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VENTURE CAPITAL IN KOREA? SPECIAL LAW TO PROMOTE VENTURE CAPITAL COMPANIES

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HYUN YOUNG SHIN**

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The National Assembly in Korea recently passed a law envisioned to promote venture capital companies in Korea. Putting the substance of the promotional measures aside, the government apparently intended the enactment to emulate the success of the venture capital market in the United States and several other countries. In this Essay, we will demonstrate that while the development of the venture capital market in the United States resulted from an evolutionary process, which led to a specific contract regime geared to accommodate different players with varying incentives and sets of information, the Korean government is playing a more active role in its venture capital market by providing tax-subsidy incentives for eligible companies. We argue that the enactment of a law promoting venture capital alone is not enough to emulate the successes achieved in other countries. Instead, it is imperative for the Korean government to understand the complex and multifaceted relationship between entrepreneurs and venture capitalists and to have a well-functioning screening and monitoring system in place. Eventually, incentive structures, labor practices, and other institutional framework may need to change in order to promote the market for innovation in Korea. In this endeavor, the government's role should be limited to providing an infrastructure, rather than participating as an active player in the market.

INTRODUCTION

On July 30, 1997, the National Assembly in Korea passed the "Special Law to Promote Venture Capital Companies" ("SLPVCC"), which became effective for a ten-year period starting October 10, 1997.¹ The primary purpose of the law is to provide a more efficient and effective market environment for venture capital companies in Korea through direct and indirect subsidies, exemptions, and the relaxation of existing regulations. This enactment, is an effort to replicate the success of the venture capital market in the United States

1. See Special Law to Promote Venture Capital Companies, Law No. 5381 (Aug. 28, 1997) [hereinafter SLPVCC].

and several other countries.²

In general, distinct features of venture capital investment include high-risk and high-return.³ In the United States, the high-risk feature is accommodated by a special form of venture capital contract that aligns the various incentives of contracting parties, while simultaneously ensuring proper monitoring. The high-return feature involves a well-developed American equity market, which functions as a major venue for reaping high returns for investors willing to bear high risks.

In Korea, however, the government plays an active role in the venture capital market.⁴ First, instead of providing a functional and flexible definition of venture capital, the SLPVCC specifically sets forth requirements for venture capital companies.⁵ Second, by employing various preferential treatments and other measures, the SLPVCC heavily protects entrepreneurs from downside risks. In addition, the lack of a properly functioning equity market for venture capital hinders the realization of upside potential for investors. Therefore, contrary to the stated purpose of deregulation, the underlying market mechanism is skewed to the extent that the nature of venture capital can no longer be characterized as a high-risk and high-return investment. Rather, venture capital in Korea has become identified with limited-risk and limited-return investment.

2. See Jin Hyung Kim, *Explanation on Special Law to Promote Venture Capital Companies*, VENTURE CAPITAL, Fall 1997, at 2.

3. See *id.* at 3. Scholars have described venture capital as follows:

We define "venture capital," consistent with American understanding, as investment by specialized venture capital organizations (which we call "venture capital funds") in high-growth, high-risk, often high-technology firms that need capital to finance product development or growth and must, by the nature of their business, obtain this capital largely in the form of equity rather than debt.

Bernard S. Black & Ronald J. Gilson, *Venture Capital and the Structure of Capital Markets: Banks versus Stock Markets*, 47 J. FIN. ECON. 243, 245 (1998).

4. See *infra* Part IV (noting that while the government emphasizes the role of the market mechanism and stresses the significance of deregulation, the role of the government remains substantial).

5. In order to accommodate different forms of venture capital, the SLPVCC law attempts to provide several categories of venture capital. See SLPVCC, *supra* note 1, art. 2. Nonetheless, it is still true that the law descriptively defines venture capital.

The literature on evolutionary economic theory suggests that there may not be a single optimal path to equilibrium, but rather chance events may lead to different paths and disturb equilibrium.⁶ In the venture capital context, economic theory indicates that the particular form of venture capital contracting prevalent in the United States may not necessarily be a universal form of contracting applicable throughout the world. Indeed, the character of venture capital contracting in an economy with a corporate governance system centered on the stock market, such as in the United States, is much different from that of bank-centered systems such as Germany and Japan.⁷ Nevertheless, a review of venture capital contracting in the United States provides insights for a general understanding of venture capital contracting as distinguished from other forms of financial contracting.

Part I of this Essay explains and describes the nature of venture capital in the United States, particularly its contracting process, economic structure, and financial success. Next, Part II briefly explores the venture capital industry in Korea and assesses two recently enacted laws regulating venture capital endeavors. Part III compares and contrasts the purposes and consequences of Korean venture capital laws of Korea with those of the United States. Finally, Part IV assesses Korea's attempt to emulate the United States' venture capital system and recommends initiatives for improving the venture capital system in Korea. This Essay concludes that for a successful Korean venture capital system, the government must refrain from interfering with fundamental market mechanisms and create the necessary institutional infrastructure that promotes incentives for ven-

6. Nelson and Winter are among the first authors attempting to theorize this literature. See Richard R. Nelson, *Recent Evolutionary Theorizing About Economic Change*, 33 J. ECON. LITERATURE 48 (1995) (discussing Alfred Marshall's book, *Principles of Economics*). See generally RICHARD R. NELSON & SIDNEY G. WINTER, *AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE* (1982) (developing an evolutionary theory of the capabilities and behavior of firms in the market environment).

