁴ Augmenting this trend, the baby-boom generation, now peopling the middle and upper levels of business management, brings with it a dislike of big institutions and a passion for independence.

As the nation's heavy industrial base declines, the role of the small service and technology companies financed by venture capitalists becomes increasingly important. These firms are generating jobs at a time when employment opportunities are desperately needed, and making the technological advances necessary to increase our productive capacity.

For some time, economists have found that small businesses—not large corporations—create the most jobs in the United States ranging up to 80 percent or more of total new jobs, depending on the definition of "small business." But, according to Joseph W. Duncan, chief economist at Dun & Bradstreet Corporation, in 1985, of the two million new workers whom employers plan to hire, Duncan expects more than half to sign on at companies with fewer than 100 employees. An additional 29 percent will get jobs at modest sized companies with 100 to 1,000 workers.⁵ Since the late 1970s, small business has become the primary provider of new jobs in the U.S. economy, as employment by *Fortune* 1,000 companies continues to spiral downward. It is not the Exxons or the U.S. Steels

or the General Motors that, collectively, are sources of job formation anymore. Between 1977 and 1982, companies too small to make the *Fortune* 1,000 provided 8.6 million new jobs. By contrast, the *Fortune* 1,000 lost 1.5 million jobs over the same time frame. In fact, *Fortune* 1,000 companies today provide fewer jobs than they did as far back as 1969.⁶

Donald Wilson, partner in a consulting firm to venture managements and a participant in the author's 1985 seminars on venture capital, referred to the well-known Marc Porat studies of employment patterns over the past century which reflect the effects of two industrial revolutions. "Employment in agriculture has dropped from 35 percent of the labor force in 1900 to two percent in the 1980s while the information field has grown from 13 percent of the labor force to 46 percent. In the same time frame, manufacturing has moved downward from 32 percent of the total to about 22 percent."

According to data from the Commerce Department and Labor Department, employment in the service sector has been rising steadily since the end of World War II to more than 21 million jobs, while manufacturing employment has declined just as steadily to less than 20 million jobs.⁷

Today, the pace of business is quickening. New business start-ups in 1984 reached an incredible record of about 100,000 new businesses.⁸ This includes all types of new businesses—both the new entrepreneur with millions in venture capital as well as the traditional "Mom and Pop" corner grocery store or neighborhood dry cleaner. Some eight million people are currently self-employed, a number that has climbed by one million since 1982 to reach a historic high.⁹

Some economists argue that venture capital enthusiasts overstate the benefits of the activity in that they fail to account for sales, jobs, etc. of firms whose products are displaced and made obsolete by the new enterprises. But the late Harvard economist, Joseph A. Schumpeter, in his treatise in the late 1930s eloquently described the process of growth of a capitalist economy as "creative destruction." While creating new growth industries inevitably inflicts displacement and distress on older, less dynamic businesses, the end result is rapid economic growth overall. In today's highly competitive world economy, moreover, if the process were not

generated internally by U.S. entrepreneurs, our international competitors would make it happen and that would inflict far greater economic displacement and distress on American industry.¹⁰

Still, entrepreneurship is not without risks—although the stigma of failure has lessened over time. For every three businesses that start, two will fail and nearly half that fail do so in the first five years, according to the Small Business Administration. But entrepreneurs who fail, start up again often with new backing by venture capitalists. For example, Osborne Corporation went bankrupt in 1984, but its founder, Adam Osborne, started a new software company a year later backed by a \$2.2 million financing package from venture sources.¹¹

How long the wave of new entrepreneurship will last is difficult to predict. The ebb and flow of entrepreneurial effort has historically been shaped by many events—wars, depressions, major new inventions, and changes in the tax system. The entrepreneurial boom of the early 1900s lasted two decades, only to be choked off by the Great Depression, which sapped the economy's energy, and World War II, which restricted many forms of civilian economic activity.

As in the earlier upheavals, small investors cannot expect to match the profits of the entrepreneurs and venture capitalists who launch high-tech firms. For example, General Georges Doriot's American Research and Development (ARD), one of the original venture capital partnerships, made over \$500 million on the investment of a few thousand dollars in Digital Equipment.¹² But small investors were able to capitalize on the IBMs and Xeroxes in the 1950s and 1960s. For example, a \$10,000 investment in IBM in 1950 (when it was already a giant firm) would be worth more than one million dollars in 1985 besides paying \$375,000 in cash dividends over the life of the investment. But even greater gains were available to investors willing to gamble on smaller companies. For more ambitious investors today, interested in big gains and willing to take commensurate risks, the action favors smaller companies with annual sales of less than \$100 million, preferably \$20 million or so, and with earnings growth potential of 20 to 30 percent annually. No matter how intense the competition among large companies or how thoroughly they blanket the market, an aggressive, well-managed smaller company can usually find profitable niches in the market. Says John Westergaard, a specialist in picking small

growth stocks, "The record shows that in times of change small companies are best at exploiting new opportunities."¹³

The current atmosphere in venture capital financing is a welcome contrast to the gloom that prevailed in the lean, dark years of the decade of the 1970s. Back then survival, not deal generation, was the name of the game. New funding for venture partnerships was scarce, and recession and liquidity scares threatened weaker investments. Typically rewarded with a 20 percent share of the profits, many general partnerships had a hard time making a go of it and to make ends meet, the majority of venturers virtually abandoned high-risk deals in the mid-1970s for safer leveraged buy-outs and investments in public companies. Scores of weaker firms in the venture capital field simply went out of business.

