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VENTURE CAPITAL AND INNOVATION

A STUDY

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EXECUTIVE SUMMARY

The nation's venture capital industry is the subject of study in this report. The study begins by looking at those factors responsible for the post-1978 surge in venture capital availability. It then proceeds to discuss the major investment patterns within the venture capital industry. Investments by stages in business development, geographical zones, and technological orientation are discussed. The "capital gap" and "regional gap" issues are also discussed. Finally, the complexity of the nation's institutional environment governing the venture capital process is emphasized in discussions of capital gains taxes, pension fund regulations, commercial and investment banking, and industrial policy strategies.

The study is based upon 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 capitalists participated in the 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 coinvestments with other venture capital firms.

This study of the nation's venture capital process has significance not only for the insights it provides into the dynamics of the venture capital process, and the public policies that influence that process, but because it has implications for a much broader range of entrepreneurial activities within the economy. Venture capital is only a small part of the nation's total entrepreneurial community, but the process of company formation, early expansion, and mature development experienced by venture capital companies is indicative of what other entrepreneurial companies must experience.

A major conclusion of the study is that policies to aid venture capital formation and innovation must follow a two-pronged path. A two-pronged policy path is necessary because of the interdependence of venture capital and the availability of entrepreneurial deals.

Another finding was that the capital gains tax differential was, and continues to be, a major factor behind the post-1978 surge in venture capital availability. Other important contributing factors include improved pension fund regulations; lower SEC registration, reporting, and filing costs for small firms seeking private and public access to equity funds; and an improved market for initial public stock offerings. The combined effect of these contributing factors resulted in a shift in the proportion of capital market resources (saving) directed to risky investments. As a result, venture capital supply has been increasing at a faster pace than growth in the nation's supply of total saving.

Without an active venture capital market, a serious misallocation of resources would exist in the nation's capital markets: an inadequate supply of risk capital for entrepreneurial investments would emerge. Substantial empirical evidence is provided which shows that large institutional investors (e.g., life insurance companies, pension funds, and commercial banks) are biased in their portfolio choices regarding risky, small business and other entrepreneurial investments. A lack of institutional expertise in small business investing and high information costs were found to be the primary reasons for the existence of a capital gap problem.

An active venture capital market, spurred on by preferential capital gains tax treatment, improved pension fund regulations, lower SEC regulatory costs, and an improved market for initial public offerings, has emerged to fill much of the void caused by the increasing role of large institutional investors in the nation's capital markets. Without a thriving venture capital market, many economically profitable entrepreneurial investments would go unfunded. Productivity growth and job creation would suffer from capital market inefficiencies and a lower rate of technological innovation. For this reason, the JEC study found venture capital availability to be a major factor in the health of the nation's overall climate for entrepreneurship and innovation.

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, 30 percent per annum, on individual investments. Most formal business proposals submitted to the venture capital community cannot meet this standard and go unfunded. Of the deals they do make, venture capitalists calculate that about 50 percent will be "winners" and about 15 percent will be "losers". Over 60 percent of the portfolio companies are expected to be liquidated by going public or merging upwards.

Unquestionably, only the "cream of the crop" of entrepreneurial investments receive funding from the venture capital community. Implied in the analysis, and corroborated by other studies, is that venture capital investments offer a risk adjusted rate of return substantially in excess of risk adjusted rates of return on other types of investments. This finding suggests that the "capital gap" problem is real. Economic efficiency requires that capital market funds be allocated until risk adjusted rates of return on alternative investments are equated at the margin. Only when this condition is satisfied will the capital gap problem be eliminated.

The JEC study found that the best way to close the capital gap is to encourage growth in the overall supply of risk capital. Policies to increase the nation's saving rate—the elimination of double taxation of saving and a reduction in the deductibility of interest expenses on consumer durables—would be appropriate. Other policies to increase the proportion of capital market resources flowing into entrepreneurial investments will also be necessary. Continued preferential tax treatment of capital gains; improved pension fund regulations; lower SEC filing, registration, and reporting costs of small businesses; and an expanded market for initial public stock offerings would be helpful. Also, regulatory barriers could be removed to enable large institutional investors to rely more on specialized financial intermediaries, such as venture capital firms and investment bankers, to select and manage their small business investment portfolios.

Monetary and fiscal policies to provide for stable non-inflationary economic growth, gradual deficit reductions to lower real interest rates, and continued improvements in the nation's tax and regulatory environment are other policies that would be helpful in encouraging continued growth in venture capital markets and related activities.

The number and quality of entrepreneurial deals have increased sharply in response to growth in venture capital availability. Continued expansion of the venture capital industry must be accompanied by an improved climate for entrepreneurship in the United States. Public policies to improve the entrepreneurial climate might include liberalized incentive stock options so entrepreneurial companies can attract the needed talents, strong basic research at American universities, improved technology transfer from government laboratories, R&D tax credits to encourage commercial research, antitrust regulations to encourage formation of R&D joint ventures among American firms, the provision of a highly educated labor force, and competition in domestic and international markets. Competitive markets are necessary to increase entrepreneurial adjustments within the economy as it responds to worldwide technological and market trends.

The State and local government role is important because of the "regional gap" in the availability of venture capital. California, Massachusetts, New York-New Jersey, and Texas have the most active venture capital markets. Venture capital markets are thinly spread throughout the other States and regions. An important finding of the JEC study was that, because of these regional gaps, entrepreneurs in the venture capital poor regions are at a competitive disadvantage in getting otherwise comparable deals funded by the venture capital industry. The primary significance of this finding is that there are inefficiencies in the inter-regional allocation of venture capital market resources in the United States.

The Federal Government can mitigate the adverse effects of the "regional gap" problem by pursuing policies to expand venture capital supply at the national level. At the State and local level, policies to encourage the development of private venture capital markets are necessary. A small, but thriving, regional venture capital market can help local entrepreneurs gain access to venture capital markets in other regions by arranging coinvestment opportunities with venture capital firms in other regions. Other State policies to encourage risk taking (e.g., lower capital gains taxes), reduced risk aversion of institutional investors, and coordinated Federal and State securities regulations would be helpful.

Finally, governments are often tempted to stimulate economic growth through direct interventionists methods. This study recommends, as an alternative to industrial policy approaches, that Federal, State, and local governments use their tax, regulatory, and expenditure authority to "target the process of innovation." Government owned and operated venture capital firms are not condoned in this study.