7. See generally Black & Gilson, *supra* note 3 (noting that German and Japanese banks are fewer in number but larger in relative size). See also Curtis J. Milhaupt, *The Market for Innovation in the United States and Japan: Venture Capital and the Comparative Corporate Governance Debate*, 91 NW. U. L. REV. 865, 874-79 (1997) (examining the institutional environment for venture capital in the United States and Japan).

ture capitalists, entrepreneurs, and investors to engage in high-risk/high-return endeavors.

I. VENTURE CAPITAL CONTRACTING IN THE UNITED STATES AND ITS ECONOMIC STRUCTURE

In the United States, venture capital has developed in response to the market demand for high-risk/high-return investments. In the late nineteenth and early twentieth centuries, wealthy families such as the Vanderbilts, Whitneys, Morgans, and Rockefellers often funded high-risk/high-return investments.⁸ With an increase in demand for high-risk and high-return investments and a change in the 1979 amendment to the “prudent man” rule provided in the Employee Retirement Income Security Act of 1974 (“ERISA”),⁹ many small investors began to infuse substantial amounts of money into venture capital through their pension funds.¹⁰ Prior to the 1979 ERISA amendment, pension funds were investing substantial amounts of money into venture capital.¹¹ Accompanying this revision in the law, a change in the sources of venture capital funding arrived. While only 15% (\$218 million) of American venture capital funds were composed of pension funds in 1978, the figure increased to 46% (\$3

8. See Paul A. Gompers, *The Rise and Fall of Venture Capital*, 23 BUS. & ECON. HIST. 1, 5 (1994) (noting that these private funds are also known as Angel Capital). Angels continue to play a role in modern day venture capital investments, although their role is not clearly understood. See George W. Fenn et al., *The Role of Angel Investors and Venture Capitalists in Financing High-Tech Start-Ups* 12 (1997) (unpublished manuscript, on file with the authors).

9. See G. FENN ET AL., *THE ECONOMICS OF THE PRIVATE EQUITY MARKET* 10 (1995). Prior to 1979, the Department of Labor required that pension fund investments be based on the judgment of a “prudent man,” which had been widely interpreted as prohibiting pension fund investments in securities issued by venture capital funds. After the 1979 amendment, however, such investments were permitted, provided that they do not harm an entire portfolio.

10. See Gompers, *supra* note 8, at 12.

11. See *id.* at 13 (finding that by the end of the 1980s, pension funds held approximately three trillion dollars).

trillion) by 1988.¹² Presently, institutional investors are the principal source of funding for venture capitalists. These institutional investors dominate the United States venture capital industry, representing over 75% of the total capital raised in 1995.¹³ Therefore, flexible interpretation of ERISA's "prudent man" rule greatly contributes to funding the venture capital industry in the United States.

The development of a special form of financial contract, which bolstered the financing of venture capital companies, complemented the availability of funds. In particular, the economic structure of venture capital contracting in the United States is based on both the alignment of economic incentives and a monitoring mechanism. The venture capital industry has three principal players: entrepreneurs, venture capitalists, and risk-loving investors.¹⁴ Venture capitalists pool funds from risk-loving investors and invest in projects carried out by entrepreneurs, who are chosen by venture capitalists. Those invested companies then become a part of investment portfolios managed by venture capitalists.¹⁵

While venture capital funds are formed as limited partnerships, the relationship between entrepreneurs and venture capitalists is dictated by a unique set of financial contracts, which align economic incentives and implement monitoring. In a venture capital limited partnership, outside investors become passive limited partners, while venture capitalists emerge as general partners. Limited partners function as a prime source of financing in the hope of receiving a high return for their investments. The general partners actually control and manage the portfolio companies. A venture capital fund, however, is typically composed of blind pools.¹⁶ Thus, while the limited partners

12. *See id.*

13. *See* Black & Gilson, *supra* note 3, at 249 (discussing venture capital investors).

14. By "risk-loving," we do not mean risk-lovers (as opposed to risk-averse investors) as described in conventional economics textbooks. We simply mean investors who are willing to bear high risks in return for high expected returns.

15. Invested companies are also known as venture capital companies, or more frequently, portfolio companies.

16. Under the blind pooling, the limited partners are not allowed to allocate their contributed funds to any particular projects. Rather, their funds must be invested according to the decision of the general partners. The proceeds from such investments are distributed in proportion to the contributions made by individual

know the fund's general investment strategy, they are not privy to information regarding the particular companies in which that fund invests. In addition, limited partners are not allowed to participate in the day-to-day management of the fund's business; only general partners control the management of the fund.

Due to the existence of information asymmetry between venture capitalists and entrepreneurs regarding the prospects of proposed projects, venture capitalists are at a disadvantage when gauging the probability of success of the entrepreneurs' project proposals. Concurrently, entrepreneurs are uneasy in revealing too much information to venture capitalists before an actual contract is signed. Accordingly, drafting specific financial contracts assists in satisfying the economic needs of both contracting parties.¹⁷ For example, venture capital contracts allow venture capitalists to retain complete control over venture capital companies, even to the extent that venture capitalists may terminate entrepreneurs at will. Consequently, venture capitalists maintain sufficient flexibility to either dissolve or restructure venture capital companies to reduce their losses in case of failure. On the other hand, entrepreneurs normally are in great need of financing and accordingly are willing to relinquish control in exchange for initial funding.

In practice, general partners, who manage venture capital funds, usually invest only 1% of the capital and receive total control of the company management.¹⁸ It is important to note, however, that general partners' principal contribution is their expertise, not capital. General partners' contribution also includes management, consulting assistance, intensive monitoring of the investing companies' performance, and the use of the funds' reputation to give the investing companies credibility with potential customers, suppliers, and employees.¹⁹ The compensation scheme for general partners is usually written to re-

limited partners. Thus, for the limited partners, the overall performance of the funds is crucial, rather than the success or failure of individual portfolio companies.