One major impediment to venture capital investment during the 1970s was the increase in capital gains taxes from a maximum rate of 25 percent prior to 1969 to a maximum rate of 49 percent in 1976 and thereafter. As Franklyn P. Johnson Jr., a venture capital partner of Asset Management Company of Palo Alto, California, puts it,

The most important single element of a strong entrepreneurial environment is the opportunity for individuals to make and keep money...but the ability to keep it, once earned, is primarily dependent on tax rates.... For the entrepreneur and his backers, very low or no taxes on gains from the realization of increases in capital value are a vital condition.¹⁴

After the capital gains tax was nearly doubled in 1969, venture capital investment fell drastically from \$500 million a year in the late 1960s to near zero in 1975. The tax law changes caused a series of "ripple effects." Entrepreneurs became less inclined to present new business proposals; top managers, with secure jobs at IBM or other *Fortune* 500 concerns, had less incentive to strike out on their own and the flow of new talent to the venture capital management firms dried up.¹⁵

Recognizing the negative impact of high capital gains taxes, Congress in 1981 reduced the maximum rate in successive measures to 20 percent and venture capital investment soared. Long term rates came down and investors were allowed to write off losses against ordinary income while incurring tax on the profits at the

TABLE 1-1. Total Return of Venture Capital Index

Year	Venture Capital 100 Index*	S & P 500
1973	-41.5%	-14.9%
1974	-47.2	-25.3
1975	134.3	37.3
1976	60.0	23.7
1977	41.7	-7.3
1978	59.4	6.5
1979	41.4	18.6
1980	77.4	32.5
1981	-13.1	-5.0
1982	25.6	21.6
1983	17.7	22.5
1984	-37.1	6.1
12 Year—1973–84 Mean	26.3	9.7
Standard Deviation	52.3	18.9

*The index consists of the unweighted stock prices of companies meeting the following criteria: the companies have been public for less than 12 years and be still in operation; early financing was provided by professionally managed venture funds; and the venture capitalist is still involved. Additions and deletions are made from the index based on the foregoing criteria.

Source: Capital Publishing Corporation, 1984.

much lower capital gains rates. As George Middlemas, the Citicorp venture capitalist, puts it, "We had an ebullient public market from 1976 on.... So as a consequence, people were able to see their way out.... they had the financial incentives to invest in the business." Reflecting the new incentives, the Securities Industry Association noted that venture capital investment in private partnerships rose dramatically to \$215 million in 1978 in anticipation of the tax law change.¹⁶ And it has increased sharply each year since.

By the end of the 1970s, however, the survivors could demonstrate conclusive historical evidence of the superiority of venture investments compared to conventional investment (see Table 1-1).

HOW VENTURE CAPITAL IS ORGANIZED

Venture capital is simply defined as investing in new businesses or new companies. The founders of these businesses have new ideas and must obtain funds to develop their new products or

services. Thus the entrepreneur approaches a venture capital fund for the money to develop his new idea. The venture capitalist may invest from \$100,000 to several million dollars in the new company and will usually receive an ownership interest in the company, depending on the relative bargaining positions and needs of the entrepreneur.

Small firms that have growth potential face greater risks than almost any other type of business, and their higher risks require special types of financing. This has led to the development of specialized venture capital financing sources. Most venture capital companies are organized as limited partnerships; others are more formal corporations termed *small business investment companies*. Such companies are defined as closed-end, nondiversified investment companies. They are like mutual funds in that they offer diversification and professional management, but they differ in that they are under no obligation to buy back the shares they have issued. American Research and Development Corporation, one of the first investment development companies, permits individuals and institutions, such as insurance companies and pension funds, to participate in the venture capital market. Other venture capital companies represent the activities of individuals or partnerships.

In the mid-1980s the Joint Economic Committee of the U.S. Congress launched a comprehensive survey—the first of its kind—of the nation’s venture capital markets. Over 47 percent, or 277, of the nation’s leading venture capital firms participated in the survey (hereinafter referred to as the “1985 JEC Survey”). Venture capital firms were found to be highly specialized investors who participate, with other venture capital firms and investors, largely in seed, start-up, and early expansion investments. The majority of investments receiving venture capital backing are in companies that use technology to expand the nation’s economy into new products and processes that raise productivity and improve the quality of life. Venture capitalists are “hands-on” investors who try to minimize risk by diversifying their firm’s investment portfolio across companies by stages in business development, by regions, and by co-investments with other venture capital firms. The survey found that while venture capital has grown substantially in recent years, it is still in short supply. An examination of the portfolio performance of venture capital firms reveals that they anticipate a minimum rate of return of 30 percent per annum on individual investments. Most