17. See generally William A. Sahlman, *The Structure and Governance of Venture-Capital Organizations*, 27 J. FIN. ECON. 473 (1990) (providing a detailed description of the economic structure of venture capital contracts).

18. The remainder of the funding comes from limited partners.

19. See Black & Gilson, *supra* note 3, at 252-55 (explaining the importance of exit by the venture capital fund).

flect their performance. General partners receive only a modest amount of the management fee for their service—usually 2.5% of the committed capital. The primary source of general partners' compensation arrives in the form of the right to claim a specified percentage of profits realized—20% is a common figure.²⁰

If such ventures are successful, venture capitalists return the companies' control to the entrepreneurs in exchange for a handsome amount of investment returns.²¹ Of course, not all venture capital projects are successful. In fact, in the United States, only one-third of venture capital companies are successful. Nonetheless, during the last several decades, the annual average returns from investments were extremely lucrative at over 40%, compared to 12% for stocks and 5% for long-term bonds.²²

The possibility of receiving an extraordinary return for their efforts provides entrepreneurs a great incentive to focus and work very hard on novel ideas. In addition, the high-risk and high-return nature of this type of investment encourages venture capitalists to commit extra efforts into monitoring entrepreneurs.²³ First, during the early stages of a venture capital project, venture capitalists frequently visit each portfolio company to assess and monitor progress. Second, instead of disbursing financial resources all at once, venture capital contracts provide stage financing, where venture capitalists take several chronological steps in financing entrepreneurs. For instance, in the beginning, venture capitalists may provide just enough funds for entrepreneurs to build a prototype. The venture capitalists may reassess the probability of the project's success after evaluating such a prototype. At the end of each stage, terms of later rounds of invest-

20. See Sahlman, *supra* note 17, at 491 (noting that venture capital companies usually receive compensation from two sources for managing the investments in each limited partnership).

21. See generally Paul A. Gompers, *An Examination of Convertible Securities in Venture Capital Investments* (Harvard Business School Working Paper, 1997) (finding that venture capital funds' equity investments in portfolio companies typically take the form of convertible preferred stock).

22. See ZVI BODIE ET AL., INVESTMENTS 126-27 (1993) (providing statistics for the average annual returns on venture capital investments).

23. See generally Paul A. Gompers, *Optimal Investment, Monitoring, and the Stage of Venture Capital*, 50 J. FIN. & ECON. 1461 (1995) (examining the various factors affecting the structure of periodic investment by venture capitalists).

ments are negotiated. Bargaining power is tilted in favor of venture capitalists since they normally reserve the option to discontinue funding at the end of each stage. Thus, venture capitalists also gather information needed to monitor the progress of the venture.²⁴

Monitoring efforts by venture capitalists are reinforced by the disproportionate allocation of the right to control the management of their portfolio companies. It is not unusual for venture capitalists to reserve the right to name a majority of a portfolio company's directors, even when their shares represent less than a majority of the company's total equity shares.²⁵ Further, the venture capitalists and the portfolio company enter into a series of contractual negative covenants, requiring prior approval by the venture capitalists before making major business decisions. This control mechanism complements the staged financing structure. In effect, it delegates to venture capitalists the right to determine whether to continue the portfolio company's projects.

Venture capital investments normally focus on early-stage financing and usually have a limited duration of ten years.²⁶ Due in part to the limited duration, general partners have a strong incentive to liquidate their investments into a portfolio as quickly as possible. Given that general partners seek to raise capital for a new fund by the midpoint of the existing fund's life, and because the overall performance of the prior funds functions as an important factor in the partners' ability to raise new capital, it is extremely important to achieve an early and successful exit. Two principal exit methods are taking the portfolio company public through an initial public offering on a stock market or selling the entity to another company.²⁷ The limited

24. *See id.* at 1470 (providing studies of venture capitalist monitoring processes). In 1991, based on 794 randomly selected venture capital companies, Gompers found 109 rounds of stage financing for venture capital investments of \$142 million. *Id.* Venture capital funds invest one-third of their capital in new investments and save two-thirds for use in later round financing of companies already in their investment portfolio. *See Sahlman, supra* note 17, at 475.

25. *See Gompers, supra* note 21, at 24-25 (noting that investors in venture capital have little voting control).

26. *See generally Gompers, supra* note 23 (discussing the duration and size of venture capital investments).

27. *See Black & Gilson, supra* note 3, at 255-57 (explaining the exit and reinvestment cycle for venture capital funds and capital providers).

duration of a venture capital fund indicates that the fund's financial and non-financial contributions are especially valuable to early stage companies. In particular, as the portfolio company gains its own experience, the value of non-financial contributions normally declines. By the time the success or failure of the portfolio company can be assessed, the expertise and financial resources could be used more profitably in a new round of early stage companies. Thus, the fund would exit.²⁸

Finally, because venture capital companies normally do not generate any revenues in their initial stage of existence, companies must be financed by equity. The negative cash flows in the early stages *de facto* prevent entrepreneurs from obtaining debt financing, which requires steady interest payments. Accordingly, convertible preferred stocks play a crucial role in venture capital.²⁹ Stocks provide entrepreneurs with the necessary equity financing, while also furnishing venture capitalists with senior claims to the remaining assets of the venture capital companies in case of failure.³⁰

On the basis of the aforementioned discussion, it is clear that the United States' venture capital system is a functional one, based on a particular form of financial contracting that aligns diverse economic incentives and provides an effective monitoring system for high-risk investments with potentially high returns. Furthermore, it should be emphasized that the basic structure of American venture capital contracting is dictated by market ordering, not by government mandates. The form of venture capital contracting that the United States follows is a result of the evolution of different players responding to various signals and incentives in the market. In sum, the United States' government has never played an active role in the formation of the venture capital industry; rather it allows participating parties to mold a venture capital system for themselves.

28. *See id.* at 254 (noting the existence of economies of scope in venture capital).

29. *See Gompers, supra* note 21, at 5 (stating that debt financing reduces the uncertainty of determining the fair price for financial securities).

30. *See generally* Erik Berglof, *A Control Theory of Venture Capital Finance*, 10 J.L. ECON. & ORG. 247 (1994) (discussing how an entrepreneur and an external investor allocate revenues and control in a venture capital relationship).

II. BRIEF HISTORY OF VENTURE CAPITAL IN KOREA

During the past several decades, Korea has realized rapid economic growth hardly matched by other economies. Between the 1960s, when industrialization first began, and the mid-1990s, Korea's per capita annual income grew from \$100 to over \$10,000 and its export income from less than \$100 million to over \$100 billion.³¹ In 1996, as the world's eleventh largest economy, Korea joined the Organization for Economic Co-operation and Development ("OECD"), an organization largely composed of developed countries. Nevertheless, in 1997, Korea underwent the most serious economic crisis in its modern history. While opinions differ among commentators, they generally agree that the export-oriented policy, backed by strong government intervention, played a crucial role in the crisis.³²

Although the availability of cheap but highly qualified labor forces significantly contributed at an initial stage, as the economy grew and matured, the cost of employment increased and Korea began to lose its comparative advantage in labor-intensive goods.³³ As a country lacking in natural resources, Korea decided to exploit its relatively abundant, highly educated and motivated work force while borrowing necessary capital from international lenders. Venture capital naturally became a focal point of discussion as the government began to promote knowledge-intensive and high value-added industries.

In fact, although institutional support for the operation of venture capital is a relatively recent development in Korea, a prototype of venture capital existed in the early 1970s. In addition, several venture

31. See BYUNG-NAK SONG, *THE RISE OF THE KOREAN ECONOMY* 57 (1990) (describing the process of economic development in Korea).

32. See Young Back Choi, *A Perspective on Korean Economic Development*, 4-13 (Paper presented at the Jan. 1999 annual meeting of the American Economic Association), available in <<http://econ.tamu.edu/kaea/PROCEEDING/proceed99.htm>> (discussing the conflicting views regarding Korean development and the economic crisis of 1997).

33. See *Business Korea*, December 1995/January 1996, at 13-15 (source in Korean).

capital companies were incorporated in the 1980s.³⁴ Not until 1986, however, did Korea provide the institutional infrastructure for the venture capital industry. In 1986 Korea enacted several laws related to venture capital, including the Law to Promote Small and Medium Size Companies³⁵ and the Law to Assist the Financing of New Technology Ventures.³⁶ After these laws were enacted, the industry grew rather quickly. In approximately a ten-year period beginning in the mid-1980s, the number of venture capital companies grew from twelve to forty-nine by 1995.³⁷ These companies invested in 1,891 projects during the years 1987 and 1997, for a total of 1.5 trillion won.³⁸

The administration by different government agencies over venture capital companies have produced varying results, dependent upon venture capital operating environments. For example, the Ministry of Finance and Economy administers the Law to Assist the Financing of New Technology Ventures; the Ministry of Science and Technology regulates the operation of the Korea Technology Banking ("KTB");³⁹

34. For example, Korea Technology Advancement Corporation ("KTAC") was incorporated in 1974 to commercialize research results from Korea Institute of Science and Technology ("KIST"). Venture capital companies established in the 1980s include Korea Technology Development Corporation ("KTDC"), Korean Development and Investment Corporation ("KDIC"), and Korea Technology Finance Corporation ("KTFC"). A distinctive feature of these companies is that public funds were, at least partially, used in establishing these companies. In the case of KDIC, even international development institutions, including the International Finance Corporation ("IFC") and the Asian Development Bank ("ADB") contributed to its financing.

35. See Law to Promote Small and Medium Size Companies, Law No. 3831 (May 12, 1986) (source in Korean).

36. See Law to Assist the Financing of New Technology Ventures, Law No. 4068 (Dec. 31, 1988) (source in Korean).

37. See DUK-HOON LEE ET AL., DEVELOPMENT PLAN ON FINANCIAL ASSISTANT TO START-UP COMPANIES 42 (1996) (finding by 1995, that 25 venture-backed companies were listed in the stock market) (source in Korean)

38. See *Business: Wild Careers*, ECONOMIST, Feb. 14, 1998, at 67 (discussing Korea's high-tech firms).

39. See *S. Korea sells 10.2 pct stake in Korea Technology Banking for 9.3 bln won*, (AFX News, Jan. 21, 1999) available in WL 10491859 (reporting that the government recently sold its stake in the company as a part of its reform program, making it a private company). The KTB is a venture capital company established under a special law.

and the Ministry of Commerce, Industry and Energy administers the Law to Promote Small and Medium Size Companies—most of the private venture capital companies are registered under this latter law.⁴⁰ Each venture capital company is incorporated under one of these laws. Thus venture capital operations are subject to different regulations that lead to different investment activities.

Preliminary conditions are required to register under the Law to Assist the Financing of New Technology Ventures. For example, venture capital companies must be in operation for a minimum of two years to register under this law—a difficult condition to satisfy.⁴¹ In return, qualifying companies are allowed to invest in a broader spectrum of investment projects while looser regulations apply to the methods of investment. Thus, companies under this category demonstrate relatively better results than others; however, the overall returns from venture capital investing were not in any way impressive, especially when considering the risks involved.⁴² Due to the poor performance of the Korean stock market in recent years and the fact that the market for initial public offerings was not well developed, equity investments by these companies were minimal—6.5% of their cumulative investments by 1995. Instead, their investments were mostly in the form of corporate lending, which constituted 86.1% of their investments.⁴³ The KTB, which is regulated by the Ministry of Science and Technology, has the capacity to conduct the same range of businesses as those companies registered under the Law to Assist the Financing of New Technology Ventures.⁴⁴

Venture capital companies established under the Law to Promote Small and Medium Size Companies, while comprising a majority in

40. See LEE ET AL., *supra* note 37, at 42 (acknowledging that by the end of 1997, there were 58 companies under this category).

41. See *id.* at 45 (concluding that there are only three companies in this category and they are all supported by public funds).

42. In 1993, venture capital companies in this category recorded a return on capital of 8.8%, while venture capital companies operating under the Law to Promote Small and Medium Size Companies made a meager 2.6% return. This is in contrast to, for instance, an 18.4% return realized by merchant banks. See LEE ET AL., *supra* note 37, at 70.

43. See LEE ET AL., *supra* note 37, at 50.

44. See *id.* at 47 (finding, although not surprisingly, that 6.2% of the KTB's investment is comprised of equity investment, whereas loans constitute 84.6%).

the industry, have far less room to maneuver.⁴⁵ Venture capitalists may only invest in small companies, as defined by the law, and such companies must be within seven years of the start of the business. In addition, restrictions limit investments by venture capital companies to certain types of industries.⁴⁶ Further, venture capital companies cannot freely make loans, but are encouraged to make equity investments.⁴⁷ Accordingly, the operational results of these companies were less than stellar.⁴⁸ By 1995, out of twenty-five companies publicly listed by venture capital companies in this category, only two remained.⁴⁹

III. GOVERNMENT INTERVENTION IN VENTURE CAPITAL CONTRACTING IN KOREA

In light of the foregoing history, by enacting the SLPVCC, the Korean government granted various forms of preferential treatment and relaxed the enforcement and regulatory rules applicable to venture capital companies, as defined by the law. Korea's legislative history indicates that, through the enactment of the SLPVCC, the Korean government strove to emulate the success of the United States' venture capital system.⁵⁰ The law as enacted, however, was aimed at emulating only the results of the United States venture capital market, without implementing the necessary contractual schemes or the social and economic infrastructure. The nature of venture capital is the appropriate allocation of the high risks that accompany projects with potentials for high returns among stakeholders, combined with heavy monitoring to reduce risks. The Korean scheme, however,

45. A majority of these companies are affiliated with banks or securities companies.

46. See Law to Promote Small and Medium Size Companies, *supra* note 35, art. 3.

47. See LEE ET AL., *supra* note 37, at 64 (stating that equity investment comprises 46% of the total investment by 1995).

48. See *supra* note 42 and accompanying text.

49. See LEE ET AL., *supra* note 37, at 42.

50. See Kim, *supra* note 2, at 2-3.

grants direct and indirect subsidies to a selected group of venture capital companies as indicated by law.

The new law in Korea ultimately may form a significantly different incentive structure than that in the United States because the law provides a specific statutory definition for a Korean venture capital company.⁵¹ Furthermore, the law provides substantial protection against downside risks for entrepreneurs through special treatments, such as tax breaks. Unlike the United States' venture capital system, the SLPVCC may distort the fundamental economic incentives of the contracting parties while limiting the downside risks faced by entrepreneurs in Korea.

A. DEFINITION OF A VENTURE CAPITAL COMPANY UNDER THE SLPVCC

As noted in Part II, the definition of venture capital in the United States is a functional one that cannot be defined in specific terms, since venture capital has developed through market mechanisms over time. There is no statutory definition of a venture capital company in the United States. The SLPVCC, however, provides a specific and descriptive definition. This artificial definition increases the risk of distorting the alignment of economic incentives necessary for successful venture capital contracting.

Specifically, according to the SLPVCC, for a company to be considered as a venture capital-backed company eligible for special treatment, it must satisfy one of the following requirements.⁵² First, a venture capital company must at least invest 20% of a company's total assets. Second, a venture capital company must at least invest 10% of the total equity of a company. Third, at least 5% of the previous year's sales revenue must be spent on research and development activities. Fourth, the main line of business of a company must be

51. See *infra* Part III.A (providing the descriptive and mechanic definition of a Korean venture capital company).

52. See Kim, *supra* note 2, at 3 (stating that the SLPVCC does not apply to big, conglomerate companies but only to medium and small companies). This reflects the government's intention to let the law provide an avenue for financing for smaller companies. See *id.* Venture-backed companies may, however, receive investments from conglomerates up to 30% of the equity raised. *Id.* at 10.

comprised of the high technology specifically recommended by the Industrial Property Office. In addition, in case of some special industries, such as the entertainment industry, the Ministry of Commerce, Industry, and Energy possesses the discretionary power to declare a company a non-venture capital-backed company, even if it satisfies one of the above requirements. Further, to qualify as a venture capital-backed company, the invested funds by venture capitalists must be used for knowledge-intensive or high-technology industries such as: energy substitute industry; telecommunications industry; electronics and communications industry; information and technology industry; and computer software industry.

A company may request that the Ministry determine whether it qualifies as a venture capital-backed company. Upon such request, the Ministry must render a decision and answer the request with a written response.⁵³ There is considerable room for discretion, however, on the part of the Ministry of Commerce, Industry and Energy in determining whether to designate a company as a venture capital-backed company.

This mechanical and descriptive definition may well distort the incentive system inherent in venture capital. First, the specificity in defining a venture capital-backed company creates the danger of Korean entrepreneurs attempting to avoid the boundaries of the definition and distort fundamental economic incentives. For example, if 19% of the company's total assets were invested by venture capitalists, the company would have to consider the marginal benefits and marginal costs of replacing 1% of its total assets with venture capital equity. The marginal benefits come from the special treatment provided by the SLPVCC. On the other hand, the marginal costs come from unnecessarily engaging in venture capital projects, which the company may have neither the economic incentives nor the expert knowledge.

Further, special treatment may distort the fundamental capital structure of a venture capital company. As previously discussed, a venture capital company in the United States uses convertible preferred stocks to raise capital since the company does not generate

53. See SLPVCC, *supra* note 1, arts. 2-4.

stable cash flows in its initial stage.⁵⁴ Special treatments, however, may cause the company to generate positive cash flows even in its initial stage. The cost of debt may become inexpensive, and the company may have no incentive to use equity. Ultimately, this may distort the fundamental economic incentive structure embedded in the venture capital contracting system. Moreover, the company may incur additional costs due to the change in its hedging strategy. Despite such costs, the benefits may still exceed the costs at the margin, thereby leading to economically undesirable investments in industries that are artificially designated by the government.

Second, the government focuses on venture capital-backed companies based on high-technology industries in Korea.⁵⁵ Although American venture capital-backed companies are often associated with high technology companies such as Microsoft and Intel, two of the most successful venture capital endeavors, Federal Express and Starbucks Coffee, are not technology companies.⁵⁶ Therefore, it is not a specific industry that creates a successful venture capital project. Rather, it is the functional nature of the venture capital contracting mechanism and the alignment of the economic incentives that underlie whether the venture capital contract will be successful.

Third, the law indicates that, in many instances, the Ministry of Commerce, Industry, and Energy possesses the discretionary power to declare whether a company qualifies as a venture capital-backed company, entitled to special treatments. In Korea, frequent turnovers of high-ranking government officials are a cause for concern.⁵⁷ In

54. See generally Gompers, *supra* note 21 and accompanying text.

55. See SLPVCC, *supra* note 1, art. 2.

56. In the case of Federal Express, the entrepreneurs developed a highly efficient and effective operational management skill to deliver mail overnight everywhere in the United States when no other company provided such service. In the latter case, the entrepreneurs developed a unique way of catering to the upscale coffee drinker.

57. For example, under President Kim Young Sam's regime, from 1992 to 1997, there were several occasions when the high government officials were replaced. See Shim Jae Hoon, *Hero to Zero: In Just Four Years, President Kim Has Fallen Dramatically From Grace*, FAR E. ECON. REV., Mar. 13, 1997, at 16 (reporting that during a four-year period, from early 1993 until early 1997, there were six Prime Ministers, seven economic-affairs deputy-premiers, and twenty-seven general reshuffles of cabinet members).

such a politically volatile environment, venture capital companies, as well as venture capitalists, cannot predict whether they will consistently receive special treatments under the SLPVCC. Further, too much power in the hands of a few government officials may foster "rent-seeking" activities and breed corruption. In the end, venture capital companies and venture capitalists may have to assess non-economic factors in measuring the possibility of success of their venture capital projects. Such political intervention was not a factor in the success of the United States' venture capital system.

B. PROTECTION FOR ENTREPRENEURS THROUGH SPECIAL TREATMENTS

If an entity qualifies as a venture capital company, entrepreneurs in Korea become eligible for special treatments. These special treatments include, to name only two, Articles 16 and 18 of the SLPVCC. First, under Article 16 of the SLPVCC, entrepreneurs who leave their jobs at public institutions or universities to pursue venture capital projects are allowed to return to their original workplace without any penalty if they return within three years. Second, under Article 18 of the SLPVCC, entrepreneurs receive special tax breaks on their office buildings if at least 75% of the building is occupied by venture capital related offices. These special treatments obviously will limit the downside risks of entrepreneurs in Korea. There is a risk that moral hazard will become a rather serious problem and venture capitalists will have to increase their monitoring costs.

First, under Article 16 of the SLPVCC, if professors at any public university or employees at any public institution decide to leave their workplaces to participate in venture capital companies, they have the privilege of returning to their respective employment within three years without any penalty. The Korean government claims that this allows entrepreneurs to pursue their innovations "with confidence."⁵⁸

58. See Kim, *supra* note 2, at 13. Apparently, the measure was undertaken to change the perceived overcautious attitude of potential entrepreneurs and to encourage risk-taking by potential entrepreneurs. More research is warranted to explore the existence, if any, of the cultural or other non-economic bias discouraging the development of entrepreneurship in Korea and to examine whether this measure is appropriate in providing incentives to potential entrepreneurs. Given the ex-

This may skew the incentive structure, however, since risks involved in venture capital projects should discourage incompetents from participating in the market at the outset by signaling that they have too much to lose should the projects fail. In other words, the risky nature of the market serves as a screening mechanism for potential entrepreneurs. If entrepreneurs in Korea are protected from losing their jobs so long as they do not spend more than three years experimenting with their innovations, many incompetent entrepreneurs may find it tempting to enter into the venture capital market in Korea.⁵⁹ In the end, this may significantly reduce the market screening and monitoring system, resulting in venture capitalists spending more resources screening and selecting competent entrepreneurs. In addition, assuming that this measure somehow will succeed in inducing competent potential entrepreneurs to the market, there is no basis for limiting this privilege to three years since it takes most Korean venture capital companies more than ten years to go public.⁶⁰

Second, under Article 18 of the SLPVCC, if at least 75% of a building is occupied by venture capital companies or their related offices, the building is considered a Venture Capital Building ("VCB"). A VCB must be at least three stories high and house at least six different venture capital companies at any given time. A VCB is free to remodel the internal section of the building without official permission provided that it does not impose a serious threat to the safety of the building. In addition, VCBs are entitled to real estate tax cuts of 50%. Considering the high price and high regulation found in the real estate market in Korea, this scheme should be considered a privilege and may have a significant impact on the geo-

istence of highly successful Korean entrepreneurs in Silicon Valley, however, cultural explanation alone would not be persuasive. Jeong Kim of Yurie Systems might provide the case in point. See Mark Leibovich & Mike Mills, *For Immigrant, A Billion-Dollar High-Tech Deal; Maryland Entrepreneur To Sell Firm He Founded*, WASH. POST, Apr. 28, 1998, at A1 (recounting an American success story of a Korean immigrant who put himself through school and founded a company that revolutionized the electronic communications industry).

59. See George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488 (1970) (writing for the first time on the variant of the lemons problem).

60. See Ki Whan Lee, *Promotion of Venture Capital and Economic Improvement*, VENTURE CAPITAL 25 (Fall 1997) (source in Korean).

graphic concentration of venture capital companies.⁶¹

The geographic concentration of venture capital companies and the promotion of synergistic effects may be a driving force behind this measure. In fact, in regard to the development of the United States' venture capital industry, several commentators noted the significance of such spillovers and the existence of networks among entrepreneurs. For instance, in her account of the development of Silicon Valley, Annalee Saxenian attributed the success of Silicon Valley to the flexible and informal network among the workers in the region, as compared to the rigid and vertical structure found on Route 128 in Massachusetts.⁶² In addition, focusing on the substance of employment contracts prevalent in Silicon Valley, Alan Hyde noted that the high employment turnover rate and the lack of enforcement of covenants not-to-compete helped to disseminate information among the entrepreneurs in Silicon Valley.⁶³ Consequently, the legal and cultural infrastructure in Silicon Valley fosters knowledge sharing, which contributes greatly to the generation of spillover effects, thereby creating positive externalities.

The scheme of VCBs in Korea, however, may not achieve the same cooperative and synergistic effects as in Silicon Valley unless the attitude of Korean companies changes dramatically. For instance, if venture capital companies were within one building, they would spend too much time concealing their secrets from competitors, thus impeding the operation of their scheme. Moreover, with lifetime employment still deeply rooted in the corporate culture, the employment

61. See Kim, *supra* note 2, at 16 (stating that a VCB is exempted from various restrictions, which are designed to discourage the concentration of office and plant facilities in the vicinity of metropolitan Seoul).

62. See ANNALEE SAXENIAN, *REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128*, at 29-82 (1994) (comparing the open communications styles of the west coast with the more closed, traditional firm management style of the east coast and the varying responses to technological development).

63. See generally Alan Hyde, *How Silicon Valley Has Eliminated Trade Secrets* (Rutgers Law School Working Paper, 1997); Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial District: Silicon Valley, Route 128 and Covenant Not to Compete* (Columbia University School of Law/Sloan Foundation Project on Corporate Governance Working Paper, 1997).

turnover rate is expected to stay very low.⁶⁴ Furthermore, assuming a high employment turnover rate, companies would see no reason not to enforce the covenant not-to-compete.⁶⁵ In this case, VCBs would be ineffective in creating the cooperative environment necessary for venture capital companies to succeed. In the meantime, the special treatments provide the opportunity for more entrepreneurs to enter the venture capital market with less chance of penalty under the market without the SLPVCC.

IV. ASSESSMENT

The foregoing analysis demonstrates that if the underlining purpose of the SLPVCC is to emulate the success of the United States' venture capital industry simply through the relaxation of existing laws in Korea, the measures taken thus far are inadequate and other complementary measures are needed. The United States' venture capital system is based on a market mechanism. A specific form of venture capital contracting, which allows the alignment of economic incentives and implements a monitoring system, assists in promoting high-risk investments in the United States. Under the SLPVCC, however, government intervention limits the downside risks of a project. Perhaps contrary to its original intent, the SLPVCC may distort the market mechanism and impede the development of the market for risky investment in Korea.

Instead of directly intervening in the venture capital market in order to promote the venture capital industry in Korea, priority must be granted to continue efforts in developing a sound financial infrastructure, including the development of a well-functioning stock market.⁶⁶ A well-developed financial infrastructure will provide

64. The law was amended in early 1998 in an attempt to make the labor market more flexible, but it remains to be seen whether the market will show the promised flexibility.

65. See Gilson, *supra* note 63, at 34-36 (examining California not-to-compete covenants). In Silicon Valley, in line with the path dependency theory, Gilson argues that a chance event prohibited the enforcement of the covenant not-to-compete and it resulted in positive spillovers, contributing to the development of the venture capital in the region. *See id.*

66. See Black & Gilson, *supra* note 3, at 244-52 (suggesting the existence of a

venture capital investors in Korea with the potential for gain. Indeed, the SLPVCC has two provisions that would assist in the development of the stock market. First, under Article 10 of the SLPVCC, the face value of a stock may be as small as 100 won compared to the existing law mandating a minimum face value of 5,000 won. The lower face value may provide greater market liquidity. Second, Article 4 allows insurance companies to invest in venture capital on a limited basis.⁶⁷ The effect of this provision is akin to the United States history surrounding ERISA's "prudent man" rule.⁶⁸ The financial deregulation, provided by Article 4, would encourage the free flow of capital, inside and outside the stock market, which is essential to the development of the stock market.⁶⁹

The overhaul of the stock market inevitably will involve the issue of improving the market of Korea Security Dealers Association Automated Quotation ("KOSDAQ"), the Korean counterpart of the National Association of Securities Dealers Automated Quotation system ("NASDAQ") in the United States.⁷⁰ Despite its original intent of providing liquid capital for smaller companies, especially venture capital companies since its opening in April of 1987, KOSDAQ has not lived up to its expectations. First, Korean entrepreneurs do not consider KOSDAQ as an independent and separate exchange to raise capital. Instead, they consider it as a stepping stone to eventually listing their companies on the Korea Stock Exchange.⁷¹

much stronger venture capital industry in stock market-centered systems, as in the United States). Nonetheless, considering, for instance, the fact that some Israeli venture-backed companies are successfully listed on the stock market in the United States, the existence of a well-functioning domestic stock market would not necessarily be a prerequisite for the development of venture capital industry. See Asher Blass & Yishay Yafeh, *Vagabond Shoes Longing to Stray—Why Israeli Firms List in New York—Causes and Implications* (Econ. Dep't Hebrew Univ. and Bank of Israel Research Dep't Working Paper, 1996).

67. Specific regulations are yet to be determined by the Ministry of Finance and Economy.

68. See *supra* notes 9-11 and accompanying text (discussing the change in venture capital funding that followed the change in law).

69. The law, however, is not clear as to how and when the limits will be determined.

70. KOSDAQ is the over-the-counter market established to provide greater capital supply to small businesses in Korea.

71. See Kun Sang Sohn, *The Capital Structure Needed to Promote Venture*

Through the KOSDAQ, small companies attempt to establish their reputation in order to be recognized by the financial intermediaries that specialize in initial public offerings in the Korea Stock Exchange.⁷² Second, the technology used in KOSDAQ is primitive and the size of the market is miniscule, the amount of shares traded per year in KOSDAQ being equal to the amount of shares traded per day in the Korea Stock Exchange.⁷³ Compared to the instant match between sellers and buyers through high-speed computers utilized in NASDAQ, KOSDAQ has a long way to go.

Korea's experience indicates that, in addition to the lack of a well-developed stock market, five key institutional environment traits, which contributed to the success of the United States' venture capital market, are missing.⁷⁴ These five traits include the existence of large, independent sources of venture capital funding, liquidity, highly developed incentive structures, labor mobility, and risk tolerance. First, the lack of financial sources combined with the scarcity of independent venture capital companies has limited the placement of Korean venture capital investments, in particular equity investments. With the availability of funds from insurance companies, sources of venture capital funding may expand. The scarcity of well-trained venture capitalists with appropriate screening and monitoring ability, however, may still prevent the efficient allocation of such funds.

Second, the availability of exits by an IPO is severely limited. The lack of corporate control of the market limits the ability to exit through acquisition by another company, thus creating a bottleneck against the availability of liquid investment opportunities. Considering that an eventual motivation for venture investing lies in the expectation of a handsome return, potential investors may be discour-

Capital Companies, Seminar For Middle Managers of Venture Capital Companies, 97-139 (Oct. 1997) (source in Korean).

72. An overview of the working of the KOSDAQ market for smaller companies can be found at <http://venture.smba.go.kr/english/bg_policy4.html>.

73. Although it is still hard to predict the direction of future developments, recently the KOSDAQ market grew dramatically, showing the possibility of functioning as a viable exit market for investors in start-ups. In terms of the market capital, it grew seven times in 1999 alone. A brief description of its history and current data can be found at its Web site at <<http://www.kosdaq.or.kr>>.

74. See Milhaupt, *supra* note 7, at 880-93 (discussing each of the five traits in detail).

aged from joining the market all together. Third, thus far, the role of venture capitalists in Korea is limited to providing funds for entrepreneurs, mostly in the form of debt rather than equity. The extensive mix of incentives and protections found in the United States are virtually non-existent in Korea. The problem is further exacerbated by the lack of venture capitalists with strong screening and monitoring abilities.

Fourth, under Korea's lifetime employment system and the team approach to research and development, the market for managerial and research talent is highly illiquid and labor mobility is relatively limited. Finally, the failure of a venture capital project, while common in the United States,⁷⁵ is not tolerated to the same degree in Korea. Instead of creating schemes to encourage risk-taking in new ventures, various private and government schemes are in place that reduce risks, providing *de facto* insurance against failure. Ultimately, a skewed incentive system will foster problems resulting from adverse selection and moral hazard.

CONCLUSION

The relationship between entrepreneurs and venture capitalists is a complex one and the working of the monitoring and incentive system is multifaceted. An attempt to emulate the result of the market evolution in another country can not create the desired result if the necessary establishment of institutional infrastructure does not accompany the endeavor. Incentive structure, labor practices, and other institutional frameworks all need to change to promote the market for innovation in Korea. As long as the Korean government provides a sound financial infrastructure for risk-loving investors and does not interfere directly with the fundamental market mechanism imbedded in venture capital, the venture capital industry in Korea, with its highly educated and highly innovative population, is bound to evolve on its own.

75. See Sahlman, *supra* note 17, at 475 (explaining the degree of failure of American venture capital projects in light of capitalist market schemes and the level of United States regulatory mechanisms).